

# UNIVERSITY OF GHANA

ANNUAL REPORT BY THE VICE-CHANCELLOR  
FOR 1976-77

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## FACULTY OF AGRICULTURE

### DEPARTMENT OF AGRICULTURAL ECONOMY AND FARM MANAGEMENT

#### DIVISION OF AGRICULTURAL ENGINEERING

##### Staff

Two of the Division's four lecturers were at post, the others being on study leave. They were assisted by two part-time lecturers.

##### Students

Three students specialised in Agricultural Mechanisation in the final year of the B.Sc. (Agric.) degree programme.

Eighteen students were admitted to the two-year National Diploma in Agricultural Mechanisation programme offered in the Division.

The following classes of students were taught in the Division:

F.U.E. (Agric)	..	..	..	..	54 Students
B.Sc. (Agric) Part I	..	..	..	..	31 Students
B.Sc. (Agric) Part II	..	..	..	..	3 Students
National Diploma in Agric. Mechanisation					
Part I	..	..	..	..	18 Students
National Diploma in General Agriculture					
Part I	..	..	..	..	25 Students
National Diploma in General Agriculture					
Part II	..	..	..	..	4 Students

##### Courses

Courses taught in the Division included Farm Power and Machinery, Mechanics and Materials, Farm Electrification, Agricultural Processing and Storage, Hydraulics and Hydrology, Erosion Control, Surveying, Irrigation and Drainage.

The two-year National Diploma in Agricultural Mechanisation programme was offered in the Division for the first time.

## **Research**

The following studies were undertaken by the final year B.Sc. (Agric.) students:

1. Volume Change in a Swelling Soil and its Agricultural Significance with regard to Soil Moisture.
2. Agricultural Research Station, Legon—Dam Capacity and Water Requirements Studies.
3. Testing of a Thresher.

Dr. David B. Ampratwum conducted research studies on Grain Drying, Processing, Handling and Storage and on Agricultural Mechanisation in Ghana.

Mr. Sumani Al-Hassan studied Frequency Distribution of River Flows in Ghana.

## **Conferences and Seminars**

The following papers were presented or submitted:

Ampratwum D.B. 'Management Considerations in the Use of Agricultural Power and Machinery'. Paper presented at the 1976 Faculty of Agriculture Seminars, University of Ghana Legon, Nov. 1976.

Ampratwum D.B. 'Training of Non-Professional Agricultural Engineering Manpower for Agricultural Mechanisation in Ghana'. Paper submitted at the CEEMAT (Centre d' Etudes et d' Experimentation du Machinisme Agricole Tropical) Seminar on Mechanisation of Individual Farms in Hot Countries, Antony, France, Feb.-March 1977.

## **Extension and Other Activities**

Members of the Division continued to serve on a number of University, Government and other bodies and to give advice to farmers and agricultural personnel on Mechanised and Irrigation Agriculture.

Mr. S. Al-Hassan was nominated to serve on the Board of Directors of the Irrigation Development Authority.

## **DEPARTMENT OF ANIMAL SCIENCE**

### **Staff**

Mr. F. K. Fianu was granted extension of his study leave for the year.

Dr. R. K. G. Assoku spent the year as Visiting Professor in the Department of Veterinary Microbiology at the University of Guelph, Canada, and participated fully in both the tutorial and teaching of graduate students in Microbial Immunology. He researched into the immunology of African Trypanosomiasis project of the Department.

Mrs. A. R. Barnes interrupted her study leave and returned.

Dr. K. Benyi resigned his appointment with effect from the end of the session.

Mr. E. K. Awotwi left at the beginning of June for Iowa State University on study leave to read for the Ph.D. degree in Animal Physiology.

Two members of the junior staff, Mr. Yaccubu Abubakari and Mr. S. A. Gyadu went to the Crop Science Department of University of Guelph, Canada, on short attachments for on-the-job training in *in-vitro* laboratory techniques.

### Students

The following numbers of students reading for the following degree and diplomas were taught by members of the department:—

F. U. E. Agriculture .. .. .	62
B.Sc. (Hons) Agriculture Part I .. ..	47
B.Sc. (Hons) Agriculture Part II .. ..	12
National Diploma in Animal Health Part I ..	10
National Diploma in Animal Health Part II	5
National Diploma in Agriculture Part I ..	26
National Diploma in Agriculture Part II ..	33
National Diploma in Home Science Part II ..	15
M.Sc. (Animal Nutrition) .. .. .	1
Total	211

### Courses

Courses taught in the department included animal nutrition, animal husbandry and production, pasture and fodder studies, breeding, animal physiology, dairying, animal health, diseases of animals and meat processing and livestock products.

## **Research Activities**

The department continued its research interest with renewed vigour. In nutrition, work continued on the use of agricultural by-products as animal feed. During the year, the use of cocoa husks by cattle and sheep feed as well as the use of bagasse, mollasses, sugar-cane tops and cassava chips were investigated. Work on the digestibility of the above and some local grasses and legumes was continued.

The crossbreeding programme was continued. The beef programme involved the crossbreeding of the Ndama cows with semen of the Santa Gertrudis and Brown Swiss. The dairy work continued with the Shorthorn and Gudali cows artificially inseminated with Jersey and Friesian semen. Currently, F<sub>1</sub> and F<sub>2</sub> as well as pure Friesian are being evaluated. The dairy work continued but due to the draught the volume of milk and hence milk products was reduced considerably.

Breeding of two lines of sheep, comparative studies of managing sheep to lamb twice a year and three times in 2 years and the effect of constant grazing of fodder under plantation crops are among the new studies under the raising of sheep under tree crop plantation programme.

Work continued on the evaluation of cross bred beef carcasses and pork carcasses of pigs fed various sources and levels of protein and energy, so also the use of local spices as substitutes in the processing of frankfurters.

Space requirement of poultry, the keeping of quality of poultry eggs under various storage conditions and the management and nutritional studies of ducks were pursued.

Research in animal health included studies of the immunology of African Trypanosomiasis; teat numbers and abnormalities of farm livestock and their effect on litter size and number of animals weaned was continued. The health of cattle and sheep under transitional rainforest zone and tree crop plantation respectively was studied. Work on skin diseases of farm animals continued.

Pasture studies included analysis of data on growth rates of introduced and natural pastures after grazing by sheep.



## Publications

- ASIEDU, F. H., Oppong, E. N. W. and Opoku, A. A. (1977) "Utilization by sheep of herbage under tree crop plantations in Ghana". *Trop. Anim. Health and Prod.* 9.
- AYEBO, D. A., Assoku, R. K. G. and Oppong, E. N. W. (1976) "A study of the Bacteriology of raw milk produced by dairy herds on the Accra Plains of Ghana". *Ghana Jnl. Sci.* 16 (1), 9-18.
- AGBLE, W. K., Oppong, E. N. W. and Opare Sem. "Agricultural Research Systems in Ghana", Proc. of the Workshop on Administration of Agricultural Research, Nairobi, Kenya—June, 1977.
- ASSOKU, R. K. G. (1977) "Free Fatty Acids and the Pathogenesis of African trypanosomiasis", (*Lancet i* (8014), 750-751).
- ASSOKU, R. K. G. (1977) "Mitogenicity of Autolysed *T. congolense*". (*Experientia* 33, 1148-1153).
- ASSOKU, R. K. G. (1977) "Free Fatty Acids, Lysophospholipases and the pathogenesis of African trypanosomiasis", (*Lancet ii* 8029, 91).
- ASSOKU, R. K. G. (1977) "Immunological studies on the anaemia in experimental trypanosomiasis: A postulated mechanism for the anaemia in rats infected with *T. evansi*". (*Proc. Canad. Fedn. Biol. Soc.* 20, 118-120).
- ASSOKU, R. K. G. (1977) "Free Fatty acids, complement activation and polyclonal B-cell stimulation as Factors in the immunopathogenesis of African trypanosomiasis". (*Lancet ii*, 1847-1853).
- ASSOKU, R. K. G. (1977) "Experimental Induction of an Immuno-haemolytic anaemia in the chicken with an Endotoxin". (*Proc. Intern. Cong. World Vet. Poult. Assoc.* 6, 45-46).
- ASSOKU, R. K. G. (1976) "Bovine mastitis in the Accra Plains of Ghana". (*Bull. Anim. Hlth. Prod. Africa.* 24 (4), 352-369).

## Students' Dissertations

- AGU, F. E. K., *In-vivo* and *in-vitro* digestibilities of buffel grass cut at 3 and 8 weeks.

- AKORDOR, F. S. Y., Studies on the nutritive value of *Milletia thonningii* seed meal diets: comparison with soyabean meal.
- AMOFO-SAKYI, C., Growth rate and feed efficiency of guinea fowls from six different areas of Northern Ghana.
- APPIAH, A. K., Shelf life of chicken eggs under different environmental conditions.
- ARTHUR, P. F., Green gram and black gram seeds as source of protein in chicken diet.
- CANACOO, F. C., Incidence of supernumerary teats in cattle on the Accra Plains.
- COLEMAN, C. V. E. (Miss), Response of rats to methionine and tryptophan supplemented *Griffonia simplicifolia* seed meal diets.
- DJAN, S. P. K., A review of cattle feeding experiments in Ghana.
- DOAMEKPOR, S. K., Performance of local sheep feed rations containing cocoa husks.
- MALLET, E. P., Studies of microbial contamination of some poultry egg-based food products—mayonnaise.
- WARMAN, M. (Miss), Studies on microbial flora of meat products.
- XAXAGBE, K. W., Studies on the quality of milk produced and handled by different herdsmen on the Accra plains.

### Conferences

Conferences, seminars and workshop both local and overseas attended by members of the department included:

#### E. N. W. Opong

- (i) Ghana Animal Science Association Conference, Kumasi. From 31st March, 1977 to 1st April, 1977.  
*Papers:*— (i) Haematological studies of a crossbred dairy herd.  
(ii) Performance of crossbred dairy cattle.
- (ii) Ghana Science Association—Cap: Coast—April 2nd–6th 1977.
- (iii) Workshop on Administration of Agricultural Research. Organised jointly by the Association for the Advancement of Agricultural Sciences in Africa and

the Canadian International Development Centre  
Nairobi—Kenya—June 25–1st July, 1977.

*Paper:* Joint authorship—Agricultural Research  
Systems in Ghana.

- (iv) O.D.M. Conference of Overseas Officers of Natural  
Resources on “Research for Rural Development”,  
London—July 10th–15th 1977.

#### **R. K. G. Assoku**

- (i) 20th Annual Meeting of the Canadian Federation of  
Biological Societies, University of Calgary, Alberta,  
Canada (21st–24th June, 1977).

*Paper read:* “The Anaemia in Trypanosomiasis: A  
postulated mechanism”.

- (ii) Third Joint Retreat of the Canadian Society for  
Immunology, Faculty of Medicine, University of  
Montreal, Montreal, Canada. 25th–28th July, 1977.

*Paper read:* “Lymphocyte Activation and Immuno-  
suppression: The example of African trypanoso-  
miasis”.

- (iii) Combined 6th International Congress of World Vet.  
Poultry Assoc. and the 114th Annual A. V. M. A.  
Meeting, Atlanta, Georgia, U.S.A. 11th–15th July,  
1977.

*Paper read:* “Experimental Induction of an immuno-  
haemolytic anaemia in the chicken with bacterial  
endotoxin”.

- (iv) 5th International Congress of Protozoology, Ford-  
ham University (Lincoln Centre Campus) New York.  
27th June–1st July, 1977.

*Paper read:* “Immuno-suppression in Experimental  
trypanosomiasis: Free Fatty Acids as the mitogenic  
factors in *T. congolense* autolysates”.

#### **E. O. Otchere**

- (i) Xth Annual Ghana Animal Science Association Meet-  
ing—University of Science and Technology, Kumasi—  
31st March–1st April 1977.

*Paper read:* “Nutritional value of milk. A review”.

- (ii) Symposium on Grain Legumes in Ghana—Faculty of  
Agriculture, University of Ghana, Legon. December  
10th–11th 1976.

*Paper read:* "Griffonia simplicifolia: Prospects for Livestock Feeding" Authored by E. O. Otchere, F. N. Gyang and Maleena Imbeah.

- (iii) Xth Biennial Conference of Ghana Science Association, Cape Coast. April, 1977.

*Paper read:* "Trypsin inhibitor from Griffonia simplicifolia seeds". By F. N. Gyang and E. O. Otchere.

#### **F. K. Fianu**

- (i) American Society of Animal Science Meetings at Madison, Wisconsin. August 1977.
- (ii) Agricultural Institute of Canada Conference, Guelph, 1977.

#### **Extramural Activities**

Senior members continued to serve on a number of University and Government committees. Professor E. N. W. Oppong served on a number of Ministry of Agriculture Committees including the Agricultural Research Advisory Committee and the International Fund for Agricultural Development. Prof. Oppong was an external examiner in Veterinary Medicine, University of Ibadan and in Animal Production at U.S.T., Kumasi.

Dr. E. O. Otchere served as a member of the Board of Management of the Animal Research Institute of the C.S.I.R. and was elected Chairman of its Research Sub-committee.

#### **Visitors**

Professor V. A. Oyenuga of the Department of Animal Science of the University of Ibadan visited the Department as an External Examiner.

### **DEPARTMENT OF CROP SCIENCE**

#### **Staff**

Except for the return of Professor D. K. Acquaye from sabbatical leave the staff situation remained the same as it had been last year. There were no new appointments to the Department or promotions among the academic staff. Teaching proceeded very well with improvements particularly in soil microbiology, mineralogy, crop physiology and agricultural entomology. Mr. Joseph Cobbina and Dr. J. K. Amatekpor,

both Research Fellows of the Volta Basin Research Project who are attached to the Soils Division participated in the teaching programme of the Division.

### Students

The distribution of students enrolled in the various courses in the Divisions of the Department was as follows:

	<i>Crop Science</i>	<i>Soil Science</i>
F. U. E. .. .. .	68	68
B. Sc. Part I .. .. .	26	36
B. Sc. Part II .. .. .	17	3
M. Sc. .. .. .	4	5
National Diploma in Agriculture Part I .. .. .	26	26
National Diploma in Agriculture Part II .. .. .	33	33
	<hr/>	<hr/>
Total .. .. .	174	171
	<hr/>	<hr/>

One of the graduate students Mrs. Olayiwole Pabs-Garnon is a Commonwealth Scholar from Freetown, Sierra Leone, and her area of specialisation is Soil Fertility.

### Research and Extension

The Soils Division continued studies into the problems of efficient use of phosphatic and nitrogenous fertilizers on selected soils of Ghana. Under the programme the efficiency of nitrogen use in relation to plant population of maize was studied in a field trial. Phosphatic fertilizers when applied to the soil are easily rendered unavailable to growing plants. Work is in progress to find a suitable method of assessing the soil's requirement and crop response to these fertilizers. Field experiments are also in progress to evaluate fertilizer requirements of cassava. The use of Rhizobia bacteria in the production of legume crops with the aim of improving yields and the nitrogen status of the soil continued to engage the attention of the Division. Research is being directed into the ecology of the bacteria and how different populations influence nodule formation and hence nitrogen fixation.

There are large expanses of soil in the Western Region and other parts of the country which are unproductive because they are acid. Experiments were initiated to find the best way of liming them in order to make them productive. With good management these soils could be used for production of many plantation crops.

Studies into the management and water requirements of sugar cane grown on the heavy soils of the Accra Plains continued. A new project aimed at examining the effects of overgrazing, afforestation and burning on land degradation in the North-eastern Ghana was also initiated. This study forms part of the North-eastern Ghana Savanna Research Project funded by the USAID and the CSIR.

The Crops Division continued with its research and extension activities on vegetables, grain legumes and root crops.

The first successful interspecific crosses between the generally cross-incompatible local garden eggs and the exotic egg plant were carried out with the view not only to increase fruit size, crop duration and plant vigour of the local types, but also to study the cytogenetics of the genus as a whole.

Requests for seed of the two high-yielding tomato varieties, *Wosowoso* and *Owusu-Bioh*, developed by the Division continued to come in from countries all over the humid tropics. The Ministry of Agriculture, the Volta River Authority, Danish Plant Products and the Tsito Adult Education Resettlement Centre were among local establishments which purchased large quantities of seed.

Growing interest in grain legumes led to the formation of a Grain Legume research group comprising research workers from the Food Research Institute and Crops Research Institute of the CSIR and several Departments of the University. The aim is to adopt a multidisciplinary approach in tackling all aspects of growing and utilization of this important group of crops. Crops receiving priority attention are the winged bean, soybean, cowpea, bambara groundnut and lima bean. Varieties of these crops were tested, and foundation seed of elite varieties of soybean, cowpea and bambara groundnut were multiplied for the Grains and Legumes Development Board.

A joint University of Ghana-CSIR symposium was held in the Faculty of Agriculture later in the year to bring together

knowledge gathered so far on the grain legumes and also to make the public aware of the importance of this group of crops.

The root crops—yams, cassava, cocoyams and sweet potatoes also received active attention. Several exotic varieties of cocoyams were introduced to be tested alongside the local varieties. Excessive defoliation for spinach has led to a reduction in tuber yields of the local varieties. Some of the exotic types appeared to withstand defoliation better, and the indications are that one variety which is very leafy could be grown solely for leaf production if found palatable. This would take the defoliation pressure off the local types which could then be grown solely for tuber.

Selections for new varieties among yam and sweet potato seedlings continued. In the sweet potato, seedlings whose tubers were less sweet and tasted very much like Irish potatoes, when fried as chips, were selected. The prospects of this type of sweet potatoes as a substitute for the largely imported Irish potatoes are very promising indeed.

The incidence of a new cassava disease, Cassava Bacterial Blight, brought the Department and the Phytosanitary authorities of the Ministry of Agriculture together in a joint effort to combat the disease. A document outlining immediate and long-term control measures to be applied was submitted to the Ministry of Agriculture, and a symposium was held in the Faculty in June to make farmers aware of the problem and to show them how they can help to reduce the spread of the disease. The Department also started testing seedlings of resistant clones for eventual distribution to farmers.

### **Students Projects**

The following students research projects were undertaken during the year:

#### *A. Crops*

1. The effects of Gardena 50 per cent W.P. and Phosdrim 24 per cent E.C. on insect damage and yields of cowpea. Atta-Krah, A.N.
2. The effect of Gardena on the insect fauna and yield of cowpea. Dosoo, E.
3. The effect of defoliation on yield and stalk sugar of maize (*Zea Mays*) Ampong-Nyarko, K.
4. The effect of TIBA (2,3,5,—Triiodobenzoic acid) on certain plant characteristics and yield of a determinate and indeterminate cultivar of soybean. Abutiata, G. K.

5. Influence of variation in inter-row and intra-row spacings on some plant characters and yields of soybean (*Glycine max*). Kyiu, F. K.
6. The effect of weeds on the yield and certain characters of soybean (*Glycine max*). Asiedu, E.
7. Studies on the tolerance of some exotic and local varieties of tomatoes to root knot nematodes. Brempong-Yeboah, C. Y.
8. Photoperiodic response in the parents and F<sub>2</sub> progenies of three cowpea (*Vigna unguiculata*) cultivars. Enos, S.
9. A comparison of the effects of two fungicides, Mucprax and Orthodifolation on *Phytophthora palmivora* a pathogen of cocoa. Asafo-Adjei, R. T.
10. The effect of photoperiod on the nodulation, growth flowering and seed yield of the winged bean (*Psophocarpus tetragenolobus*). Nyamalegbe, K. B.
11. The effect of CCC (2—chloroethyl trimethyl ammonium chloride) and etherel (2—chloroethyl phosphonic acid) on flowering and bulb characteristics of Bawku onions (*Allum cepa*). Otoo, E.
12. The effect of fertilizer levels on yield, quality and blossom-end rot of tomatoes (*Lycopersicon esculentum*). Awuma, K.
13. The effect of intercropping on the performance of maize and cassava. Abaka-Ewusi, K.
14. Effect of rooting media and node number on the growth and tuber yield of white yam (*Dioscorea rotunda*) cuttings. Adu-Baffuor, A.

#### *B. Soils*

1. A comparison of several methods of determining the lime requirements of Ghanaian soils. Awere-Gyekye, F.
2. Investigation into some physical properties of soil which favour growth of cassava (*Manihot esculenta*. Crantz). Owiafe, A. K.
3. Effect of inoculum size on the nodulation and nitrogen content of 5 selected grain legumes in two Ghanaian soils. Dakora, F. D.



## Publications

1. DADSON, R. B. 1977. "Screening and evaluation of soyabean cultivars at Legon". Proceedings of the University of Ghana-CSIR Symposium on Grain Legumes. Faculty of Agriculture, University of Ghana, Legon pp. 71-77.
2. DOKU, E. V. 1977. "Food grain legume production in Ghana". Proceedings of the University of Ghana-CSIR Symposium on Grain Legumes. Faculty of Agriculture, University of Ghana, Legon. pp. 1-6.
3. DOKU, E. V. "Food storage losses in Ghana". Paper read at the Commonwealth Secretariat Regional Workshop on Post-harvest Losses, Accra, April 25-29, 1977.
4. DANSO, S. K. A. "The ecology of *Rhizobium* and recent advances in the study of the ecology of *Rhizobium*". In P. Dart and A. Ayanaba Eds. Biological nitrogen fixation in farming systems of the tropics. J. Wileys, London (In press).
5. LAMPTEY, P. "Ultra-structure of pepper veinal Mottle Virus in host cells". Paper read at the first International Conference on the impact of viral diseases on the development of African countries. Abidjan, 13-18th December, 1976.
6. MANTE, E. F. G. 1977. "Suitable soils for legume production". Proceedings of the University of Ghana-CSIR Symposium on Grain Legumes. Faculty of Agriculture, University of Ghana, Legon. pp. 7-23.
7. MANTE, E. F. G. 1977. "Resources and Environment—The Role of Science Teaching". Edited by E. Laing and E. F. G. Mante. Proceedings of the 1st COSTED/SCOPE Workshop on Resources and Environment, the Role of Science Teaching.
8. SINNADURAI, S. 1977. "Preliminary studies on some Ghanaian Okra varieties". *Vegetables for Hot Humid Tropics Newsletter* 2: 45.
9. SINNADURAI, S. 1977. "Onion farming in Ghana". *Economic Botany* 31:312-314.

10. THOMPSON, E. J. AND E. A. DENNIS, 1977. "Studies on nodulation and nitrogen fixation by selected legumes". *Proceedings of the University of Ghana-CSIR Symposium on Grain Legumes*. Faculty of Agriculture, University of Ghana, Legon. pp. 85-102.
11. THOMPSON, E. J. "Raising productivity in the Agricultural sector". Public Lecture. Lectures and Seminars organized by the Management Development and Productivity Institute. March 13-19, 1977.
12. COBBINA, J. AND E. J. THOMPSON. "Relationship between phosphorus absorption maximum and phosphorus availability in selected Ghanaian soils". Paper read at the 10th Biennial Ghana Science Association Conference, Cape Coast University, April 2-7, 1977.
13. THOMPSON, E. J. "Training needs of developing countries in soil testing". FAO/Finland Expert Consultation on Soil and Plant Testing in Developing Countries. Rome, June 13-17, 1977.
14. THOMPSON, E. J. "The use of chemical fertilizers in Ghana and West Africa:—Trends, problems and prospects". Fourth Scientific Conference on Chemicalization of Plant Production in the Tropic and Sub-Tropics. Karl Marx University, Leipzig, June 27-July 7, 1977.

#### **Conferences and other Activities**

The major event of the year was a symposium on grain legumes organised jointly by the University of Ghana and the Council for Scientific and Industrial Research which was held in the Faculty of Agriculture, Legon—December 10-11, 1977. The organising committee was headed by Dr. E. V. Doku of the Division of Crops who also elected the Proceedings. Papers were read by Drs. Ankomah, Dadson, Doku, Mante and Thompson of the Department of Crop Science. Dr. E. J. Thompson chaired the Opening Session as well as the First Session on Production. Dr. R. B. Dadson chaired the Second Session on Production and Dr. E. V. Doku presided over the Third Session on Research. Dr. E. V. Doku participated in the Commonwealth Secretariat Regional Workshop on post-harvest losses held in Accra from April 25th to 29th, 1977. Dr. J. F. Abu attended the First International Sympo-

sium on Pests of Grain Legumes at the IITA from 8th to 13th November, 1976 and the Joint International Centre for Insect Physiology and Ecology and United Nations Environment Programme (INCIPEUNEP) Training Course on Integrated Pest Management in Nairobi from 3rd to 22nd July, 1977. Dr. Paul Lamptey attended the IDRC/IITA Cassava Blight Workshop at Ibadan, Nigeria from 1-4th November, 1976 and the First International Conference on the Impact of Viral Diseases in the Development of African Countries which was held in Abidjan 13-18th December, 1976. Dr. S. K. A. Danso of the Soils Division lectured at the UNEP/UNESCO/ICRO Regional Training Course on Basic Research Techniques in Industrial and Environmental Microbiology in Nairobi, Kenya, August 22nd.

Dr. S. Sinnadurai was Visiting Lecturer in Tropical Crop Production at the University of Guelph, Ontario, Canada from December, 1976 to July 1977 and he served on the Management Board of the Crops Research Institute of the Council for Scientific and Industrial Research during the period under review. Professor D. K. Acquaye continued as President of the Association of Faculties of Agriculture in Africa and was busily engaged in efforts to establish a permanent Secretariat for the Association. Dr. E. J. Thompson delivered a public lecture during "Productivity Week" March 13-19, 1977 organised by the Management Development and Productivity Institute and read a joint paper at the 10th Biennial Conference of the Ghana Science Association held at Cape Coast University, April 2-7, 1977. He presented an invitational paper at the FAO/Finland Expert Consultation on Soil and Plant Testing in Developing Countries held at FAO Headquarters in Rome, June 13-17, 1977. Dr. Thompson read another invitational paper at the 4th Scientific Conference on "Chemicalization of Plant Production in the Tropics and Sub-Tropics" held at Karl Marx University, Leipzig, G.D.R., June 27-July 7, 1977.

## DEPARTMENT OF AGRICULTURAL EXTENSION

### Staff

Mr. J. J. Hagarty, Lecturer serving through the Ghana/Guelph Project left at the end of the 1976/77 academic year and was relieved by Mr. C. F. MacGregor. Mr. E. Bortei-Doku, Acting Head of the Department left on Sabbatical Leave in January, 1977.

Dr. J. K. Geker and Dr. K. D. Opare returned from study leave at the beginning of the academic year.

Staff Members at Post, 1976/77:

Dr. J. K. Geker  
Dr. K. D. Opare  
Mr. F. M. Y. Fiadjoe  
Mr. J. J. Hagarty

### **Students and Courses**

Courses in Agricultural Extension and Rural Sociology were offered to the following groups of Students:

- (a) National Diploma in Agriculture Part I & II
- (b) National Diploma in Animal Health Part I & II
- (c) National Diploma in Agricultural Mechanization Part I & II
- (d) Diploma in Home Science Part I
- (e) B.Sc. Agriculture Part I
- (f) B.Sc. Agriculture Part II
- (g) B.A. Sociology Part II

### **Short Course in Extension**

The Department has so far taken over 980 Technical Officers from the Ministry of Agriculture through a five-day Short Course in Extension under the Ghana/Guelph Project.

### **Village Practicals for National Diploma in Agriculture Students**

The Department continued to organise village practicals for National Diploma students. The practicals were organised for students to learn to do extension work with farmers.

### **Conferences and Workshops**

Dr. J. K. Geker was a lecturer at two Workshops for Agricultural Science Teachers held at Akropong-Akwapim and Agona Swedru in March and June, 1977.

He served as a member of Ministry of Education Committee for the preparation of Agricultural Science Syllabus for Junior Secondary Schools and Upper Primary Schools, and as a member of Social, Agricultural and Economic Sub-Committee of the Volta Lake Research and Development Project (V.R.A.).

Dr. K. D. Opere was a member of the Ghana delegation to the Cocoa Alliance Technical Consultation on Agricultural Extension Methods and Techniques for Cocoa held in Brazil in May, 1977. He was a member of the Management Committee of the Cocoa Production Division, Ministry of Cocoa Affairs.

### Research Activities

Members of staff were engaged in research activities alongside their teaching and extension duties.

DR. J. K. GEKER—Evaluation of Agricultural Education Programme Activities in Ghanaian Secondary Schools.

DR. K. D. OPARE—Reasons for farmers not Adopting Recommended Cocoa Practices.

The new Department of Agricultural Extension passed through its first year with no serious problems. The only problem has been that of accommodation. The Department needs one more office and a publications room.

## DEPARTMENT OF HOME SCIENCE

### Staff

*New Staff.*—Miss Charlotte Oforu—B.Sc. Home Science, Legon; M.Sc. University of Guelph, to teach extension and Housing Environment.

*End of Contract.*—Dr. Gwenna Moss, Ghana/Guelph appointee, ended her contract of two years with the department. Senior lecturer in the department, she taught Research Methods, Extension and Housing Environment. Miss Marie Dunn, who was asked back in February, 1976 also left. The department, after the 1975/76 session, found it necessary to request the University of Guelph to extend Miss Dunn's contract for another year since her services were still needed. The request was granted and she helped with the Management and Housing Courses.

### Students

Nineteen students were admitted into the first year of the Diploma in Home Science Extension programme. Enrolment dropped for the degree course, only three were admitted into the B.Sc. and 10 in the B.A. with a total of 67 in the department.

Fifteen completed the diploma in home science and 6 in the B.Sc. with one First Class.

### **Course, Research and Extension Activities**

The new degree programme graduated its first products at the end of the last session. A first class, the first ever, was obtained by one of the graduates, Mrs. Edith Francois, who is presently pursuing further studies at the University of Guelph.

### **Research**

The following are in progress:—

**MRS. FREMA OSEI-OPARE**

- (1) Home preservation experiments—freezing of cassava; sun-drying, bottling and freezing of garden eggs.
- (2) Development of recipes using different varieties of sweet potatoes (a co-operative work with the Division of Crop Science).

**MRS. DOCEA FIANU**—Fabric preferences of the wives of lecturers of University of Ghana.

**DR. GWENNA MOSS**—

- (1) Survey of Eating Patterns of University of Ghana students under the “Pay as You Eat” (PAYE) system—in collaboration with Mrs. Opare-Obisaw.
- (2) Study of village woman’s day—in collaboration with Miss Marie Dunn.
- (3) Study of village women: Their homes and villages—in collaboration with Miss Marie Dunn.

These last 2 studies were from the 1975/76 session. The studies have been completed and Dr. Moss has promised to send a written report.

**MRS. OPARE-OBISAW**—In addition to the collaborative work with Dr. Moss, Mrs. Opare-Obisaw has been working with vegetables.

- (1) The effects of freezing on the nutritive value and eating quality of some local leafy green vegetables.
- (2) Ascorbic acid content of tomatoes—a factor of variety of treatment or time of harvesting.

**MRS. LAETITIA HEVI-YIBOE**—

- (1) The management practices of rural Ghanaian women (Volta Region).

- (2) Storage of some local vegetables.
- (3) The use of students loans by University of Ghana students.

The department's extension work was centred mainly in Oyibi and Amasaman, nearby villages. Some of the students also helped with the "Baby-Well Clinic" of the Staff Village.

### **Conferences**

Except for a one-day workshop in Appropriate Technology on 28th September, 1977 in collaboration with the Agricultural Engineering Division and UNICEF, the department was unable to organize any conference.

However the Acting Head of Department read a paper on the "Integration of Women Into Economic Development" at the Sociological Conference in March at the University of Cape Coast.

Mrs. Opare-Obisaw attended an international conference in Nutrition Education in the United Kingdom in August and presented a paper on "The Impact of Nutrition Education at a Baby Clinic" (One of the extension activities referred to above).

### **Visitors**

Dr. Janet Wardlaw, Dean of the College of Family and Consumer Studies, visited the department from 11th to 22nd February.

The Ghana/Guelph project ends formally in 1978. The Dean was here for an on the spot evaluation as far as Home Science is concerned. She wanted to find out for herself the growth of the department during the course of the project and also to have discussions with faculty members as to the kind of continuing relationship which will be of mutual benefit (Ghana and Guelph) after 1977/78 academic year.

Definite plans were made for the final year of the project. As requested much earlier on, plans for short term visits of University of Guelph faculty members were finalized. Child Studies, Housing and Home Management were identified as areas which needed help and attention. Names were suggested and Dean Wardlaw was to make the necessary contacts when she returned home.

Professors Joan Simon and Richard Barham are expected early 1978 January and February respectively.

Unfortunately Dean Wardlaw's visit coincided with one of the several strike actions of students and she could not meet all the Home Science students. However, she met a few on an informal basis. She also had very lively and revealing individual meetings with most of the Home Science staff who had studied in her college at the University of Guelph.

Dr. Jim Shute—Ghana/Guelph Project Director was here in May on his usual round of duty.

Mrs. Ogunka, the external examiner from the Department of Home Economics, Alvan Ikoku College of Education, Owerri, E. C. S., Nigeria was here from Thursday, 6th October to Monday, 10th October.

### Benefactors

As already mentioned, though the Co-operative Project of the Universities of Ghana and Guelph is coming to a close in 1978, the department continues to benefit from it. Mrs. Edith Francois left in September to do further studies in Management under the auspices of the project.

Short term visits (about a term or less) after 1978 are also under consideration.

The department continues to receive aid in the form of equipment from the project. Delivery was taken of a V.W. combi bus in June, 1977. The additional bus has greatly enhanced the work of the department, especially in the area of extension.

During the department's 10th Anniversary celebration in November, 1976, an appeal was made for funds—the Virginia Cutler Scholarship Fund. The following contributions were made during the celebrations and in the course of the year:

(i) Dr. Lila Engberg (former Head of Department)	£	1,000.00
(ii) Dr. Jim Shute, Director of Ghana/Guelph Project on behalf of the University of Guelph (on the occasion of the department's 10th anniversary celebration)	..	500.00
(iii) Ghana Home Science Association	..	300.00
(iv) Dr. and Mrs. Moss (Dr. Moss' Parents)	..	110.00



(v) A Reading Club to which Mrs. Moss belongs .. .. .	27.00
(vi) Mrs. Rose Dunn (mother of Miss. Marie Dunn) .. .. .	27.00
(vii) The Friendly Service Club of College Avenue United Church through Mrs. Dunn. .. .. .	27.00

Some USAID equipment in connection with the Home improvement project arrived during the year.

## AGRICULTURAL RESEARCH STATION, KADE

### Staff

Dr. A. A. Opoku, Senior Research Officer-in-Charge resigned from the services of the University at the end of his two years leave. Mr. F. H. Asiedu was confirmed in his appointment as a Research Officer. He proceeded on a two year study leave at the University College of Wales to read for his Ph.D. degree. Mr. S. Asamoah-Appiah joined the staff as a Graduate Research Assistant. He assumed duty on 1st September, 1977. Mr. S. T. Nartey's appointment as Farm Supervisor was confirmed. Mr. S. K. Karikari spent nearly seven months at the Tropical Products Institute (T.P.I.) London, investigating post harvest Physiology of plantains under a collaborative programme between the University and the Tropical Products Institute.

### Research

**Rubber** (*Hevea brasiliensis*): Research on rubber is in its sixteenth year. Results so far indicate that rubber clones GT1, PRIM 501, PB 5/51, PB 5/63 and FRIC 45 have been found to be the best yielders. It is beneficial to intercrop young rubber plantations until the rubber plants are about 10 years old without any decrease in growth of the trees or yield of latex. Dense planting followed by thinning is wasteful. At present records continue to be kept on prevalent rubber diseases and clonal vigour. Studies are being made on different treatments on quantity of latex flow and quality of smoked sheets.

**Citrus**:--Rootstock studies have been completed after 14 years, and four have been found to be the best. These are, Rangpur lime, Lake Tangelo, Rough Lemon and Cleopatra Mandarin. All citrus buddlings now used on the station as well as any sold out to farmers are indexed for all known viruses of citrus. Studies have been initiated on fruit quality.

### *Other Fruits:*

*Avocado and Mangoes.*—Few exotic varieties including 'Fuerte', have been introduced and comparison is being made on their performance. In the local collection types Q,56 and 58 have promise of high yield, good quality and off season. These are being cloned for multiplication. Exotic cultivars that have started flowering and fruiting show self-incompatibility and biennial bearing. Further investigation into these problems are being undertaken.

*Cola.*—Studies on cola were mainly concentrated on the effect of genotype and fruit setting, colour segregation and germination and early seedling growth. Hand pollination of cross incompatible types, e.g. Laboshie white, X-Kade white decreased fruit drop, and increased seed yield consequently. Colour segregation observed between various types did not appear to be hereditary. Fi plants of all crops have been planted and observations are being made on early seedling growth.

*Plantains.*—Research on plantains was concentrated on post-harvest physiology of storage and ripening, which was carried out at the Tropical Products Institute in London by Mr. S. K. Karikari. Preliminary results showed variation between bunch age of the 'Apem' (French) and 'Apantu' (Horn) types. In Apem bunch age fell within 120–130 days and in Apantu 80–120 days. Correlation co-efficients of the order 0.6–0.8 were observed between bunch age and mean finger girths; the growth rates of apem and apantu being about 1/15cms, and 1/12 cms per day respectively. Differences were small between bunch age and storage life in plantains of varying maturities, but generally plantains kept in sealed plastic containers in a flow through system stored for 30–40 days without ripening. Ripening pattern in Apem follows six stages; early pre-climateric phase, a pre-climateric, climateric, peak climateric, post-climateric and senescence. Peak of ethylene production is about 30–70 ul/kg/hr and this is observed about 60 hours before peak of carbon dioxide production which is about 100 mg/kg/hr. The study is being extended to 'Apantu'.

*Cocoyam.*—Studies were made to compare the performance of 14 varieties of Puerto Rican cocoyams and four of Ghanaian ones. The Puerto Rican cocoyams are generally less vigorous in growth, but one variety *Xanthosoma brazilliensis* has much potential as a producer of green leaves for spinach (Kontomire). The study continues.

**Winged Beans.**—Investigations on winged beans were concentrated on seed multiplication to supply seeds to the Food Research Institute for use in preparation of infant weaning foods. Under this study it was found out that it costs ₵348.00 to cultivate a hectare of the beans, for a yield of 700 Kilos of air dried seed. A price of 15 pesewas a cigarette tin (200 gms) should be offered for the farmer to realise a profit of ₵175.00. Studies are being made on the use of the winged bean as a cover crop, and tuber formation.

**Livestock.**—The project on sheep husbandry entered its fifth year. Reproduction performance of Nungua Black Head West African Dwarf Sheep was investigated. Dams were in three age groups 5–11 months (ewe lambs), 12–24 months (yearlings) and 25–48 months. Reproductive performance increased with increasing age of dam, but conception, birth and weaning percentages were quite high for the ewe lambs which made applicable contribution to the overall flock production. Studies on grazing behaviour of yearling and mature West African Dwarf sheep showed that a flock of about 100 sheep should be the optimum to be tended by one man especially under perennial tree crops with crowns close to the ground.

#### *Students and Courses:*

Training facilities on propagation and culture of forest zone crops were provided on the station for students of the Faculty of Agriculture during the long vacation. Some staff members of the Station participated in the teaching and seminar programmes of the Faculty.

#### **Visitors**

Distinguished visitors to the station included Professor E. N. W. Oppong, the Dean of the Faculty of Agriculture, Mr. E. O. Dodoo, Deputy Registrar; Osagyefo Kuntunkununku II, Okyenhene and Mr. E. K. Ofori, Director of Finance of the Cocoa Marketing Board

#### **Conferences and Activities**

While at the Tropical Products Institute in London, Mr. S. K. Karikari gave two seminars on plantains in the Farming Systems of West Africa and Post Harvest Physiology of Storage of Plantains. Mr. Karikari also gave a seminar on An Integrated Approach towards Research on Food Crops in Ghana, with special Reference to Plantains. Mr. Karikari and Mr. F. H. Asiedu participated in the First CSIR/University of Ghana

Grain Legume Workshop at Legon, 10th–11th December, 1976 and read a joint paper entitled Cost Accounting in the Production of Winged Beans (*Psophocarpus tetragonolobus* (L) DC).

Mr. F. H. Asiedu participated in the 10th Biennial Conference of the Ghana Science Association, held at the University of Cape Coast from 2nd–7th April, 1977 and read a paper entitled “Sheep Production Under Tree Crops—The Reproductive Performance of Nungua Black Head—West African Dwarf Sheep Crosses”.

### Publications

ABAKA-GYENIN, A. K. and J. C. Norman (1977): ‘The Effect of Storage on Fruit Quality of Watermelons (*Citrullus vulgaris* Schrad)’. *Acta Horticulture* 53 305–307.

KARIKARI, S. K. and S. OTENG (1977): ‘The Effect of Staking on the growth and yield of the winged bean (*Psophocarpus tetragonolobus* (L) DC)’ *Acta Horticulture* 53 159–163.

KARIKARI, S. K. and S. K. LAVOE (1977): ‘Preliminary Evaluation and Utilisation of 14 cultivars of Bambarra groundnut (*Voandzeia subterranea* Thouars)’ *Acta Horticultural* 53 195–199.

KARIKARI, S. K. and K. A. AMANKWAAH (1977): ‘The Effect of Sucker type and size on the growth and development of banana (*Musa ABB Group*)’ *Acta Horticultural* 53, 341–347.

P. N. L. LAMPTEY and S. K. KARIKARI (1977): ‘*Helicotylenchus disydera* associated with banana and plantain in Ghana.’ *Acta Horticultural* 53, 291–292.

The Station’s Annual Report for 1971/72–1974/75 were published in a combined form.

## AGRICULTURAL RESEARCH STATION, KPONG

### Staff

Mr. G. Y. Gidiglo, Senior Clerk, was transferred to the Dean’s Office, Faculty of Agriculture on 1st November, 1976. Mr. James K. Madakena, Clerk Grade 2, was transferred on promotion to the Department of Animal Science on 1st October, 1976.

The following new appointments were made with effect from the dates shown:

Mr. Francis A. Dor, Technical Assistant Grade 2, 1st July, 1977.

Mr. Benjamin Annoh, Research Assistant Grade 3, 1st July, 1977.

Mr. Moses K. Addae, Departmental Assistant Grade 3, 6th September, 1977.

Mr. Ben T. Kwablah, Established Labourer, resigned his appointment with effect from 1st July, 1977.

Six members of the junior staff were promoted during the year. The grades to which they were promoted and the effective dates of the promotions are indicated below.

Mr. J. M. D. Obeng, Senior Departmental Assistant, 1st October, 1976.

Mr. S. Y. Nyadzro, Storekeeper Grade 2, 1st October, 1976.

Mr. M. B. Anom, Driver Inspector, 1st October, 1976.

Mr. A. K. Dunyo, Driver Inspector, 1st October, 1976.

Mr. C. Y. Kumado, Junior Foreman, 1st October, 1976.

Mr. Francis Nutsi, Accounts Clerk Grade I, 1st February, 1977.

Dr. J. W. Oteng who had been on study leave returned to the Station in September, 1976. Mr. B. K. Johnson, Farm Supervisor, attended a six week course for Field Assistants engaged in rice research work in January/February, 1977. The course which was held in Liberia was organized by the West Africa Rice Development Association.

Because it is not convenient for junior staff of the Station to attend courses in Legon, it was decided to organize two courses in Book-keeping and English for the junior staff of the station.

### **Research and Notable Developments**

With the return of Dr. Oteng to the Station, the number of resident research scientists increased from one to two. The Animal Science Department, Legon continued to be responsible for research projects on improvement of beef cattle in the Station. Drs. Paul Lamptey and John Abu of the Department of Crop Science, Legon and Dr. D. M. Osafo of the Department of Crop Production, University of Science and Tech-

nology, started research projects in the Station. Mr. K. B. Boakye-Boateng, an agronomist of the Crops Research Institute started to conduct research work in the Station during the year.

Mr. Aryeetey continued his agronomic and varietal improvement studies on rice, cowpea and soya bean.

Dr. Oteng and Mr. Boakye-Boateng resumed research work on sugarcane which had been suspended in 1972 because of shortage of research scientists.

The Station continued to collaborate with the West Africa Rice Development Association in conducting rice variety trials and with the International Institute of Tropical Agriculture in testing varieties of rice, cowpea and soya bean. Collaboration between the Station and the International Soybean Program (INTSOY), U.S.A., in soya bean research started during the year.

#### **Conferences**

Mr. Aryeetey attended the Annual Rice Research Review Meeting of the West Africa Rice Development Association in Monrovia in May, 1977. He presented a paper entitled "Rice Herbicide and Variety Trials at the Agricultural Research Station, Kpong, Ghana, 1976-77"

#### **Extension and Other Activities**

A successful Open Day was held on the Station on 21st January, 1977. It was attended by a large number of guests including farmers, chiefs and Government officials.

Seed of the recommended rice varieties CICA 4 and IR 442, was sold to various organizations and farmers during the year. Among the organisations which bought rice seed from the Station were the Seed Multiplication Unit of the Ministry of Agriculture, the Asutsuare Rice Irrigation Project and the Southern Rice Development Association.

The Station continued to support the efforts of the Grains Development Board in promoting soya bean production in the country. In addition to making the Station's research findings on soya bean available to the Board, the Station supplied the Board with seed of the high yielding soya bean variety, F62-3977, to be given to selected farmers for planting.

Advice on various aspects of agriculture was given to farmers who visited the Station throughout the year.

### Visitors

Among the large number of visitors to the Station were the following:

Dr. D. Nangju, International Institute of Tropical Agriculture, Ibadan, Nigeria.

Mr. R. Chabrolin, I.R.A.T., Paris.

Dr. Paul G. Addoh, O.A.U.-S.T.R.C.-I.A.P.S.C., Yaounde Cameroon.

Dr. A. H. Abdel-Razik, Assistant Executive Secretary, O.A.U.-S.T.R.C., Lagos, Nigeria.

Hon. M. C. Jallou, M.P., Gambia.

Dr. J. C. M. Shute, University of Guelph, Canada.

Prof. S. Sey, Bank of Ghana, Accra.

Prof. E. O. Asare, Faculty of Agriculture, U.S.T., Kumasi

Mr. T. O. Sunkwa-Mills, Director, Department of Animal Husbandry, Accra.

Dr. Henry B. Obeng, Director, Soil Research Institute, Kumasi.

Dr. P. R. Goldsworthy, Assistant Director, International Institute of Tropical Agriculture, Ibadan, Nigeria.

## AGRICULTURAL RESEARCH STATION, LEGON

### Staff

Miss. Gertrude Aboagye was appointed Research Officer. Mr. D. A. Ayebo was granted leave of absence for two years to pursue his Ph.D. degree course in Milk Technology in the U.S.A. Dr. Topal, a Hungarian Veterinary Surgeon on Technical Aid to the Agricultural Research Station, Legon completed his contract and left for Hungary.

### Students

Degree and National Diploma students in Agriculture and Animal Health were lectured on the Station by Miss. Aboagye and Dr. Bafi-Yeboa respectively.

### Courses

The training of Middle School Leavers and young farmers continued. Some institutions and organisations are giving the

practical training programme a good patronage by sending their wards for training.

### **Extension**

The Department of Agricultural Extension continued with the Short Courses for Technical Officers drawn from the Ministry of Agriculture. These short courses have become a permanent feature on the station's programme.

### **Publication**

The following papers have been accepted for publication:—

1. Brewer's Grain as a Supplementary Feed to Weaned bullocks.
2. The incidence of Tapeworm (Helminth) infestation in Sheep and Goats at the University of Ghana Agricultural Research Station, Legon.

### **Research**

Research Reports are published in the Station's Annual Reports.

### **Visitors**

Among the distinguished visitors to the station were R.R. Long, University of Papua, New Guinea; Brain Whitworth (incubationist), Western Incubators, England; Geoffrey de Freitas, (MP), House of Commons, London; Dr. Anthony Smith, University of Edinburgh, England (Centre of Tropical Vet. Medicine); David Jones, Overseas Development Institute, London; R.B. Griffiths, Chief Animal Health Service, FAO, Rome, Italy; S. K. Bose, Regional Engineer, Greater Accra Region, Ghana Highways Authority; J. Peruerstorfer, Prime Minister's Office, A.1010 Vienna, Austria; P. Horbell, Director U.K. Ministry of Overseas Development, London; Dr. Evans Anom, Chairman, National Council for Higher Education, Accra; Dr. Claude Bissell, University of Toronto, Canada; G. Montsma, Department of Tropical Animal Production, Agriculture University of Wageningen, Holland; Dr. I. Sada, Institute of Tropical and Sub-Tropical Institute in Prague; Dr. Pospisil, Institute of Tropical and Sub-Tropical Institute in Prague; Fred Beaver, Brisbane, Australia; Prof. E. A. Boateng, Environmental Protection Council, Accra.



FACULTY OF ARTS  
DEPARTMENT OF CLASSICS

**Staff**

Professor de Graft Hanson took his sabbatical which he spent at the University of British Columbia. In his absence Mr. J. B. Leaning acted as Head of Department. Three new lecturers were appointed to the Department: Dr. L. L. Doyle, who had just completed his Ph.D. on 'The origin, significance and development of *Ludi* at Rome, with special reference to the Roman and Plebeian Games, to the end of the Republican period'; Mr. T. T. Rapke, who unfortunately had to vacate his post after only five months; and Mr. D. K. Shadow, a student of the Department, on completion of his M.A. thesis 'Africa and the Roman *venationes*'. The Department also had a new External Examiner, Professor A. R. Birley, Professor of Ancient History in the University of Manchester.

**Students and Courses**

During the session two hundred and forty-seven students worked in the Department. Of these a small number read Latin, but the main emphasis of the Department is now on teaching the Classics in translation, and these courses are proving popular and successful. Ancient History is already well established, and this year Classical Civilization admitted its first F.U.E. students. The aim of this course is to provide students with a wide appreciation and knowledge of Greek and Roman civilization through studies in ancient society, literature, history, philosophy and religion based on the principal texts in translation. But facilities will also be offered for those students who wish to specialize in Classical Civilization or Ancient History after the first year to obtain a working knowledge of Latin.

The distribution of students was as follows:—

*Latin*

F.U.E. .. .. .	6
Part I .. .. .	2
Part II .. .. .	2
<i>Ancient History</i>	
F.U.E. .. .. .	97
Part I .. .. .	82
Part II .. .. .	14
<i>Classical Civilization</i>	
F.U.E. .. .. .	44
Total .. .. .	247

## Publications

Members continued to work in their respective areas of interest and the following publications were made:—

- de Graft Hanson, J. O.: 'Curtius Rufus Vision of the spirit of Africa' *Universitas* Volume 5, Number 2 (New Series) May/November, 1976.
- Adeleye, G.: 1. 'Critias: from Moderation to radicalism' *Museum Africum*, 6, 1977.
2. 'The Arginusae affair and Theramenes' rejection at the *dokimasia* of 405/404 B.C. *Museum Africum*, 6, 1977.

## LANGUAGE CENTRE

### Courses and Students

During the academic year under review the language Centre offered five courses:—

1. English Language and Study Skills Course.
2. Diploma and Graduate Diploma in Ghanaian Language Teaching.
3. Francophone English Course.
4. The F.U.E. (African Studies) Language Proficiency Course B.1.
5. Proficiency Courses in Ghanaian Languages.

#### 1. *English Language and Study Skills*

About 450 students enrolled for this course during the year under review. 141 F.U.E. Arts, Agriculture, Medicine and Law students, and four diploma students were taught. Groups were taught from the following courses:

- Diploma in Home Science (19)
- Diploma in Ghanaian Languages (9)
- Diploma in Sociology for Prison Officers (15)
- Diploma in Post Basic Nursing/Nursing Administration (24)
- Diploma in Librarianship/Archival Studies (37)

Staff of the Language Centre taught English in the School of Administration for the following courses:

- Diploma in Public Administration
- Diploma in Accounting, I and II

This amounted to a total of 120 students.

## 2. *Diploma/Graduate Diploma in Ghanaian Language Teaching*

Nine Secondary School Tutors, released on study leave with pay by the Ghana Education Service, took this course during the year under review. All except one passed the final Diploma examinations.

### 3. *The Francophone Unit*

The Francophone Unit opened in April, 1977 with the aim of teaching English to mainly francophone Africans. Lessons were given to occasional students until the end of the third term when the Unit began preparations for Long Vacation courses.

In the Long Vacation, short courses were given to 34 Nigerienne and Gabonese students from the Universities of Niamey and Gabon respectively. These courses were very successful and it is hoped to repeat them for a longer period and, with larger numbers from the same Universities.

## 4. *F.U.E. (African Studies) Language Proficiency Course B.1.*

This course is a new one which the Language Centre teaches for the Institute of African Studies. In all, the Centre taught 278 students whose breakdown is as follows:

Twi: 89, Fante: 14, Ga: 125, Ewe: 36, Dagbani: 14.

## 5. *Proficiency Courses in some Ghanaian Languages*

Enrolment position at the beginning of the academic year was as follows:

Twi: 15, Fante: 4, Ga: 7, Ewe: 4.

## *Publications*

PROFESSOR GILBERT ASARE:

1. 'Four Rationalisations for Maintaining the European Languages in Education in Africa'. A paper read at a Seminar on African Languages in Education, Kinshasa, Zaire, December, 1976.
2. 'National Development and Language: A Prologue to Language Policy Formulation and Implementation'. A paper delivered at the West African Linguistic Congress, Ife, Nigeria—April, 1976.

HELEN ODAMTEN (Miss): "Command of Spoken English in Ghana, a case for a New Teaching Approach"—to be published in the forthcoming '*Papers in Ghanaian Linguistics*' Vol. 6.

## Research Projects

E. Y. EGBLEWOGBE:

- (a) *A Sociolinguistic Study of Ewe Personal Names*.—This Project was completed in February, 1977 and the results submitted as a Ph.D. thesis.
- (b) *Collection of Ewe Oral, Art Forms*.—The aim of this project is to provide a book containing sample collections of the various genres of Ewe Oral Literature for "A" level studies.

E. O. KORANTENG: *An Akan Course for Beginners*.—The work is aimed to meet the needs of both foreign students and Ghanaian students whose mother-tongue is not Akan. It is divided into three sections as follows:

Elementary  
Intermediate  
Advanced

S. E. SANNEH (MRS.): *Logba and the 'Togo Remnant' Languages*.—This project includes the analysis of Logba phonology, morphology and syntax and the collection of word lists in order to establish whether or not logba can be included in the so-called 'Togo Remnant' group of languages.

HELEN ODAMTTEN (MISS):

- (a) *Present Standards in Spoken English Among Formally Educated Ghanaians*.—An on-going project in the identification of main problem areas and the development of compensatory material.
- (b) *Current Trends in the Use of English Among Students at the University of Ghana*.—This will involve an analysis of student writing particularly student journals, to determine the varieties of English most in vogue amongst students at the University.

F. KOFI NYAKU: *A Bibliography of Ewe*.—This will include all books and papers written on or in Ewe.

S. W. ASOMANING:

- (a) *The Language of the 'Bonsam' and 'Ayesu' fetishes*.—This includes a study of the language used in worship of the fetishes, the names of articles used and the stories about them.
- (b) *A Standardized Akan Orthography*

J. A. CODJOE:

(a) *A Ga Course for Beginners*.—For use by both foreign and Ghanaian students (the latter not native speakers of Ga). It will be based on material already in use at the Language Centre.

(b) *Ga Proverbs and 'Adawe' Songs*.—Collection and classification.

A. AL-HASSAN.—*A Short Dagbani Dictionary*

### Conferences/Seminars

Professor G. Ansre: 13th–15th December, 1976—Seminar on African Languages in Education organised by the International African Institute in Kinshasa, Zaire. He delivered a paper on 'Four Rationalisations for Maintaining the European Languages in Education in Africa'.

12th January, 1977:—Kumasi University Seminar in Language and Literature. Professor Ansre read a paper on 'Development and Language Use in Ghana'.

4th–6th July, 1977.—The West Africa Linguistic Society meeting in Ibadan, Nigeria.

27th August—5th September, 1977.—International Congress of Linguists in Vienna, Austria.

Mr. E. Y. Egblewogbe: Mr. Egblewogbe attended a six-week intensive French Course organised by the Association of African Universities in l'Université du Bénin, Lomé, Togo, from the 17th of July—28th August, 1977.

Miss H. Odamtten: Attended the Annual Meeting of the Linguistic Circle of Accra—30th June, 1977—at which various research papers on aspects of Ghanaian and West African Linguistics were read. Venue: University of Ghana, Legon.

### Workshop on Primary School Materials

In collaboration with the Curriculum Research and Development Division of the Ghana Teaching Service, The Centre organised a Workshop on the writing of Primary School materials—Science, Mathematics and Environmental Studies—in Ghanaian Languages from 10th July to 20th August. Work is continuing on the materials.

### Extension and other Activities

Members of the Centre liaised with and continued to be consulted by the Ghana Publishing Corporation, Bureau of

Ghana Languages, Curriculum Research and Development Division, Ministry of Education, and the West African Examinations Council. The Centre also participated in the activities of the Association of Teachers of Ghanaian Languages, the Linguistic Circle of Accra and the West African Linguistic Society.

## DEPARTMENT OF LINGUISTICS

### Staff

The Department started the year with Professor L. A. Boadi, Head of Department, on a year's Sabbatical Leave at the University of Nigeria, Nsukka, and Dr. F. A. Dolphyne appointed Acting Head of Department.

Okyeame Boafu Akuffo, who was appointed Temporary Chief Instructor for two years to assist in the collection and analysis of material for teaching oral literature, had his appointment extended to 31st March, 1977.

Mr. Kwesi Yankah was appointed Lecturer in the Department with effect from 1st March, 1977.

### Students

Student numbers in the Department were as follows:

M.A. 1st year	..	..	..	..	2
M.A. 2nd year	..	..	..	..	3
Postgraduate Diploma	..	..	..	..	2
B.A. Part II	..	..	..	..	12
B.A. Part I	..	..	..	..	26
First Year	..	..	..	..	97

The student intake for the First Year shows a considerable increase over the previous years' intake of 52.

### Courses

The Department continued to offer courses leading to the B.A. and M.A. degrees. These included Theoretical Linguistics, Linguistics of Ghanaian Languages, Linguistics of English, Stylistics, Sociolinguistics and Diachronic Linguistics. With the slight improvement in staff numbers it was possible to include Instrumental Phonetics in the Phonetic Theory course for the B.A. Part I. In the past this has been done for the B.A. Part II and postgraduate courses only. Dr. M. E. K.

Dakubu of the Institute of African Studies taught the course in Diachronic Linguistics, and Dr. Duthie gave a course in Sociolinguistics and the History of Linguistics to graduate students for the first time.

The Department used two of the postgraduate students and the one National Serviceman for F.U.E. tutorial classes.

### **Departmental Seminars**

The following papers were read at Departmental Seminars during the year:

Dr. M. E. K. Dakubu.—Tone and Vowel interrelationship in Ga

Dr. A. S. Duthie.—Consonant and Tone in Ewe

Mr. K. Yankah.—Akan Proverbs

Mr. C. H. Capo (Graduate student).—Nasalisation in Aja.

### **Research**

Dr. Dolphyne continued research work on Akan dialects, the languages of the Brong-speaking areas of Ghana and the Ivory Coast, and the historical phonology of the Volta-Bandama languages.

Dr. Duthie completed work on a textbook of Ewe phonology and grammar for G.C.E. 'O' and 'A' level students, and continued work on the bibliography of the Ewe-Ge-Aja-Fon languages.

Dr. Moser started a study of the phonology and syntax of Hausa spoken in Ghana, and will be teaching it at Part I level in future.

Dr. Mensah continued work on phonetic aspects of sound change, especially of palatalisation of consonants. He also worked on the Ga Literary Studies Project.

### **Publications**

DR. F. A. Dolphyne.—'Language use in the Upper Region', in *Transactions of the Linguistic Circle of Accra: Papers in Ghanaian Linguistics II* IAS, Legon, 1977.

DR. E. N. A. Mensah.—'Problems of Palatalisation in Akan', in *Transactions of the Linguistic Circle of Accra: Papers in Ghanaian Linguistics II*, IAS, Legon, 1977.

### **Other Activities**

Members of the Department continued to serve on the West African Examinations Council's Subject Panels for G.C.E. 'O' level Oral English and 'A' level Ghanaian languages.

Professor Boadi continued his term of office as Secretary-Treasurer of the West African Linguistic Society, and Dr. Dolphyne and Dr. Duthie were re-elected President and Secretary-Treasurer, respectively, of the Linguistic Circle of Accra. Professor Boadi continued to edit the *Legon Journal of Humanities*.

Dr. Dolphyne was external examiner in linguistics for the University of Ibadan. She also served as Vice-Chairman of the National Council on Women and Development, and a member of the Ghana Education Service Council.

Dr. Duthie participated in a course on basic translation principles for the Institute of Linguistics in Tamale in August, 1977.

Dr. E. N. A. Mensah wrote and presented French lessons for the Ghana Broadcasting Corporation.

## DEPARTMENT OF MODERN LANGUAGES

### **Staff**

During the 1976-77 academic year, the Department welcomed the following new members:

Dr. K. A. Sampson, Lecturer in French

Mr. Daniel Cep, Tutor in French

Mr. M. M. Abdel-Latif Gouda, Part-time tutor in Arabic

Mrs. Hamida Harrison, Assistant Lecturer in Swahili

Dr. J. J. Achiriga, Lecturer in French and Dr. V. A. O. Lamptey, Lecturer in Spanish, were away on study leave in France and Spain respectively.

Dr. S. K. Britwum, Lecturer in French was promoted to the rank of Senior Lecturer.

At the end of the academic year, Dr. W. M. Hutchins who had been responsible for looking after Arabic for three years in difficult circumstances, resigned from the Department. Mrs. Morcos-Wen, Lecturer in Arabic, was transferred, at her



own request, to the Department of History as lecturer in Islamic History.

Students	Part I (year abroad)					Final	M.A.
	F.U.E.	Part I	Part I	Part I	Part I		
French .. ..	46	29	24	20	1		
Swahili .. ..	13	—	2	4	—		
Russian .. ..	24	14	15	2	—		
Spanish .. ..	32	18	16	7	—		
Arabic .. ..	4	3	1	2	—		
	119	64	64	35	1		

Students' Total=277

### Courses

There were no new developments in the courses in the Department. The new degree structure was applied throughout the entire Department.

Despite the decision taken by the Academic Board, Portuguese could not be offered as an ancillary subject owing to the lack of suitable teaching personnel. Some German was available to the various sections of the Faculty of Science.

### Publications

R. F. AMONOO: "The Study of French Literature: 17th Century French Drama and Corneille". *Proceedings of the Ghana Academy of Arts and Sciences*. Vol. XIII 1975, Accra 1977 p. 35-44.

S. K. BRITWUM: "La socialité du texte et/ou le texte du réel: pour un socio-critique du roman africain" in *Text and Context in Africa*, Mineke Schipper—de Leeuw, Leyden, Holland.

Review—article of *Socio-political thought in African Literature*, in *African Literature Today*, Number X, Heinemann, London.

R. G. HADEN: "Towards the establishment of lexical and grammatical minimums, taking into account different registers of Russian" in a Collection of articles, Russki Jazyk publishers, Warsaw.

N. O. MMBAGA: "The elements of Swahili plays", *Mulika* No. 8, 1976, Institute of Kiswahili Research, Dar-es-Salaam, 1976.

"The development of Swahili Poetry, 1827-1967", *Kioo cha Lugha*, Nos. 4 and 5, Chamacha Kiswahili-Dar-es-Salaam, 1976.

#### Seminar and Conference Papers

R. F. AMONOO: 'The Oedipus in classical French drama: Corneille and Voltaire' Joint Modern Languages English seminar, May 1977.

W. O. ANIMFEN: 'Gide and the Oedipus legend'.

J. N. D. DODOO: 'Cocteau and the Oedipus theme'. 'The Department of French in English-speaking Africa and its relations with pre-university institutions'. AUPELF Regional Seminar, Legon, January, 1977.  
'French in English-speaking Africa and the role of University teachers'. AUPELF World Congress, Strasbourg, July 1977.

K. A. SAMPSON: 'Componential analysis applied to the teaching and learning of French'. AUPELF Seminar, Legon, January 1977.

R. G. HADEN: 'A course in History, Literature and civilization for beginners'. Seminar for Russian Teachers from Asia, Africa and Latin America, Moscow, July 1977.

E. MCGRATH: 'Black Africans in Spain from the Middle Ages to the end of the 17th Century'. Department of History Seminar, May 1977.

Professor Marie Claire Banquart of Paris University X, Nanterre, visited the Department during the month of February. She gave a series of lectures and seminars on the following subjects:

1. The various Poetic Tendencies during the first twenty-five years of the 20th Century (Jules Romains, Apollinaire, Dada, Saint-John Perse).
2. Significance and influence of the Surrealist movement (Aragon, Andre Breton, La Revolution Surrealiste).
3. Maupassant naturalist?
4. The technique of the Short Story in Maupassant (*Boule de suif, Le Horla, Garcon, Un Bock!*).

The Department of Modern Languages hosted a Regional seminar for English speaking Universities in West Africa organised by the AUPELF (Association of Universities entirely or partially of the French language), from the 17th to the 21st of January, 1977. The conference was attended by over 30 specialists of French from Universities in Ghana, Nigeria and Sierra Leone, and observers from the University of Abidjan, and by officials of the AUPELF from Canada and Paris.

The discussions centred on the following:

1. Aims of the teaching of French in English-speaking West Africa.
2. Teaching of the Language and the role of Linguistics.
3. Contribution of French Literatures and civilisations.
4. Institutional problems.

The inaugural session of the seminar was attended by Dr. Evans Anom, Chairman of the National Council for Higher Education; the Vice-Chancellor of the University of Ghana; Dr. Y. Lule, Secretary General of the Association of African Universities; Mr. Nzeza Bilakila, Director of the African Bureau of AUPELF, Dakar. The Rector of the University of Dakar, Professor Seydou Madani Sy, President of the AUPELF subsequently joined in the seminar. At the end of the seminar, a West African Regional Committee of the AUPELF was set up and Dr. J. N. D. Doodoo was elected one of the two representatives of Ghana.

#### **Staff-Student Consultative Committee**

The following served on the Staff-Student Consultative Committee:

	<i>Students</i>	<i>Staff</i>
Spanish Section	Sylvester Doggu	Miss. E. McGrath
Russian Section	Mensah Eleblu	Mr. R. G. Haden
Arabic Section	Ameen Muhammad	Dr. W. M. Hutchins
French Section	Martin Quansah	Dr. W. O. Animfen/ Prof. Amonoo
Swahili Section	J. T. Y. Amekplenu	Mr. T. B. M. Buggingo and Mr. A. Okai (Secretary).
3rd Year .. ..	.. .. Daniel Anaglate	
2nd Year .. ..	.. .. Anthony Mensah	
1st Year .. ..	.. .. Kwashi C. W. Kpornu	

The Consultative Committee held two meetings. The first on Friday, 26th November, discussed a number of subjects including the departmental library, periodicals, courses in French and Spanish, the Language laboratories, the year abroad programme, etc. The second meeting discussed mostly the question of the financing of handouts to students. A suggestion had been made to the effect that handouts to students should be costed and charged to them. It was agreed that for the time being, it was premature to levy students but that representation be made to the University to ensure that money was available for running courses, including teaching materials.

### **Conferences**

Mr. R. G. Haden, Head of the Russian Section and Mr. J. D. A. Okai, attended the 17th International seminar of Russian Teachers from Asia, Africa and Latin America held in Moscow, from the 12th of June-12th of July, 1977. Dr. J. N. D. Dodoo attended the World Congress of the AUPELF at Strasburg from the 17th-23rd of July, 1977. Professor R. F. Amonoo attended the Biennial Congress of the International Council for Philosophy and Humanistic Studies at Montreal, from the 14th-17th of September, 1977.

### **Gifts and Donation**

The French Government gave the Department an annual grant of 3,000 French Francs, about C750, for the purchase of books to be kept in the departmental library. The Soviet Government, through the Soviet Cultural Centre, donated two Russian Typewriters to the Department. As in previous years, the French, Spanish and Soviet governments awarded scholarships to some of the second year students to enable them to spend the year abroad in Dakar or Abidjan, Madrid and Minsk Universities.

### **Extra Curricula Activities**

Dr. Dodoo, acted as President to the Ghana Association of French Teachers (GAFT). Mr. Atukwei Okai was President of the Association of Writers (GAW). Heads of Languages liaised with their counterparts at the Ghana Institute of Languages to discuss the programme of the Institute and also acted as External examiners.

Dr. Britwum and Dr. Dodoo served as Chief examiners in French at the West African Examinations Council. Professor

Amonoo was the external examiner at the University of Ife: he also served on the board of management of the Ghana Institute of Languages and on the Council of the Ghana Association of Arts and Sciences.

## DEPARTMENT OF PHILOSOPHY

### Staff

Professor J. O. Sodippo, Head of the Department of Philosophy, Chairman of the College of Humanities at the University of Ife, Nigeria and editor of *Second Order, An African Journal of Philosophy* was Visiting Professor in the department during the first term of the session. During the same session, Mr. M.A. Kissi, who had been on sabbatical in the previous session resumed duties, and Mr. Gjertsen took his sabbatical leave.

### Students

F.U.E.	..	..	..	..	..	176
Part I	..	..	..	..	..	40
Part II	..	..	..	..	..	21

### Research

#### J. K. M. ARTHUR

- (a) The question of proverbs as material for Philosophy
- (b) Plato's Politics and Africa.
- (c) Interpretation of Plato's *Cratylus*.
- (d) The Pragmatic justification of Induction.

E. F. COLLINS: Political Philosophy.

KWAME GYEKYE: Akan Philosophical Ideas.

DEREK GJERTSEN Nature and Growth of Science.

M. A. KISSI: investigations in the field of moral theory with special reference to the psychological study of Will and its relevance to the problems of Ethics.

#### B. E. OGUAH

- (a) Aspects of African Philosophy.
- (b) The Philosophy of Kant.
- (c) Existence and Predication.

#### Kwasi Wiredu

- (a) The Philosophy of Logic.
- (b) The relation between contemporary African philosophy and African traditional thought.

### Departmental Seminars

- J. O. SODIPO: Karl Marx, Albert Camus and Frantz Fanon on the Dehumanisation and the Re-creation of Personality.  
S. E. OGUAH: Transcendentalism, Kant's Analogy and Time.  
E. F. COLLINS: On Commanding.

### Publications

- J. K. M. ARTHUR: 'African Philosophers and African Philosophy', paper read at Addis Ababa University Conference on Philosophy, December 1976; forthcoming in the Ethiopian review *Abba Salama*.

#### KWAME GYEKYE

- (1) 'Akan Concept of a Person', *International Philosophical Quarterly*, August, 1978.
- (2) 'Akan Language and the Materialist Thesis', *Studies in Language*, Vol. 1. 1977
- (3) 'An African Conception of Philosophy (Wisdom) *Studia Africana*, Vol. 1, No. 2 October 1977.
- (4) 'The term TA ADIAPHORA in Aristotle's post Anal 100 16', *Museum Africum*, 1977.

#### B. E. OGUAH

- (1) 'Transcendental Arguments and Mathematical Institutions in Kant'; forthcoming in *Kant Studien*. Bonn, West Germany.
- (2) 'Dualism: African Ideas about Man', *Studia Africana*, October, 1977.
- (3) 'Transcendentalism, Kant's First Analogy and Time'; *Second Order: An African Journal of Philosophy* Vol. VI, No. 1 January, 1977.

#### KWASI WIREDU

- (1) 'Philosophy and our Culture, Fellows Inaugural Address to the Academy of Arts and Sciences, October 1976; forthcoming in the *Proceedings*.
- (2) 'The problem of Entailment', in *Second Order: An African Journal of Philosophy*, University of Ife Press, Ife, Nigeria.
- (3) 'On the Necessity of S4', *Notre Dame Journal of Formal Logic*, Indiana, U.S.A.

## DEPARTMENT FOR THE STUDY OF RELIGIONS

### Staff

We started the session without Rev. Dr. J. C. Thomas who went to the University of Lancaster, England, for his sabbatical leave. Mr. B. A. R. Braimah was back at post after two years spent at the School of Oriental and African Languages, University of London, working on his Ph.D. thesis.

Mr. J. S. Pobee was promoted Associate Professor, and one of our M.A. students, Mr. A. A. Akrong, continued to handle part of the First Year degree and diploma courses.

### Students

The First Year intake (degree) was 93; the rest of the new intake consisted of 13 diploma, 3 M.A., and 1 Ph.D. students. We catered for about 150 students in all the various categories together.

### Courses and Research

No significant modifications in the courses offered were made in the session.

The staff continued with their research interests. Professor Dickson has completed a manuscript, "A Study in Ancient Israelite Sacrifice" (accepted for publication by the Ghana Universities Press), and work is proceeding on the Old Testament and African Life and Thought, and African Traditional Wisdom Sayings.

Professor Pobee's interest in Church and State in Ghana has issued in a manuscript on the subject which is in the press (E. J. Brill, Leiden). Meanwhile, work proceeds on Theology of Persecution and Martyrdom in Paul, and Ethical and Religious Aspects of Population Dynamics.

Dr. Thomas has completed work on Dr. Ackah's manuscript on Akan Ethics, and has re-written his Ph.D. thesis which has been accepted for publication by the Ghana Universities Press (Title: "Theology and Falsification"). A new area of research on which he has embarked is Problems of Development of Christian Doctrine with Special Reference to the Indigenisation of Christianity in West Africa.

Mr. J. N. Kudadjie continues to work on his Ph.D. thesis (Morality among the Ga-Dangme), and with Professor Pobee he is working on the Ethical and Religious Aspects of Population Dynamics.

Dr. Ryan's research interests are: Comparative Study of the Forms of Traditional Faith Among Kwa and Gur-speaking Peoples in West Africa and Comparative Study of Modern Trends in African Muslim and Christian Thought.

Dr. Sanneh is preparing an Arabic historical manuscript on Karamokho Ba of Touba, Guinea (1730-1834), and is in the process of contributing to a three-part study of ancient Ghana and the Almoravids based on Arabic and oral sources.

#### **Publications**

**K. A. DICKSON:**

1. "The Biblical Basis of Confessing Christ", tabled at a Conference at the Ecumenical Institute, Bossey, 2-8 July, 1977.
2. "The Methodist Witness and the African Situation", Methodist Theological Institute Proceedings, Oxford, 18-28 July, 1977 (forthcoming).
3. "Assumption of African Civilisation Values as Christian Values", Presence Africaine Conference Proceedings, 12-17 September, 1977 (forthcoming).

**J. S. POBEE:**

1. Edited "Religion in a Pluralistic Society", F. J. Brill.
2. "Social Change and African Traditional Religion", *Sociological Analysis*, Vol. 38, No. 1 (Spring 1977), pp. 1-12.
3. Review article on "The Prayers of African Religion" *Worship*, Vol. 51, No. 2.
4. "The Church and Community", *African and Asian Contributions to Contemporary Theology*, ed. J. S. Mbiti, pp 78-88, Ecumenical Institute, Bossey, 1977.
5. "Christianity and Indigenous Beliefs" (Revised), *Ghana Talks: Ghana Past and Present*, ed. Maggie Dodds, Washington: Three Continents Press.

**J. C. THOMAS:**

1. "The Epistemology of Karl Barth", in *The Heythrop Journal*, October 1977.



2. "Christology, Creation and Falsification", *Ghana Bulletin of Theology*, December 1975.

**P. J. RYAN:**

1. "Stages in the Development of 'Monotheism' in West Africa", delivered at the Harvard Divinity School, March, 1977.
2. "Polarities within Contemporary Islam and Christianity in West Africa", Islam in Africa Project Conference Proceedings, July 1977.
3. "Islam and Christianity in Africa: A Comparativist Viewpoint", *Intellect*.

**B. A. R. BRAIMAH:** "Kitab-ul-Abalis"—a didactic poem by al-Hajj Umar of Salaga, edited with footnotes, 1977 edition of *Research Bulletin of the Centre of Arabic Documentation*, University of Ibadan.

**J. N. KUDADJIE:**

1. (With several others, "The Impact of Tourism on the Social Life of Ghana (Vol. 2)).
2. "The Psycho-Social Effects of Tourism on Ghana", Tourist Board Control Seminar.
3. Review Article in *Universitas* (forthcoming) on Okot p'Bitek's *African Religions in Western Scholarship*.
4. *Report of the All Africa Conference of Churches Consultation of African Church Music*, Legon, 17-23 April, 1976.

**L. O. SANNEH:**

1. "The Muslim Education of an African Child", in Brown and Hiskett (eds.), *Conflict and Harmony in Education in Tropical Africa*, London: George Allen and Unwin, 1975.
2. "Christian Experience of Islamic Da'wao" *International Review of Mission*, Geneva, October 1976.
3. "Christian-Muslim Encounter in Freetown in the 19th Century", *Bulletin of the Secretariat for Non-Christians*, Rome, XII/1-2, 34-35, 1977.

## FACULTY OF LAW

### Staff

Mr. S. O. Gyandoh Jnr., Senior Lecturer in Law returned to his post after spending his sabbatical leave at the Netherlands Institute for Advanced Studies (N.I.A.S.). Dr. A. K. P. Kludze,

Senior Lecturer, has been granted a year's sabbatical leave with effect from October 1977 to enable him accept a fellowship at the Temple University School of Law, Philadelphia, U.S.A. Mr. E. V. O. Dankwa, a lecturer who was granted a year's study leave had his leave extended for another year. Mr. J. A. Peters, a lecturer, who was appointed during the 1976/77 academic year under the Leiden/Legon Project in Public Law left for home at the end of his tour. Mr. F. S. Tsikata was appointed lecturer. Mr. E. D. Kom has been appointed Part-Time Lecturer.

### **Students**

In the LL.B. Part II Examination this year, eleven candidates obtained Second Class Upper Division. Eight candidates obtained Second Class Upper Division in the Professional Law Part II Examination. Miss Myma Adwoa Bentsi-Enchill was awarded the Mensah Sarbah Prize for being the best student in the Professional Law Parts I and II Examinations. The Moot Court was also won by her. For Mr. E. D. Kom's Prize in Civil Procedure, Miss Myma Adwoa Bentsi-Enchill tied with Mr. E. Obeng Kuffuor for the first place. Miss Myma Bentsi-Enchill and Miss. Bemma B. Donkoh were awarded University Post-graduate scholarships tenable at Harvard Law School, U.S.A. Mr. F. N. A. Sowah was also awarded a University Post-graduate scholarship to study at London School of Commerce. Miss Leonora K. Agyarko and Mr. Yaw Benneh have also been awarded fellowships at the Leyden University under the Leyden/Legon Project on Public Law. Messrs M. A. Ntumy and Kwamena Acquah have been awarded fellowships at the Temple University Law School, U.S.A. to read for the LL.M. degree.

### **Research**

**PROFESSOR W. C. EKOW DANIELS**

1. Family Law and Administrative Law

**DR. A. K. P. KLUDZE.** Equity and Succession in Ghana

**DR. S. K. DATE-BAH**

1. Analysis of the results of Ghanaian Businessmen and Contract Law Project.
2. Law and Environmental Research
3. Case Study of the Contracts of GIHOC

DR. G. F. A. SAWYERR. Continuing long-term study of the impact of multinational corporate activity on Trade and Investment in underdeveloped countries. 'Patents and the Transfer of Technology, and Management Agreements'.

DR. R. B. TURKSON

1. Project on GIHOC
2. Project on Environmental Legislation

DR. A. K. FIADJOE

1. Negligence in Tort Law
2. The Oppression Remedy as Applied by the Ghanaian Courts.

MRS. AKUA KUENYEHIA. Female Labour Force participation in Ghana and the Legal and other discrimination suffered by them.

MR. C. E. K. KUMADO

1. Judicial Attitudes in Anglophone and Francophone Africa.
2. ECOWAS and the municipal laws of the member states
3. Contempt of Court in Ghanaian Law.

### Publications

PROFESSOR W. C. EKOW DANIELS

1. 'Defences to breach of promise of Marriage' (1976) 8 *R.G.L.* 55-63.
2. 'The Extent of the Head of Family's Liability to Account' (1976) 8 *R.G.L.* 70.
3. 'Marital Family Law and Social Policy' *Essays in Ghanaian Law*, 1976, pp. 92-117. Woodman & Daniels (Eds.)

DR. A. K. P. KLUDZE "A Century of Changes in the Law of Succession" *Essays in Ghanaian Law* 1976, pp. 233-265.

DR. S. K. DATE-BAH

1. "Remedying Wrongful Dismissal: the way of an Iconoclast" (1976) 8 *R.G.L.* 211.
2. "Legislative Control of Freedom of Contract" *Essays in Ghanaian Law*. Woodman & Daniels (Eds.)

DR. G. F. A. SAWYERR

1. "Multinational Corporation and Underdevelopment: The Case of the Rubber Tyre Project of Ghana", Ghai Y. P. (ed.) *Public Enterprises in Africa*; Uppsala.

2. "Industrial Co-operation under the A.C.P.-E.E.C. Convention of Lome" 13 *U.G.L.J.*
3. "Dependency and Rural underdevelopment" (mimeo) Paper read at Workshop on "Rural Development and Planning", Kumasi, May, 1977.

**DR. R. B. TURKSON**

1. "The Right to make and reply to a Submission of No Case", August 1976 *R.G.L.* 158.
2. "The Survival of the Fundamental Human Rights Provisions of the 1969 Constitution" December 1976 *R.G.L.*
3. "The Role of Law in Socio-Economic Development" Paper read at Family Education Seminar held in Banjul, The Gambia, July 1977.

**DR. A. K. FIADJOE**

1. The Position of the Non-member Director and the Oppression Remedy in Ghana (1976) 8 *R.G.L.* 236.
2. The Company Law of Ghana Revisited—A review of the Past Fourteen Years. Lecture delivered to the Institute of Chartered Accountants Ghana: Accepted for Publication in the *U.G.L.J.*

**Conferences**

Professor W. C. Ekow Daniels, Dean of the Faculty of Law was invited by the Ambassador to Pakistan to attend and participate in the proceedings of the Conference of Jurists in connection with the Quaid-i-Azam Centenary Celebrations held in Karachi from 5th to 12th December, 1976. Professor Daniels was also invited by the Dean of Temple University Law School and gave a series of lectures from the 1st to 8th April, 1977. The French Government invited Prof. Daniels to attend and participate in the proceedings of a seminar on African Law held in Paris from the 29th September to the 7th of October, 1977.

Dr. A. K. Fiadjoe was nominated by the Ghana Atomic Energy Commission to serve on the delegation to the Annual Conference of the International Atomic Energy Agency in Vienna, Austria, from 24th September to 21st October, 1977. Dr. S. K. Date-Bah was nominated by the Ministry of Foreign Affairs to serve on the Ghana delegation to the United Nations Commission on International Trade Law Annual Session from

23rd May to 17th June, 1977. Dr. R. B. Turkson was invited to participate in the Third Annual Seminar on Recent Developments in American Law, Hebrew University, Jerusalem from 18th to 28th July, 1977. Mrs. Akua Kuenyehia was invited to read a Paper on 'Discrimination Against and the Exploitation of Women in the Labour Market and Under Legislation' at the 19th FIDA Convention held in Lagos, Nigeria, from 4th to 11th September, 1977. Dr. G. F. A. Sawyerr attended a seminar on Industrialisation in West Africa: and Realities held in M'Bour, Senegal, from 1st to 8th May, 1977.

#### **Visitors**

Among the distinguished visitors to the Faculty during the year were Professor W. Simmonds, Queen Mary College, University of London, Professor Bernard C. Audit, Universite Rene Descasta, Paris, Professor Cowen, University of Queensland, Australia and Professor Patrick Swygert of the Temple University School of Law, U.S.A.

### **FACULTY OF SCIENCE**

#### **DEPARTMENT OF BOTANY**

#### **Staff**

Miss Angelina A. Oppong left for the University of Wisconsin, U.S., on study leave, in January 1977 to pursue a course of studies leading to the Ph.D. degree in Genetics.

Dr. J. M. Lock, one of our plant taxonomists, who joined the Department in 1971 left the service of the University at the end of the year.

Dr. D. Adomako of the Cocoa Research Institute, Tafo, Dr. H. B. Dampety of the University of Cape Coast and Mr. O. B. Dokosi of the C.S.I.R. gave part-time lectures on Cell metabolism, whole plant physiology and Economic Botany, respectively to B.Sc Parts I and II students.

Mr. P-L. Akushie and Mr. D. H. A. K. Amewonor assisted in the Department under the National Service Scheme during the year.

Dr. R. K. L. Bannerman was appointed a Research Fellow (Bacteriology) in the Volta Basin Research Project in April, 1977.

## Students

The students in the Department for the 1976/77 session were distributed as follows:

F.U.E.	..	..	..	..	..	65
B.Sc. Part I	..	..	..	..	..	10
B.Sc. Part II	..	..	..	..	..	2
M.Sc.	..	..	..	..	..	6
Ph.D. (non-resident)	..	..	..	..	..	6

## Courses

No new courses for the Department were added to those already published. Some courses were organised for other departments. Professor E. Laing gave a course on Cytogenetics to students of the Departments of Biochemistry and Psychology. He provided also a course in Biometry for students of the Departments of Zoology, and Nutrition and Food Science.

Mr. J. B. Hall gave three lectures on Botany to students of the Departments of Archaeology and two lectures on Terrestrial Ecology to students of the Department of Geography. Dr. M. D. Swaine gave in addition five lectures to the Geography students on Quantitative Ecology.

Miss Cecilia Apaloo gave 20 hours Tutorials to Final Year Medical Students on Aquatic Bacteria.

## Field Course

This year's field course was organised in April, 1977 at the Agricultural Research Station, Kade. Projects carried out were: Forest and Terrestrial Ecology under Mr. J. B. Hall and Dr. M.D. Swaine, Infection of Cola by *Tapinanthus bangwensis* under Professor G. C. Clerk and Floral Biology under Dr. J. M. Lock. The help of the Dean of the Faculty of Agriculture, Legon and members of the staff at the Research Station is gratefully acknowledged.

## The Students Consultative Committee

The membership of the Committee was as follows:—

Mr. K. G. de Graft-Johnson	..	F.U.E. Biology
Mr. T. Rajaratnam	..	F.U.E. Biology
Miss Maud Christian	..	B.Sc. Part I
Mr. E. A. Okrah	..	B.Sc. Part II
Mrs. Diana Lieberman	..	M.Sc.

Professor G. C. Clerk  
Mr. J. B. Hall  
Dr. M. D. Swaine  
Dr. C. E. Bimpong

### **Conferences, Workshops and Open Lectures**

Professor E. Laing attended the Science Education Programme for Africa writing Workshop in Accra from December 28, 1976 to January 8, 1977.

He also presented a paper 'Genetics of Cowpea' (with Mr. A. N. Aryeetey, Mr. G. Bonney and Professor S. I. K. Odoom) at the Symposium on Grain Legumes held at Legon on 11-12 December, 1976.

Professor G. C. Clerk and Miss. Cecilia Apaloo presented the paper "Effect of mineral Salts on sporangial formation of *Achlya megasperma*" at the Conference on the Volta Lake and National Development from September 5-11, 1976.

Professor G. C. Clerk attended an International Conference from September 20-30, 1976 at Taita Hills Lodge, Kenya, organised by the German Foundation for International Development (DSE) in collaboration with the German Agency for Technical Co-operation (GTZ) and the German Academic Exchange Service (DAAD) on "Teaching and Research in African Universities and the role of German assistance". He read a paper on 'Higher education for development in Africa and the role of the Association of African Universities'.

Dr. C. E. Bimpong read a paper on 'Fatty acid and lipid composition in mycelium and zoospores of *Phytophthora palmivora*' at the 2nd International Mycological Congress in Florida, U.S.A. August-September 3, 1977.

### **Other Activities**

Professor E. Laing was the External Examiner in Botany at the University of Dar-es-Salaam, Tanzania, and External Examiner in Botany at Fourah Bay College, University of Sierra Leone, Freetown, Sierra Leone.

Professor G. C. Clerk was the External Examiner in Botany at the University of Lagos, Nigeria and External Examiner in Biology at the University of Cape Coast.

Mr. J. B. Hall identified numerous specimens of plants brought to the Herbarium by the Government Chemical Labora-

tory, Institute of Aquatic Biology, Department of Game and Wild Life, Centre for Research into Plant Medicine, Mampong-Akwapim, Duke University, U.S.A., Forest Products Research Institute and the Volta River Authority.

Mr. J. B. Hall and Dr. M. D. Swaine wrote a report on the vegetation of the Bui National Park for the Department of Game and Wildlife.

### **Representation on Boards and Committees of Scientific and Educational Institutions**

Professor E. Laing served on the Council for Scientific and Industrial Research, Committee on Science of the National Council for Higher Education, Management Committee of Ghana Atomic Energy Commission, and the Management Committee of Adisadel College. He was the Chairman for the C.S.I.R. Library Committee, UNISIST National Committee and Prizes and Awards Committee of the Ghana Academy of Arts and Sciences.

Professor G. C. Clerk was a member of the Council of the C.S.I.R. and the Management Board of the Institute of Aquatic Biology. He was also the Scientific Editor of the Ghana Journal of Science.

Mr. J. B. Hall was the Consultative Editor of the Journal 'Forest Ecology and Management' and a member of the Natural Ecosystems Committee of the Environmental Protection Council.

### **Herbarium**

Collections were made during the year mostly from the Shai Hills, Mole National Park, Bia National Park and Bui Dam area. As much as 450 numbers were added to collections in the Herbarium.

An interesting collection of 118 Holocene leaf fossils was made from exposures of three lacustrine shales around lake Bosumtwi.

During the year a total of 703 duplicate specimens were sent to the following Institutions: Bailey Hortorium of Cornell University (10), East African Herbarium, Nairobi, Kenya (4), Forest Herbarium, Ibadan, Nigeria (47), Forest Herbarium, Kumasi, Ghana (71), Forest Herbarium (15), Herbarium Vadense, Wageningen, Netherlands (76), Missouri Botanic



Gardens (172), Museum National D'Histoire Naturelle, Paris (21), Royal Botanic Gardens (138), Smithsonian Institution, Washington (73), Universite d'Abidjan, Cote d'Ivoire (12), University of Cape Coast, Ghana (21), University of Ibadan, Nigeria (28), University of Ife, Ile-Ife, Nigeria (5) and University of Strathclyde, Glasgow, Scotland (10).

The Herbarium in turn received 353 duplicate specimens collected by Geerling and Bokdam in the Ivory Coast and Upper Volta on exchange basis from Wageningen, and 28 duplicate specimens of ferns collected by Dr. G. V. Benl from Fernando Po. One hundred and sixty-five duplicate specimens collected in Ghana by Dr. A. J. M. Leeuwenberg in February-March, 1976 were presented to the Herbarium.

### **The Botanical Garden**

The Botanical Garden suffered a very long spell of drought and some of the species in the Arboretum showed visible signs of the effect of the drought by excessive leaf-yellowing and leaf-fall.

During the year the Garden received seeds of 392 plant species from various Institutions and sent out 1,567 samples of seeds. Interest in the plants prepared for sale and wreaths made by the Garden have increased immensely and sales made in the session amounted to ₦1,420.90.

The Botanical Garden received a large number of visitors, made up of both individuals and groups. The notable visitors were: Lord and Lady Bowden, England, Isao Matsudaira, Governor of the Prefecture of Fukushima, Japan, Mr. Abdul Hassan-King, Grounds and Gardens Superintendent of Njala University College, Sierra Leone, and Dr. V. S. Sotchenko of the Maize Laboratory of the U.S.S.R.

### **Research Activities**

PROFESSOR E. LAING

1. Genetics of cowpea, *Vigna unguiculata* L. (Walp.)
2. Evolution of *Crinum ornatum*.
3. Chromosome cytology of cocoa
4. Human genetics
5. Akan terms on reproduction and heredity.

PROFESSOR G. C. CLERK

1. Host range and physiology of powdery mildews in Ghana
2. Physiology of sporangia of *Phytophthora palmivora* (Butl.) Butl.
3. *Pencillia* of stored groundnut seeds
4. Strains of *Trachysphaera fructigena* in Ghana
5. Smut diseases of grains in Ghana
6. Parasitic Angiosperms with special interest in *Tapinanthus bangwensis*

MR. J. B. HALL

1. Secondary succession in forests
2. Phenology and regeneration in dry forest in the Shai Hills
3. Effects of fire in savanna
4. Taxonomy and distribution of forest species

DR. D. M. JOHN

1. A taxonomic re-appraisal of marine algae of the West African and offshore islands
2. Structure and ecology of marine algal communities along the West African coast.
3. Structure and dynamics of subtidal algal communities off the Ghanaian coast.
4. Interactions in littoral and shallow subtidal habitats between grazers and marine algae.

DR. J. M. LOCK

1. Taxonomy of African Zingiberaceae
2. Plant/Animal Relationships

DR. M. D. SWAINE

1. Phenology and litter-fall of dry forest on the Shai Hills
2. Forest re-growth on an abandoned bauxite mine
3. Forest studies in Bia National Park
4. Forest dynamic at the Agricultural Research Station, Kade
5. Preparation of book (with J.B. Hall) on the distribution of forest species in Ghana.

DR. C. E. BIMPONG

1. Host-parasite relationships of cocoa and *Phytophthora palmivora*.

DR. E. K. OBENG-ASAMOA

1. Limnological Investigations of Volta Lake with emphasis on primary production.

2. Water quality changes in the Volta River below the Akosombo Dam.
3. Pollution of the Odaw Stream.

DR. R. L. K. BANNERMAN

1. Bacteriological investigations of the Volta Lake
2. Aquatic weeds

MISS CECILIA APALOO

1. The ecology of carbon degradating bacteria in the PawmPawm arm of the Volta Lake.
2. Influence of textile discharge on Microbial Population
3. Fungal disease of freshwater fishes

MR. O. B. DOKOSI

1. Research on medicinal plants
2. Studies on the Dioscoreaceae and Solanaceae.

### Publications

- NWACHUKU, E. (1977). The Floral Biology and the Chromosome Cytology of Cocoa. 50pp. B.Sc. Dissertation. University of Ghana.
- OKRAH, E. A. (1977). An experimental study on the effect of fish grazing on benthic algal succession on plexiglass plates pp. 1-49. B.Sc. Dissertation. University of Ghana.
- ANANG, E. R. (1976) Seasonal changes in the Phytoplankton population in the coastal waters of Ghana. 92pp. M.Sc. Thesis. University of Ghana.
- BROWN, R. N. A. (1977). Studies on Powdery Mildew of Pepper (*Capsicum* species) caused by *Leveillula taurica* (Lev.) Arn. 188p. M.Sc. Thesis. University of Ghana.
- MARKWEI, CAROL M. (1977). Studies on the mycoflora of freshly harvested and stored seeds of Groundnut (*Arachis hypogea* L.). 168pp. M.Sc. Thesis. University of Ghana.
- BEER, T. and SWAINE, M. D. (1977). 'On the theory of explosively dispersed seeds'. *New Phytol.* 78, 681-694.
- CLERK, G. C. (1976). 'Blackpod disease of Cocoa, observations on the parasite.' *Proceedings of the Ghana Academy of Arts and Sciences.*
- HALL, J. B. and SWAINE, M. D. (1976). 'Classification and ecology of closed-canopy forest in Ghana.' *J. Ecol.* 64, 913-951.

- JENIK, J. and HALL, J. B. (1976). 'Plant communities of the Accra Plains, Ghana.' *Folia Geobot. Phytotax.* 11, 163-212.
- JOHN, D. M. (1977). 'The marine algae of Ivory Coast and Cape Palmas in Liberia (Gulf of Guinea)'. *Revue algol.* 11, 303-324.
- KRAFT, G. T. and JOHN, D. M. (1976). 'The morphology and ecology of *Nemastoma* and *Predaea* species (Nemastomataceae, Rhodophyta) from Ghana.' *Br. phycol. J.* 11, 331-344.
- JOHN, D. M. and LAWSON, G. W. (1977). 'The marine algal flora of the Sierra Leone Peninsula.' *Botanica mar.* 20, 127-135.
- JOHN, D. M., D. LIEBERMAN and LIEBERMAN, M. (1977). 'The structure and dynamics of benthic subtidal algal vegetation off Ghana (Tropical West Africa)'. *J. Ecol.* 65, 497-522.
- JOHN, D. M. and LAWSON, G. W. (1977). 'The distribution and phytogeographical status of the marine algal flora of Gambia'. *Feddes Peperitorium* 88, 287-300.
- JOHN, D. M. and PRICE, J. H. (1977). 'The marine flora of Ascension Island, South Atlantic'. *Phycologia* 13. Supplement. p.55.
- DE MAY, D., JOHN, D. M. and LAWSON, G. W. (1977). 'A contribution to the littoral ecology of Liberia.' *Botanica mar.* 20, 41-46.
- ANANG, E. R., OBENG-ASAMO, E. K. and JOHN, D. M. (1977). "Observations on the red-water ciliate *Mesodinium rubrum* Lohmaum in Ghanaian coastal water". *Bull. Inst. fond. Afr. noire. ser A, no. 2, 38, 235-240.*
- LAING, E. (1977). Report on Research on Cowpea; Mimeo, *Department of Botany. Technical Report.*
- LOCK, J. M. (1977). "Probable pollination of *Parinari polyandra* by bats". *Nigerian Field* 41, 89-92.
- LOCK, J. M. (1977) "Notes on some species of *Aframomum* from East Africa". *Kew Bulletin* 31, 263-271.
- LOCK, J. M., HALL, J. B. and ABBIW, D. K. (1977). "The cultivation of Melegueta Pepper (*Aframomum melegueta*) in Ghana". *Econ. Bot.* 31, 321-330.

- Obeng-Asamoah, E. K. (1977). "The Kpong Hydro-Electric Project. Pre-impoundment Studies on the Hydrobiology of the Volta River below the Akosombo Dam". *V.B.R.P. Technical Report*.
- Swaine, M. D. and Beer, T. (1977). "Explosive seed dispersal in *Hura crepitans* L. (Euphorbiaceae)". *New Phytol.* 78, 695-708
- Swaine, M. D. and Hall, J. B. (1976). "An application of ordination to the identification of forest types". *Vegetatio* 32, 83-86.

### Visitors

Visitors to the Department included:

- Dr. A. J. M. Leenwenberg, Laboratory of Plant Taxonomy, Wageningen.
- Dr. V. S. Sotchenko, Dr. G. V. Tekhanovich and Dr. G. A. Tekhanovich, Institute of Plant Industry, Leningrad, U.S.S.R.
- Prof. J. Yanney-Ewusie, Vice-Chancellor, University of Cape Coast, Cape Coast.
- Mr. Abdul Hasan-King, Njala University College, Sierra Leone.

### Benefactors

The Department acknowledges with gratitude a gift of two air-conditioners for the Herbarium by the Ghana Cocoa Growing Research Association, Birmingham, England.

The Department is also indebted to FORGE for the gift of three refrigerated incubators for work on stored seed deterioration and a calculator for work on Genetics of Cow pea.

## DEPARTMENT OF BIOCHEMISTRY

### Staff

Two new lecturers, Dr. N. Woolhouse and Dr. Marian E. Addy were appointed to the Department.

Professor G. S. Asante, Head of Department, returned from sabbatical leave.

Dr. E. Anato-Dumelo, lecturer, was granted one year study leave with pay with effect from 1st January, 1977 to undertake research at the University of Leeds under the special Link arrangement with that University. His trip was sponsored by the Inter-University Council (I.U.C.) in London.

Dr. K. K. Oduro, lecturer, returned to Legon after 30 months study leave at Edinburgh University, where he worked for the Ph.D. degree. He was sponsored by the Commonwealth Scholarship Commission in the U.K.

Mr. E. Owusu-Mireku, Assistant Technician, studying under the I.U.C. Technician Training award at Kitson College, Leeds, passed the Part II City and Guilds Examination in June 1977. He also worked at the Leeds Biochemistry Department to acquire more experience in laboratory work. He is expected to be back at Legon at the end of October 1977.

Mr. Defencer Anyetei was promoted Principal Technician.

### Students

Student numbers in various courses in the Department were as follows:

B.Sc. Part I	..	..	..	..	34
B.Sc. Part II (3.2.1.)	..	..	..	..	12
B.Sc. Part II (3.2.2.)	..	..	..	..	7
M.Sc.	..	..	..	..	7
2nd M.B. Ch.B.	..	..	..	..	71
2nd B.D.S.	..	..	..	..	7
F.U.E. Agriculture	..	..	..	..	59

### Courses

The Biochemistry curriculum and syllabuses for the B.Sc. degree programme were revised during the session to streamline overlaps that have been observed since the new degree structure came into operation in October, 1973.

A similar revision exercise was carried out on the biochemistry syllabus for the 2nd M.B./B.D.S. programme.

Thirteen project reports on research work carried out by B.Sc. Part II students were completed. The research projects included investigations into certain aspects of malaria parasite, antimalarial drugs and /or steroid hormone, red blood cell membrane and metabolism, black pod disease of cocoa caused by *Phytophthora palmivora*, and trypsin inhibitor from a local legume.

One thesis entitled "Glucose Metabolism by *Phytophthora palmivora*" was accepted for the award of the M.Sc degree.

Three candidates for the M.Sc. degree and one for the Ph.D. degree submitted their theses for examination.

### Publications

MARTIN F. CHAPLIN and two others (1977), 'Studies on the Mucilages Extracted from Okra Fruits (*Hibiscus esculentus* L) and Baobab Leave (*Adansonia digitata* L.), *J.Sc. Fd. Agric.* Vol. 28, 519-529.

ASHONG, J. O. with Woolfe, J. A. (1976), 'A comparison of Hair Root Morphology with Anthropometric and Biochemical Indices of Nutritional Status in Ghanaian Pre-School Children'. *Environmental Child Health* Vol.2, No.6, 281-284.

### Conferences

In July 1977 the Department organised a successful meeting of the Ghana Biochemical Society with the aim to reactivating the society which had become dormant for the past few years.

- (i) Tenth Biennial Conference of the Ghana Science Association at the University of Cape Coast—2-7 April, 1977: Three Senior Members of the Department participated in the conference. Papers read were:

'Trypsin Inhibitor from *Griffonia simplicifolia* seeds' by F. N. Gyang.

'A Study of o-diphenol: O<sub>2</sub> Oxidoreductase from 'cocoa husk' by M. F. Chaplin.

'*In vitro* cultivation of Human Plasmodium falciparum' by J. O. Ashong.

- (ii) Symposium on Medicinal Plants at the University of Ife, Nigeria, 8-16 July, 1977. Dr. Marian E. Addy participated in this symposium by reading a paper entitled "Metabolic effects of Antiasthmatic Plant Materials on Sensitized Mice."

### Visitors

The following people visited the department during the year:

Dr. T. A. Scott, Department of Biochemistry, University of Leeds as Visiting Senior Lecturer for about four weeks under the special Link arrangement with the University of Leeds.

Dr. P. H. W. Butterworth, Department of Biochemistry, University College London, as External Examiner for the B.Sc. degree examination.

Professor R. L. Smith, Department of Biochemical and Experimental Pharmacology, St. Mary's Hospital Medical School, Paddington, London as External Examiner for the M.B.II examination in Biochemistry.

Professor B. E. Ryman, Department of Biochemistry, Charring Cross Hospital Medical School, University of London paid a short visit to the Department following a visit as external examiner to University of Ibadan in February. She gave a seminar on 'Liposomes—Possible Carriers of Therapeutic Agents'.

### **Benefactions**

We are grateful to the Ministry of Overseas Development (ODM) and the Inter-University Council (IUC) in London for the gift of one Manual Scintillation Counter. Some component parts and scintillation chemicals have already arrived.

Also the Department acknowledges with gratitude the financial assistance received during the year from the IUC for:

- (i) The purchase of essential chemicals and spare parts for our instruments.
- (ii) The promotion of a staff exchange programme and training of technical staff under the special Link with the University of Leeds.

### **Extension and Other Activities**

Professor G. S. Asante served as External Examiner for the third time at Makerere University, Kampala, Uganda.

## **DEPARTMENT OF CHEMISTRY**

### **Staff**

Professor F. G. Torto returned from Sabbatical Leave at the beginning of the session.

Dr. I. Addae-Mensah was away from January 1977 on Sabbatical Leave.

Mr. S. K. Viana, Chief Technician resigned his appointment with effect from 30th September, 1977.

Part-time assistance with lectures and laboratory classes were given as follows:

- Dr. I. M. Procter (Third Year Inorganic Chemistry)
- Dr. O. Ribeiro (Second Year Practical Chemistry)



## Student Numbers

Student numbers during the session were as follows:

F.U.E. Science	..	..	..	..	70
F.U.E. Medicine and Dentistry	..	..	..	..	76
F.U.E. Home Science	..	..	..	..	1
B.Sc. Part I	..	..	..	..	23
B.Sc. Part II	..	..	..	..	1
M.Sc.	..	..	..	..	1

## Research

Research was carried out in the following areas:

- (a) X-ray crystallographic studies of inorganic complexes (Dr. F. L. Phillips).
- (b) Gas-phase kinetics of cyclic alcohols (Dr. M. Dakubu)
- (c) Photochemical reactions (Dr. P. C. Goswami, Dr. W. R. Phillips).
- (d) Organometallic compounds (Dr. W. A. Asomaning)
- (e) Investigation of medicinal plants: alkaloids (Prof. F. G. Torto, Dr. I. Addae-Mensah); essential oils (Dr. W. A. Asomaning, Dr. W. R. Phillips, Prof. J. A. K. Quartey).
- (f) Biogenetic studies using tracers (Prof. J. A. K. Quartey).
- (g) Development of concepts in Ghanaian secondary students (Dr. R. F. Pearson).

## Publications

### I. ADDAE-MENSAH:

1. 'Wisanine, a Novel alkaloid from the roots of *Piper guineense*'. *Tetrahedron Letters* Vol. 35, 3049-3050, (1976) with I. Baxter and F. G. Torto).
2. 'N-Isobutyl-trans-2-trans-4-eicosadienamide and other alkaloids of the fruits of *Piper guineense*'. *Phytochemistry*, Vol. 16, 4, 483-485, 1977) with F. G. Torto, I. V. Oppong, I. Baxter and J. K. M. Sanders).
3. 'Novel Amide Alkaloids from the Roots of *Piper guineense*'. *Phytochemistry*, Vol. 16, No. 6, 759-761, (1977) (with F. G. Torto, C. I. Dimonyeka, I. Baxter and J. K. M. Sanders).

### F. G. TORTO:

See (1), (2) and (3) under I. A. Mensah above.

### Conferences, Seminars, etc.

Dr. I. A. Mensah presented a paper 'The chemistry and preliminary pharmacological studies of wisanine and dihydro-wisanine (with Dr. E. Ayitey-Smith) at the 7th Annual Conference of the West African Society for Pharmacology, April 1977, Zaria, Nigeria. He also read two papers 'Alkaloids of *Fagara Tessmanii*' and 'Seasonal and geographical variations in the constituents of *Piper guineense* and their relevance to Herbal Medical Practice' at the Third Symposium on Medicinal Plants, July 1977, at the University of Ife, Nigeria.

Professor J. A. K. Quartey read a paper 'Studies on the stereochemical course of the biosynthesis of indole alkaloids from tryptophan' at the Third Symposium on Medicinal Plants, July 1977, at the University of Ife, Nigeria.

Professor F. G. Torto attended the 27th Pugwash Conference on Science and World Affairs, 24-29th August, 1977 at Munich.

### Other Activities

Members of the Department served on various Boards, Committees, etc., including:

	<i>University</i>	<i>Outside</i>
Dr. W. A. Asomaning	Legon Hall Senior Tutor ..	Committees on Petroleum Products and starch-based adhesives (Standards Board).
Dr. M. Dakubu ..	..	
Dr. P. C. Goswami ..	Departmental Librarian Legon Hall Tutor. ..	
Dr. R. E. Pearson ..	Science Laboratory Training Scheme Co-ordinator, Universitas Editorial Board Honorary Coach, University Volleyball team, Executive Committee, Ghana Association of University Teachers.	
Dr. F. L. Phillips ..	Akuafu Hall Choirmaster ..	
Dr. W. R. Phillips ..	Board of Faculty of Science Board of Faculty of Agriculture .. .. Legon Hall Tutor .. .. Legon Hall Choirmaster ..	
Prof. J. A. K. Quartey	Faculty Board of Science Academic Board ..	Environmental Protection Council: Toxic Chemicals Committee
Prof. F. G. Torto	Academic Board Disciplinary Board	Research Committee, Centre for Plant Medicine.

Several members of the Department took part in examining for the West African Examinations Council.

## DEPARTMENT OF COMPUTER SCIENCE

### Staff

Mr. Walter Neilson, who holds a Master's degree in Computer Science from the University of Alberta, Canada, joined the staff as Lecturer in the Department. Mr. Andrew Moulton, a Peace Corps Volunteer who holds a degree in Mathematics and Computer Science from Yale, began a two-year period of service as the Acting Director of the University Computing Centre. He is also involved in the teaching programme of the Department. During the year, the Centre also had the valuable services of Mr. E. A. Alesha-Mensah, a National Serviceman who had just completed the course leading to the graduate diploma in Computer Science. His main task was to assist students in their computer problems and to contribute to programming and systems tasks at the Centre. At the end of the academic year, the Department lost the valuable services of Dr. Douglas M. Cruickshank, who had served as a lecturer in the Department for a period of three years.

### Teaching Programme

During this year the first students were admitted to the new undergraduate programme in Computer Science in the University. Eleven students chose the Mathematics-Computer Science combination, while two opted for Statistics and Computer Science.

Eight graduate students were admitted to the course leading to the graduate diploma in Computer Science. Seven of them completed the course successfully.

Introductory courses in computing were offered to all students and staff of the University during the first two terms of the academic year. Over 200 students attended the courses.

During the long vacation, a short course in RPG was offered to the students reading for the graduate diploma. During the remainder of the long vacation they were busy working on practical projects.

In addition to the above, some introductory courses in computing, with a bias towards business, were offered to students of the School of Administration. Students of other disciplines are encouraged to take any courses in the undergraduate programme that is of interest to them.

## **The Computing Centre**

The Computing Centre is intended to serve the computing needs of the entire University. The machines are fully committed from 6.00 a.m. to 8.00 p.m. daily. Of these 14 hours, approximately 3 hours are devoted to the University's own accounting and data processing needs, 4 hours to educational needs such as running students' programmes, and 7 hours to research projects. Outside these working hours, the computer is available to qualified individuals for "hands on" operation of their own programmes.

The Centre makes the facilities of both its machines and its staff of operators, programmers and analysts available to outside bodies. Among the Centre's clients are the following: Council for Scientific and Industrial Research, Cocoa Research Institute, Food Research Institute, Animal Research Institute, Ghana Tourist Control Board, Atomic Energy Commission, Water Resources Research Unit, Ghana Highways Authority, and the Ministry of Foreign Affairs. The Institute of Statistical, Social and Economic Research and the Danfa Rural Health Project are major users within the University.

Soon, the facilities of our present computer, an IBM 1130, will no longer meet the needs of the University. In order to ensure that the Centre will continue to meet the University's requirements, the Department of Computer Science carried out a study, during the 1976/77 academic year, of the future computing needs of the University. Upon recommendation from this study, the Department has ordered an IBM 370/115. The enlarged capacities of this new computer will be available to members of the University community at the beginning of the 1978/79 academic year.

## **DEPARTMENT OF GEOLOGY**

### **Staff**

Dr. M. Bacon joined the Department in November, 1976. He holds a lectureship in solid earth geophysics. The appointment was made under the link agreement between this Department and the Department of Geology of Chelsea College, London (home-based post). Dr. Bacon served with the Institute of Geological Sciences (North Sea Division) at Edinburgh before coming to Ghana.

Dr. P. M Afenya assumed duties as Lecturer in Geology in January 1977. An alumnus of the University of Ghana, Dr. Afenya took his Ph.D. degree in Mineral Technology at Imperial College, London. His previous appointment was with the Ghana State Gold Mining Corporation at Prestea.

### Teaching

The following courses were conducted during the year :

First year B.Sc. (F.U.E.)	.. ..	10 students
Second year B.Sc. Part I	.. ..	8 students
Third year B.Sc. Part II	.. ..	9 students
(eight students offered Geology as a single subject, one offered Geology and Physics for the combined degree).		
M.Sc.	.. ..	2 students
Ph.D.	.. ..	1 part-time registered.

Senior members of the Department again took part in the first year teaching programmes of the Department of Physics and Geography.

### Research

Prominent among new research projects undertaken in the Department were:

- The study of the seismicity of Southern Ghana and its relationship to the geology of the country and its adjacent continental shelf (Dr. Bacon). Contrary to expectation a series of test runs showed that the basement of the Balme Library is not suitable as a seismograph station. However, a satisfactory site was found below the Great Hall on Legon Hill, which is now being used with the kind permission of the Registrar.

Many small local earth tremors and a couple of stronger shocks were recorded during the year. The seismograms were regularly checked with the recordings of the Kukurantumi main seismograph station, which is controlled by the Geological Survey Department, and an interesting picture of the distribution of the epicentres is emerging. The results are expected to contribute greatly to our understanding of the geology of Ghana.

- Other activities in the field of geophysics included the interpretation of seismic data from the continental shelf and the interpretation of an aeromagnetic map of the Akwapim fault zone (Dr. Bacon).
- The systematic mapping and laboratory investigation of the rocks of the Buem formation in the area of Kpandu, with emphasis on the volcanic rocks (Dr. Jones.)
- K/AR dating of Ghanaian rocks (Mr. Adjei.)

Further progress was made with a number of on-going projects such as the structural relationships and metamorphism of the Dahomeyan, Togo and Buem rocks (Mr. Adjei, Dr. Van Landewijk), the study of the Birrimian volcanic-sedimentary rocks of Northern Ghana (Dr. Attoh); archaeoscience (Dr. van Landewijk); environment aspects of geology (earthquake hazards, the quarry industry) (Dr. van Landewijk, Mr. Mensah); the study of the geology and palaeontology of the phanerozoic coastal basins, especially the Amisian and the Sekondian (Mr. Mensah); the development of computer programmes for geological use (Dr. Attoh, Dr. Bacon).

Mr. Mensah spent 2 months in the United Kingdom during the long vacation as a Visiting Research Associate at Chelsea College and Birkbeck College, London. He worked on fossil plant material from the Essikado sandstone (Sekondi Group) and from the Amisian, in collaboration with Professor W.G. Chaloner, and on the fossil conchostraca of those two units. This research visit was arranged under the link agreement between the Geology Department of the University of Ghana and Chelsea College, London, with the assistance of the Inter-University Council for Higher Education Overseas.

The teaching and research facilities of the Department greatly improved, especially in the field of geochemistry and geophysics. The equipment for rock crushing—and grinding which the Department received during the session as its share of the grant made by the Ford Foundation to the Faculty of Science, is extensively used for geochemical and geochronological work, both by staff and advanced students. The same is true for the recently acquired portable seismograph system, proton magnetometer and E.M. unit.

Conferences/Public Lectures/Seminars etc.

Dr. van Landewijk, Mr. Mensah, Mr. Adjei, Dr. Attoh and Dr. Bacon attended the 10th Biennial Conference of the Ghana

Science Association, held at Cape Coast in April, 1977. They presented the following papers:—

Dr. K. Attoh, Dr. M. Bacon. Mr. F. Tamakloe (a third year student) 'Some constraints on the interpretation of the Bouguer gravity anomaly on the Salaga sheet'.

Dr. J.E.J.M. van Landewijk: 'Testing and inspection of gold and gold ornaments in Ghana'.

Dr. J.E.J.M. van Landewijk and Mr. M. K. Mensah: 'Accra quarries, their geological, economical and environmental implications'.

Mr. M.K. Mensah: The lithological and biological relationships of the Amisian System and the Essikado Sandstone of the Sekondian Group'.

Guest speakers in the Department's fortnightly series of seminars were:

Dr. P. K. Blay, (Geological Survey, Koforidua), Prof. D. J. Blundell (Chelsea College, London), Mr. D. Rex (Dept. of Earth Science, University of Leeds), and Mr. D. Hastings (Geological Survey Department, Takoradi).

Dr. Attoh attended a Geochemical Workshop in Zambia in August 1977, under the auspices of the Association of Geoscientists for International Development (AGID) which sponsored his participation.

Professor Smit, Mr. Mensah, Mr. Adjei and Dr. Attoh attended a two-day meeting in Lome, organised by the Geological Society of Africa, in January, 1977. The meeting discussed the reorganisation of the international project dealing with the Precambrian of West Africa which is part of the International Geological Correlation Programme (I.G.C.P.). Anglophone and Francophone West African countries are contributing to this programme which will cover several years.

### Visitors

Visitors to the Department included Mr. I. G. Hughes of the Overseas Division of the Institute of Geological Sciences, UK., Mr. D. P. Saville of the Inter-University Council for Higher Education Overseas, and Dr. M.M.J.W. Herath, Commonwealth Geological Liaison Officer, London. Professor D.J. Blundell, Head of the Geology Dept., Chelsea College, University of London visited the Department from 23rd March to 5th April, 1977 under the link agreement between

Legon and Chelsea College. A group of staff and graduate students of the Geology Department, University of Ife, led by Dr. G. Matheis, visited Ghana on a mining excursion early October, 1977. Dr. Attoh accompanied them in the field around Accra.

Prof. B.C. King, Head of the Geology Department of Bedford College, University of London acted as External Examiner in Geology and visited Ghana in that capacity during the (re-scheduled) examination period from 29th September to 5th October, 1977.

### **Benefactions**

Phillips Petroleum Company donated ₵35,000 towards the work of the University to be spent on the acquisition of geophysical and geochemical equipment for the Department of Geology. The Department wishes to express its gratitude for this very generous contribution to its further development. The Department also acknowledges the gift of a copy of the 'Glossary of Geology' published by the American Institute from the Balme Library.

### **Other Activities**

Dr. P. M. Afenya represented the Head of Department on the Board of Management of the newly established Institute of Mining and Mineral Engineering of the University of Science and Technology, Kumasi.

Dr. K. Attoh delivered a public lecture at the meeting of the Geological Society of Ghana on the topic 'Regression models for mapping geological variables.'

Mr. M. K. Mensah was appointed a Member of the Board of Directors of GHAIP.

Mr. A. O. Adjei was a Member of the National Executive of the Ghana Science Association and Chief Editor of the Association's Newsletter.

Dr. van Landewijk represented the Department in the National Earthquake Protection Agency and acted as convener of the University Working Group on Earthquake Hazard Mitigation.

### **Publications**

BLUNDELL, D. J.: 'Active Faults in West Africa,' *Earth and Planet Sci. Letters*, 31, 1976, pp. 287-290.



SMIT, A. F. J.: 'Ghana: Its Geology', *Ghana Talks* ed. M. Dodds. Three Continents Press, Washington D.C. 1976. (also published in *History of Ghana* see V.C. Ann. Rep. 1973-74).

TALBOT, M. R.: 'Quaternary palaeoenvironments in the Accra-Tema area of Southern Ghana.' 20th Ann. Rep. Res. Inst. Afr. Geol. Univ. Leeds, 1976. pp. 66-68.

'Late Quaternary sedimentation in Lake Bosumtwi, Ghana.' 20th Ann. Rep. Res. Inst. Afr. Geol. Univ. Leeds, 1976, pp 69-73.

TALBOT, M. R. and DELIBRIAS, G.: 'Holocene variations in the level of Lake Bosumtwi, Ghana.' *Nature*, Vol. 268, No. 5622, pp 722-724.

## DEPARTMENT OF MATHEMATICS

### Staff

Dr. K. Osei returned in October, 1976 after completing his studies for the Ph.D. (Statistics) degree at the University of Hull, England.

Mr. J. S. G. Jackson also returned in November after a year's sabbatical leave spent partly at the International Centre for Theoretical Physics, Trieste, Italy and partly at the University of Calabar, Nigeria.

Professor S. I. K. Odoom was granted a year's sabbatical leave beginning in October, 1977.

### Students

Students who registered in the Department for the Undergraduate courses in Mathematics and Statistics were distributed as follows:

<i>Mathematics</i>	<i>Arts</i>	<i>Science</i>	<i>Total</i>
F.U.E. .. ..	22	41	63
Part I .. ..	8	20	28
Part II .. ..	1	5	6
	<hr/>	<hr/>	<hr/>
	31	66	97
	<hr/>	<hr/>	<hr/>

<i>Statistics</i>		<i>Arts</i>	<i>Science</i>	<i>Total</i>
F.U.E. .. ..		84	26	110
Part I .. ..		55	9	64
Part II .. ..		13	12	25
		<hr/>	<hr/>	<hr/>
		152	47	199
		<hr/>	<hr/>	<hr/>

Five students obtained Second Class (Upper Division) Honours degrees in B.A./B.Sc. Statistics in the final year examination.

### **Publications**

DR. P. W. DARKO: On cohomology with bounds on complex spaces, *Rendiconti della Nazionale dei Lincei*, LX, 189-194 (1976).

DR. K. OSEI: The suppression of one rumour by another, *J. Applied Probability*, 14, 127-134 (1977) (with J. W. Thompson).

### **Conferences**

Dr. D. Adu-Gyamfi spent the long vacation in Trieste, Italy attending the Research Workshop on Solid State Physics held at the International Centre for Theoretical Physics from 1st July to 30th September, 1977.

### **Extension and Other Activities**

Members of the Department served on outside committees and boards as follows:

PROF. D. A. AKYEAMPONG: Member, National Council for Higher Education and Council for Scientific and Industrial Research; Honorary Secretary, Ghana Academy of Arts and Sciences. Reviewer for Mathematical Reviews (U.S.A.); External Examiner, University of Cape Coast and University of Science and Technology.

DR. J. M. HYDE: Vice-President of the Ghana Science Association; Honorary Secretary of the West African Science Association.

**MR. J. S. G. JACKSON:** Chairman of the Mathematics Textbook Writing sub-committee of the National Advisory Council on School Curricula; Honorary Treasurer, Ghana Science Association.

**DR. N. K. KOFINTI:** Member, sub-committee for Mathematics of the National Advisory Council on School Curricula.

**PROF. S. I. K. ODOOM:** President, Mathematical Association of Ghana; Member, Management Board of the Water Resources Research Unit; Member, West African Examinations Council; member of the Editorial Board of the Ghana Journal of Science; External Examiner, University of Nsukka.

Dr. N. K. Kofinti was presented in April, 1977 with a Wall Plaque by the Mathematical Association of Ghana in recognition of his contributions over the years to the organisation and in-service training of the members of the Association.

Members of the Department continue to serve variously as examiners, Chief examiners, moderators and members of subject panels for school mathematics examinations conducted by the West African Examinations Council.

## DEPARTMENT OF NUTRITION AND FOOD SCIENCE

### Staff

Dr. B. Bediako-Amoa was away on leave in the United Kingdom. Dr. R. B. Duckworth was appointed Professor and Head of the Department. Dr. R. F. Grimble and Mr. G. Campbell-Platt were appointed to lectureships in the Department.

### Resignations:

Dr. Suzanne Grondin resigned because of ill-health early in the session.

### Students

Diploma in Nursing .. .. .	28
B.Sc. Agriculture Part I .. .. .	47
B.Sc. Home Science Part I .. .. .	5
B.Sc. Nutrition and Food Science Part I .. .. .	9
B.Sc. Home Science Part II .. .. .	2
B.Sc. Part II Food Science 3:2:1 .. .. .	6
B.Sc. Part II Food Science 3:2:2 .. .. .	2

M.Sc. Food Science	..	..	..	2
M.Sc. Nutrition	..	..	..	2
Affiliate Students	..	..	..	2

### Courses

No substantial changes were made to the courses offered by the Department during the session.

### Research

Departmental research suffered a major interruption because of the changes in staff, with three senior members having resigned at the end of the last session in addition to Dr. Grondins resignation mentioned above. However, some lines of work were continued and the new members of staff were able to initiate some work in their respective fields. Research activity has included:—

1. Studies on the biochemistry and epidemiology of protein energy malnutrition.
2. Studies on the metabolic effects of the types of carbohydrate in rehabilitation diets of children with Kwashiorkor. (Both the above were in association with the staff of the Princess Marie Louise Hospital in Accra.
3. A nutritional survey of the village of Farfraha was carried out. It served also as a field training for students.
4. An investigation was initiated into the microbiological changes during the production of the important northern Ghanaian food Dawadawa.
5. Work was begun on the manometric measurement of water activity in food samples with a view to initiating a programme on the preparation of preserved intermediate moisture products from local raw food materials.
6. Further studies were made of the chemical composition of some less commonly-used legumes.

### Publications

DAKO, D. Y. 'Chemical and biological evaluation of *Mucuna pruriens* (utilis) beans'. *Nutrition Reports International*, 15, 239, 1977.

DAKO, D. Y. and Watson J. D. 'Available Carbohydrates in Ghanaian Foodstuffs Part III'. *Plant Foods for Man* 2, 63, 1976.

- DUCKWORTH, R. B., Allison, Joy Y. and Clapperton, H. A. Ann. 'The aqueous environment for chemical change in Intermediate Moisture foods', Davies, R., Birdch G. G. and Parker, K. J. Eds. Applied Science Publisher London, 1976, p.89.
- MILLER, B. G., Grimble, R. F. and Taylor, T. G. 'Liver protein metabolism response to cold in genetically obese mice'. *Nature*. 266, 184, 1977.
- MILLER, B. G., Grimble, R. F. and Taylor, T. G. 'Measurement of liver protein turnover in genetically obese mice using DL- (2-H<sup>3</sup>) glutamic acid'. *Proc. Nutr. Soc.*, 35, 128A, 1977.
- WOOLFE, M. L., Chaplin, M. F. and Otchere, G. 'Studies on the mucilages extracted from Okra fruits (*Hibiscus esculentus* L.) and Baobab leaves (*Adansonia digitata* L.)'. *J. Sci. Fd Agric*, 28, 519, 1977.
- WOOLFE, M. L. and Manu-Tawiah, W. 'Tin content of canned evaporated milk manufactured in East Africa', *Ecology of Food and Nutrition*, 6, 1, 1977.

### Conferences

Dr. Orraca-Tetteh participated in a United Nations University World Hunger Programme Workshop in Ibadan, Nigeria in December, 1976. He read a paper on "Post-harvest losses and Nutrition."

Dr. Dako read a paper on the Nutritive value of *Mucuna pruriens* (utilis) beans at a joint University of Ghana/C.S.I.R. Symposium on Grain Legumes at Legon in December, 1976

Dr. Orraca-Tetteh attended the 1st Afro-Brazilian Seminar on Tropical Medicine and Nutrition in Recife, Brazil in February, 1977.

Dr. Orraca-Tetteh participated in the International Union of Nutrition Sciences Conference on Practical Approaches to Combat Malnutrition in Cairo, Egypt in May, 1977, reading a paper on "Reliability of available data and additional data needed for planning for prevention of malnutrition".

Drs. Dako and Orraca-Tetteh both attended the International Conference on Nutrition Education in Oxford, England in September, 1977. Dr. Dako read a paper on "The contribution and importance of Socio-Economic studies in Nutrition Education Programmes at Legon", while Dr. Orraca-Tetteh

spoken "Food and Nutrition Education in Ghana" and also acted as Chairman for a panel discussion on "The need for qualified personnel for food and nutrition education and training."

Mr. J. D. Watson participated in a Seminar/Workshop on the incidence of vitamin A deficiency and blindness in North Ghana sponsored by UNICEF and the Nutrition Division of the Ministry of Health.

### **Visitors**

Dr. Nevin S. Scrimshaw, Professor and Head of the Department of Food Science and Nutrition at Massachusetts Institute of Technology, Cambridge, Mass. U.S.A., visited the department from 18th-20th December, 1976. Dr. Scrimshaw, who is also the senior Advisor to the Rector of the United Nations University on the World Hunger Programme, discussed the possibility of the department becoming an Associated Institution of the U.N. University with the Vice-Chancellor, the Deans of the Faculties of Science and Agriculture and the Acting Head of the Department. He also addressed an interdisciplinary meeting on the aims of the U.N. University.

Dr. David B. Coursin, a consultant to the U.N. University World Hunger Programme visited the department from May 29th-31st, 1977.

Professor G. R. Howat, recently retired from the chair of Food Technology at Ife, Nigeria, visited the department between October 2nd and 9th, 1977 as external examiner.

### **Benefactions**

Gifts of books, equipment and chemicals were received during the session from the University of Guelph, from the University of Strathclyde and from the Inter-University Council for Higher Education Overseas, London.

### **Other Activities**

Professor Duckworth was appointed Chairman of the Ghana Standards Committee on Processed Fruit and Vegetable Products and Mr. Cambell-Platt joined the equivalent Committee for Cereals and Cereal Products.

## DEPARTMENT OF PHYSICS

### Staff

Mr. V.C.K. Kakane was appointed lecturer. Mr. J. Kwablah attended a course on glass blowing in Cape Coast for eight weeks. The course was organized by the I.U.C.

### Students

F.U.E.	..	..	..	..	..	33
F.U.E. (Physics with Mathematics)	..	..	..	..	..	38
First Year Medicine	..	..	..	..	..	73
Second Year B.Sc.	..	..	..	..	..	7
Third Year B.Sc.	..	..	..	..	..	5

### Graduates

(1) Amaeshie, L.L.N., Legon

### Courses

The M.Sc. course was not given this year as no suitably qualified student registered for the course. The undergraduate programme has been extensively reviewed to emphasize electronics and other areas of Physics of direct practical application to development.

### Undergraduate Projects and M.Sc. Thesis accepted during the year

PHILIP K. ADDOLI—Design, build and test A phase meter.

BENONY K. KORTATSI—The design and building of a circuit which produces two audio signals of the same frequency, but the phase of one continuously variable over 360 degrees with respect to the other.

EMMANUEL OSEI ASOMANI.—Determination of the total Emissivity of some metal surfaces.

ELIAS K. D. TAALE—The strength and micro-structure of welded aluminium joints.

### M.Sc. Thesis

V. C. K. KAKANE (November 1976) Activation analysis using californium-252 Neutron source and a nuclear reactor.

### Research Activities

DR. E. K. AGYEI

1. Potassium-Argon geochronology and related problems.
2. Thermal ionization on metal filaments.
3. Isotopic fractionation of boron during clay absorption.

DR. J. K. A. AMUZU

1. Friction and lubricating properties of certain polymers.
2. Solar Energy.

DR. R. D. BAETA.—The nature and stability of defects in ceramic crystals; dislocations in molecular structures.

DR. R. KWADJO.—Strengths of some local building materials:

PROF. D. YEBOAH-AMANKWAH

1. Primary fixation in the Volta lake.
2. Magnetic storm effect on the total electron content of the ionosphere.
3. Mossbauer Spectrometry.
4. Studies of thermal properties of some building materials.

PROF. J. R. KOSTER

1. Ionospheric studies—scintillation measurements and ionospheric irregularities.
2. Total electron content of the ionosphere.

#### Conferences and other activities

Drs. J. K. A. Amuzu, R. D. Baeta, E. K. Agyei and Prof. D. Yeboah-Amankwah attended the Biennial Conference of the Ghana Science Association in Cape Coast. The following papers were read at the Conference by members of the department.

E. K. AGYEI

1. Potassium-Argon Dates
2. A simple apparatus for thermal ionization

R. D. BAETA

3. Some aspects of brittle fracture in Quartz

J. K. A. AMUZU

4. Some aspects of fundamental research on the friction and lubricating properties of polymers.

V. C. K. KAKANE and D. YEBOAH-AMANKWAH

5. Construction and performance characteristics of the Legon Mossbauer spectrometer.

D. YEBOAH-AMANKWAH and E. K. OBENG ASAMOA

6. Spectral intensity of light in the Volta Lake



Dr. J. K. A. Amuzu attended the Fourth Course on Solar Energy conversion held at the International Centre for Theoretical Physics in September, 1977. Dr E. K. Agyei has been in charge of the Geochronology Laboratory at Kwabenya, run jointly by the University of Ghana, G.A.E.C. and the Geological Survey Department of Ghana. Prof. D. Yeboah-Amankwah attended World Energy Conference in Abidjan, Ivory Coast in October 1976. Dr. Baeta was appointed Vice-Chairman of the Board of Directors, Ghana Sanyo Electrical Manufacturing Corporation Limited.

### Benefactors

The department is grateful to Dr. G. K. Greenhut for a gift of books on Physics and Astronomy.

### Publications

DR. E. K. AGYEI:

1. 'Potassium-argon age of a rock from a Koforidua Quarry, *Ghana Journal of Science*.
2. 'A simple apparatus for thermal ionization studies' *Ghana Journal of Science*.

DR. J. K. A. AMUZU:

1. 'Friction and Wear of Polymers: I Polythènes'.
2. 'Aspects of the friction of Copper'.

DR. T. DAKUBU: 'An unfolding procedure for slowly varying pulse height spectra produced by beta particles in Si (Li) detectors' *Nuclear Instruments and Methods*.

DR. R. KWADJO: 'Fatigue of Magnesium Acta Metallurgica'.

PROF. D. YEBOAH-AMANKWA: "Spectral Intensity of light in the Volta Lake, Ghana. A preliminary report, "Department of Physics, Legon.

PROF. J. R. KOSTER:

1. 'Study of the Equatorial Ionosphere', Interim Scientific Report No. 3, 30-11-76.
2. 'The Equatorial Evening minimum in the total electron content of the Ionosphere and its role in Equatorial Scintillation', *Fu Jen Studies*.

## VOLTA BASIN RESEARCH PROJECT

### Board and Staff

Prof. G. C. Clerk was appointed the new Chairman of the Board with effect from October 1, 1976 in place of Prof. S. La-Anyane who had resigned from the University.

The list of research fellows of the V.B.R.P. was as follows:—

Agriculture	..	..	Mr. J. Cobbina Dr. J. K. Amatekpor Mr. K. B. Laryea (on study leave)
Botany	..	..	Miss. Cecilia Apaloo Dr. R. L. K. Bannerman (Appointed April, 1977). Dr. E. K. Obeng-Asamoah
Zoology	..	..	Mr. C. J. Vanderpuyé Mr. Sam Whyte

### Research

#### 2.1 Projects completed

##### *Agriculture:*

- |               |    |    |  |
|---------------|----|----|--|
| Mr. Cobbina   | .. | .. | Biological assay of N,P,K, status of soils of the drawdown area at Kpandai and Makongo. (The objective of the Project was to find out which of the nutrient elements N,P,K, were deficient in drawdown soils at Kpandai and Makongo and also what should be the combination of N,P,K, for optimum yields).     |
| Dr. Amatekpor | .. | .. | (i) Survey, morphology, genesis and classification of soils in the Makongo sample area (Zone II) of the Volta Drawdown Area (VLDA).<br>(ii) Investigations into the effects of seasonal flooding on the mineralogical, chemical, and morphological properties of soils in the Makongo sample area of the VLDA. |

*Botany:*

- Miss C. Apaloo .. Fungal disease of some fresh water fishes.
- Dr. Bannerman .. Bacteriological analysis of the Afram arm, and part of the lake around Klaw.
- Dr. Obeng-Asamoah .. Solar Radiation and Primary Production in Lake Volta (Co-sponsored by FORGE).

*Zoology:*

- Mr. Vanderpuye .. Pre-impoundment studies on fish populations in the Kpong hydroelectric area.
- Mr. S. Whyte .. (i) Auto-ecology of *Macrobrachium Vollehovenni* (Kerklots) as a basis for a rational prawn fishery along the stony shores of the Volta Lake and the Lower Volta River.

**2.2 On-going Research**

*Agriculture*

- Mr. Cobbina .. (i) Studies on the mineral nutrition and fertilizer requirements of cassava.
- (ii) Effects of Ca and Mg on nodulation and N-fixation by legumes.
- (iii) Relationship between phosphorus absorption maximum and phosphorus availability on selected Ghanaian soils.
- (iv) Maintenance of soil fertility with legume manure.

Mr. Cobbina collaborates with staff of the Department Crop Science.

**DR. AMATEKPOR**

- (i) Survey, morphology, genesis and classification of soils in the Kpandai sample area (Zone I) and in the Kpandu and Anyaboni sample areas (Zone II) of the VLDA.

- (ii) Investigations on the effects of seasonal flooding on the modification of properties of soils in Zones I and III of the VLDA and the immediate adjoining areas.
- (iii) Kpong Dam: Pre-dam investigations:—  
Survey and classification of soils of the University of Ghana newly acquired Kpong (ARS) land.

### *Botany*

#### MISS C. APALOO

- (i) Bacterial distribution in the Southernmost part of the Volta Lake.
- (ii) The effect of textile effluents on the ecology of microbes in the Volta River.

#### DR. BANNERMAN

- (i) Survey of the distribution of bacteria in the Volta Lake.
- (ii) Study of Vegetational changes of the important species of aquatic weeds in the drawdown area.

#### DR. OBENG-ASAMOA

- (i) Limnological studies in the Volta Lake.
- (ii) Studies on the dam effect on Lower Volta.

#### MR. VANDERPUYI

- (i) Fish stock assessment in the Volta Lake.
- (ii) Studies of the biology of commercially important fishes.

#### MR. WHYTE

- (i) The Taxonomy of Dragonflies of Ghana.
- (ii) The Taxonomy of Chironomidae of Ghana.
- (iii) Benthic Invertebrates of the Volta Lake.
- (iv) A Guide to the study of Freshwater Invertebrates of Africa.
- (v) The Development of a pond Culture Method for the commercial propagation of *Macrobrachium Vollehovenni* (Kerklots).
- (vi) Palaeo-Limnology of Lake Bosumtwi (in collaboration with Prof. Livingstone and his team from Duke University, U.S.A.)

## Conferences and Papers

In September, 1976, the V.B.R.P. and Volta Lake Research and Development Project (VRA) jointly organized a conference on 'The Volta Lake and National Development.' All the fellows then at post contributed papers. These and subsequent publications are listed below:—

AMATEKPOR: Soils in Ghana Volta drawdown area and the effect of seasonal flooding on their mineralogical and chemical properties after five years. Volta Lake Conference, Sept., 1976.

C. AMANOO and GEORGE C. CLERK: The Sensitivity of the Water Mould, *Achyla Megasperma Humphrey* to low concentrations of inorganic and organic compounds.

### OBENG-ASAMOA:

- (i) With E. R. Anang, and D. M. John. Observations on the red-water ciliate *Mesodinium rubrum* Lohmann. Bulletin de l'I F.A.N.T. 38. Ser. A. No. 2. 1976.
- (ii) Nutrient Regeneration in the Sediment of an Oligotrophic Lake. *Arch Hydrobiol.* 78 (4): 536-536. Nov., 1976.
- (iii) A Limnological Study of the Afram Arm of Volta Lake. *Hydrobiologia* 55 (3): 257-264. 1977.
- (iv) Pre-impoundment studies on the Hydrobiology of the Volta River below the Akosombo Dam. VBRP Tech. Report, September, 1977.
- (v) With Yeboah-Amankwah: Spectal Intensity in the Volta Lake. Paper read at the 10th biennial conference of the Ghana Science Association at Cape Coast. April 2-7, 1977.

### VANDERPUYE

- (i) Investigation into causes of increase in abundance of *Lates niloticus* and concomitant decline of *Tilapia* spp. stocks in Volta Lake. Volta Lake Conference, September, 1976.
- (ii) Studies in Fish Population in the Volta Lake, Five to Nine Years after Impoundment. Volta Lake Conference September, 1976.

### S. WHYTE

- (i) The Food of Chironomidae in a Tropical Man-made-Lake—The Danfa Reservoir, Ghana. Paper presented at the West African Science Association Biennial Conference in Sierra Leone (April, 1976).
- (ii) The Physico-Chemical conditions in Lake Bosumtwi. Accepted for publication in *Limnology and Oceanography* (November, 1976).

### Other Activities

The following fellows assisted in the teaching programmes of the Departments to which they are attached:—

Dr. Amatekpor	..	Soil Science (Crop Sc. Dept.)
Mr. Cobbina	..	Soil Science
Dr. Bannerman	..	Botany
Dr. Obeng-Asamoah	..	Botany
Mr. Vanderpuye	..	Zoology
Mr. Whyte	..	Zoology

Dr. Obeng-Asamoah was appointed to serve on the Environmental Protection Council's Action Unit for the Rehabilitation of the Korle Lagoon.

## DEPARTMENT OF ZOOLOGY

### Staff

Dr. Ian Taylor resigned his appointment as a lecturer with the University with effect from 30th September, 1977.

Mr. Paul Attah, a former student of this Department, joined the staff as a lecturer in October 1976.

Professor W. Z. Coker was granted sabbatical leave in January 1977.

Mr. S. A. Whyte of the Volta Basin Research Project continued his lectures on Freshwater Insects.

Professor T. R. Odhiambo, Director of the International Centre of Insect Physiology and Ecology, was guest of the department from 14th November to 28th November, 1976. During his stay he delivered a series of 8 two-hour lectures and a 4-hour practical on Insect Physiology to our M.Sc. Part I students.

Dr. Ntifo of the Cocoa Marketing Board, Tema, Mr. Firempong of the Cocoa Research Institute, Tafo and Mr. Martin Mensah of the Fisheries Research Unit, Tema lectured on part-time basis.

### Courses

The new degree programme in Zoology is in its fourth year of operation. Difficulties which were encountered in the beginning of its operation are gradually being overcome whilst other problems inherent in the course system are also being solved from past experience.

Two of our lecturers were involved in inter-faculty lecturing. Mr. Hughes presented a 2-hour lecture/practical on the Human Skeleton for B.A. Archaeology for Man. The Primates course to students of the Archaeology Department. In the same Department, Dr. P. Grubb treated the Senior Staff and M.A. Students as well as undergraduates to faunal remains and skeletal identification.

### Field Course

This year's Field Trip was held at Tafo Cocoa Research Station from 2nd April to 7th April, 1977 for B.Sc. Part II students. The students were lectured on the "Evolution of mouthparts of insects", how to hunt frogs which demonstrated the importance of CALLS in species and sex differentiation and the implication of habitat selection in relation to time and weather variation as well as the introduction of toad and frog catching. Students were briefed on certain aspects of insecticide screening, the relationship of spraying times with population changes of the pest to be controlled and types of spraying. Talk was given on "Cocoa, mealybugs and SSVD, Swollen Shoot Virus Disease" by Mr. Bonney who had been working on the subject since 1946. It covered the history of SSVD which is dated as far back as 1938. Students were taken to the field and shown how to recognise both stem and leaf symptoms. Other field activities touched on capsids and lepidopterous pests with reference to their sampling methods; manipulation of data including the calculation of regression coefficients; the biology of *Characoma stictigrapta* damage caused by Lepidoptera; the creation of microhabitats by minor pests. There was a 3-hour talk on "Instruments for measuring microclimatic factors and their calibration."

## Students

The students population in the Department was distributed as follows:

FUE Science	..	..	..	..	66
FUE Medicine/Dentistry	..	..	..	..	71
B.Sc. Part I	..	..	..	..	13
B.Sc. Part II	..	..	..	..	13
M.Sc. Part I	..	..	..	..	2
M.Sc. Part II	..	..	..	..	2

## M.Sc. Part I Projects

SAMPSON, M. A. (1977). Some aspects of the ecology of *Oecophylla longinoda* (Latr) Hymenoptera: Formicidae, in Ghana.

ARMAH, A. K. (1977). An investigation into the burrowing behaviour of Ocypode crabs on a tidal beach at Tema, Ghana.

## Seminars

The following seminars were held during the 1976-77 session:

Mr. Herbert Alomenu, Technical Director, OICMA (International African Migratory Locust Organisation, Bamako), presented a seminar on "Main generations of the migratory locust in Mali and the Lake Chad basin and their periodic movements in relation to rainfall and flood"

Dr. Milton E. Lieberman (Lecturer in Zoology) "Lactase deficiency: a genetic mechanism which regulates the time of weaning"

Mr. Barry Hughes (Lecturer of this Department) "West African freshwater turtles—discoveries at Damoŋgo"

In addition to the above, Dr. T. Roberts (National Museum of Natural History, Washington, DC., U.S.A.) spoke on "Freshwater fishes of New Guinea and Sudanland"

## Students Consultative Committee

The two students consultative committees continued to function well. Membership of the committees was as follows:

<i>Science Students</i>	<i>Senior Members on the Committee</i>
Mr. J. Hama	Prof. J. K. M. Hodasi (Chairman)
Mr. J. K. Mireku	Dr. P. Grubb



*Science Students*  
Miss Mary Sampson (*Secretary*)  
Mr. D. E. K. A. Staw  
Mr. C. C. Tagoe  
Miss G. Baffoe  
Miss M. D. Owusu-Frimpong  
Mr. L. I. Braimah

*Senior Members  
on the Committee*  
Mr. P. K. Attah  
Prof. R. Kumar  
Dr. M. Lieberman  
Prof. W. Z. Coker  
Mr. B. Hughes  
Dr. I. R. Taylor

*Medical Students*  
Mr. E. Sory  
Mr. K. A. Koram  
Miss Edith Attipoe (*Secretary*)  
Mr. L. Roberts

*Senior Members  
on the Committee*  
Prof. J. K. M. Hodasi  
(*Chairman*).  
Mr. B. Hughes  
Dr. R. K. Anteson

The items discussed at the Consultative Committee meetings were mostly related to students' problems and requests.

### Research Activities

#### PROFESSOR J. K. M. HODASI

1. Helminth fauna of domestic fowl and Guinea fowl.
2. Biology and ecology of *Bulinus globosus*.
3. Biology and behaviour of the Giant West African snail, *Achatina achatina*.

#### PROFESSOR R. KUMAR

1. Biology and systematics of African cockroaches.
2. Biology and systematics of the shield bugs (Pentatomidea) of the world.
3. Ecology and population dynamics of cocoa farm insects.

#### PROFESSOR W. Z. COKER

1. Insect toxicology and resistance.
2. Enzymology of medical and agricultural insects and snail vectors.
3. Bilharzia.

DR. P. GRUBB:

1. Speciation in African animals, especially large mammals.
2. Biology of West African Lepidoptera.

MR. B. HUGHES:

African Snakes

DR. M. E. LIEBERMAN:

Marine ecology, population dynamics and competition on the species level, environmental physiology of marine gastropods, size-structure and organization of ecosystems, mathematical models.

MR. P. K. ATTAH:

1. Biology of *Tyora tessmanni* (Aulm).
2. Biology and control of sugar-cane pests in Ghana.
3. Ecology and population changes of cocoa farm insects.

### Conferences

At the 10th Biennial Ghana Science Association Conference held at the University of Cape Coast from 2nd-7th April, 1977, the following read papers:

PROFESSOR J. K. M. HODASI—Chaired two scientific sessions and presented a paper entitled 'Some aspects of the biology of *Achatina achatina*.'

DR. M. E. LIEBERMAN—'The origin of Lactase Deficiency'.

DR P. GRUBB read a paper 'Patterns of speciation in African mammals' at Carnegie Museum of Natural History's 'Colloquium on Ecology and Taxonomy of African Small Mammals', held in September 1977. (September 19-22) at the Powdermill Nature Reserve outside Pittsburg. The paper will be published in the Museum's Journal.

He also visited the American Museum of Natural History, New York; the Field Museum of Natural History, Chicago; the Carnegie Museum of Natural History, Pittsburg; the National Museum of Natural History, Washington; and the Academy of Natural Sciences' Museum, Philadelphia in pursuit of his research into the speciation of African mammals.

Prof. R. Kumar lectured at the United Nations Environmental Programme held at I.C.I.P.E. Nairobi from 6th-26th July 1977. He also organized the 3rd I.C.I.P.E. Conference and edited its proceedings.

### **Extension and other Activities**

Prof. J. K. M. Hodasi was the External Assessor to the Department of Biological Sciences, University of Science and Technology, Kumasi. He was the University's representative on the Medical Research Committee of the C.S.I.R., and the Fishery Hydrobiological Sub-committee of the Volta River Authority. He was appointed by the National Redemption Council to serve as a member of the reconstituted Ghana National co-operating Committee of the Encyclopedia Africana Project. He was also the Chairman of the Management Committee of the Peki Secondary School, Volta Region.

Prof. R. Kumar served on the executive of Accra Branch of Ghana Science Association. He chaired a session at 5th West African Cocoa Research Conference, Yaounde, Cameroun. He has continued to provide free insect identification service to entomologists and the public in West Africa as well as referee papers for Ghana Journal of Agricultural Science, Ghana Jnl. Sci. and Journal West African Science Association.

### **Visitors**

Prof. T. R. Odhiambo, International Centre of Insect Physiology and Ecology, Nairobi.

Dr. Tyson Roberts, National Museum of Natural History, Washington D.C., U.S.A.

Dr. P. Mathiessen, Centre for Overseas Pest Research, London.

Mr. J. Johnson, Centre for Overseas Pest Research, London

Mr. Gavin Pope, Centre for Overseas Pest Research, London

Prof. D. E. B. Chaytor, Department of Zoology, Fourah Bay College, Freetown. He was the only External Examiner to the Department.

### **Publications**

HODASI, J. K. M. 1975. 'Preliminary studies on the feeding and burrowing habits of *Achatina achatina*. *Ghana Journal of Sciences* 15, 193-199.

HODASI, J. K. M. 1975—'Helminth parasites of native domestic fowls from two coastal lagoon towns in Ghana.' *Zoo. Soc. India*, Dr. B. S. Chauhan Comm. Vol. pp. 129-133.

- KUMAR, R. and ATTAH, P. K. 1977—'Structure of the organs of digestion and reproduction in the Tortoise Beetle. *Aspidomorpha* spp. (Chrysomelidae: Coleoptera)'. *Jour. nat. Hist.* 11: 65-76.
- KUMAR, R. 1977—'On some cockroaches from Angola including a check list of the species.' *Bull IFAN, Dakar.*
- KUMAR, R. 1977 'New records of Blattaria from Africa.' *Bull. ent. Soc. Nigeria.*
- KUMAR, R. 1977 and PRINCIS, K. 1977—'African species of the genus *Theganopteryx* Brunner v. W (Blattaria: Ectobiidae)' *Systematic Entomology* (accepted 3.3.1977).
- KUMAR, R. and MENSAH, J. A. 1977—'Metamorphosis of alimentary and reproductive organs in the developmental stages of *Characoma stictigrapta* Hmps. (Lepidoptera: Noctuidae)'. *J. West Afr. Sci. Assoc.*
- KUMAR, R. and Nutsugah, D. 1977—'Parasite complex on two lepidopterous cocoa pests in Ghana'. *Nig. J. Agric. Sci.*
- KUMAR, R. 1977—'Biological control of cocoa pests in West Africa.' *Proc. 5th Conf. Afr. Cocoa Entomologists.*
- GRUBB, P. 1977—'Comment on the proposed conservation or suppression of *Papio* Muller, 1973 and on the proposed suppression of *Pakis Busion* 1762.' *Bull. Zool. momen* 34, 5-6.
- GRUBB, P.—Notes on the Sand Cat, *Felis Margarita loche*, 1858.

## DEPARTMENT OF ARCHAEOLOGY

### Staff

Following the departure of Professor M. Posnansky in the long vacation of 1976, Mr. J. R. Anquandah was appointed Acting Head. This arrangement lasted for the whole academic year, since the new Professor, Dr. J. E. G. Sutton, was committed to completing certain projects at Ahmadu Bello University and therefore unable to move to Legon until the 1977/78 academic year. Professor Sutton did however visit Legon in February and again in June, 1977, and gave a staff seminar and lectures to undergraduates.

Mr. L. B. Crossland, lecturer, began a two-year study leave period at Arizona State University.

Mr. D. Agyei-Henaku, Principal Technician, spent the year on study leave at the Institute of Archaeology in London University, where he completed the Museums Association Certificate examination in Archaeological Conservation. During his absence Mr. S. A. Dankwa took charge of the technical unit.

### Students

There were 31 first-year undergraduates, 10 second-year and 6 third-year, as well as one graduate in M.A. coursework. Four others were working on M.A. theses, and one on his Ph.D. thesis.

The following were selected for prizes:

F.U.E.	..	..	..	..	T. O. Ampah
B.A. and M.A.	..	..	..	..	A. Dozie

### Research

Although the West African Trade Project is now virtually complete, several field researches, both new and continuing ones, have been pursued. One of these has close connections with the former project: i.e. Mr. Effah-Gyamfi's excavations and historical enquiries at Bono Manso. These are now being completed and written up.

Mr. J. R. Anquandah initiated the Accra Plains Archaeological and Historical Project, combining archaeological field-work and excavations with collection of oral and ethnographic evidence. So far the work has been concentrated at the site of Ladoku (near Dawhenya). A number of undergraduates visited the site to see the work.

Dr. J. C. Dombrowski, with the help of a generous grant from the Valco Trust Fund, has begun excavations of Late Stone Age shell mounds in the lagoon at Kpane near Tema, as well as of an Iron settlement above the near-by cliff. She was assisted by graduate and undergraduate students.

The Department also offered assistance to Professor P. L. Shinnie (formerly Professor at Legon, 1957-66), Calgary University, who was embarking on a new field survey in Gonja. His team was assisted by Mr. A. Dozie, a third-year undergraduate

## **Publications**

J. C. DOMBROWSKI, 'Preliminary note on excavation at a shell hidden near Tema' *Nyame Akuma*, 10 (1977).

pp. 31-4.

'Mumute and Bonoase: two sites of the Kintampo industry'. *Sankofa*, II (1976), pp. 64-71.

E. EFFAH-GYAMFI, 'The Ghanaian hunter and the archaeologist'. *Sankofa*, II (1976). pp. 72-78

Several other articles by all members of the Department have been accepted for publication in a variety of Journals.

The second volume of the Department's Journal, *Sankofa*, appeared in December 1976. It was edited by Mr. J. R. Anquandah.

## **Conferences**

In December 1976 Mr. E. Effah-Gyamfi attended the conference of West African Archaeologists at Enugu and presented a paper on his work at Bono Manso. Professor Sutton was also present and spoke on recent work in Hausaland.

Dr. J. C. Dombrowski and Professor J. E. G. Sutton attended the Eighth Pan-African Congress on Prehistory and Quaternary Studies in Nairobi in September, 1977, where both presented papers.

Mr. J. R. Anquandah read a paper at a symposium to mark the twenty-fifth anniversary of the Ghana National Museums and Monuments Board.

## **Seminars**

Departmental Seminars were addressed by the following:

Mr. E. Effah-Gyamfi

Mr. T. Gerrard

Dr. J. C. Dombrowski

Professor W. H. Bayley, Chairman of the Museology Department of the Royal Ontario Museum, Canada.

Professor J. E. G. Sutton, Ahmadu Bello University, Nigeria.

Mrs. Jean Jenkins, a musicologist.

Mr. J. R. Anquandah delivered an Inter-Faculty Lecture entitled 'The contribution of archaeology to an understanding of modern Ghanaian culture'. This is to be published in *Universitas*.

### **Library**

Mr. E. Effah-Gyamfi has been responsible for the Department's Library, assisted by a new clerk, Miss F. Addo-Sunu.

New bookshelves were built to cater for the increasing number of books, journals and offprints for the growing use of the Library. Besides receiving Periodicals and pamphlets, 35 volumes were accessioned.

### **Museum**

Various improvements to the cases and display were made under the direction of Mr. J. R. Anquandah, assisted by Mr. S. A. Danquah, acting Principal Technician, and the other Technical staff.

### **Visitors**

The Department and the Museum were honoured by the visits of His Royal Highness the Prince of Wales in March and His Excellency Isao Mutsudaira, Governor of Fukushima in Japan in August.

Academic visitors included Professor Thurstan Shaw, Professor Hewitt Bayley of the Royal Ontario Museum, Professor P. L. Shinnie and Professor Merrick Posnansky.

### **Extra-Mural**

Mr. J. R. Anquandah gave a series of talks on the history and archaeology of Africa on the G.B.C. network. These have been translated into many African languages.

Mr. E. Effah-Gyamfi has continued as a member of the Law Enforcement Committee of the Ghana Museums and Monuments Board.

### **Benefactions**

The Department is grateful to UNESCO for a donation of materials for the drawing room and museum displays, and to the Embassy of the German Democratic Republic for arranging radio-carbon dating of research samples free of charge in Berlin.

## DEPARTMENT OF ECONOMICS

### Staff

The sad event during the year was the sudden death of Professor J. C. de Graft-Johnson, Head of the Department, on March 27, 1979.

Mr. A. Kwasi Kwarteng was given a two-year study leave and is reading for Ph.D. Degree in Oxford. Dr. E. K. Akpa resigned his appointment with the University in the middle of the year. Mr. R. G. Brooks joined the Department from the University of Strathclyde.

### Students

Student numbers are still increasing. Intake for the various courses in the Department for the 1976-77 academic year were as follows:

F.U.E. in Arts and Social Science	..	225
B.A. Part I	.. .. .	177
B.A. Part II	.. .. .	148

In addition our lecturers taught the following courses:—

F.U.E. Administration	.. .. .	73
D.P.A. I	.. .. .	33
D.S.A. I	.. .. .	25
Dip. in Acc.	.. .. .	45
B.Sc. (Agric.)	.. .. .	28
Prison (Administration)	.. .. .	15

Two final year students, C. Ofori-Mensah and N. Amoako-Asante obtained First Class in the 1976-77 academic session and were awarded University scholarship to pursue further studies.

### Conferences

Mr. J. E. A. Manu attended the Fifth Congress of International Economists meeting in Tokyo, Japan. Mr. Sam Dodoo attended a study seminar on Fiscal Policy and Development at the University of Sussex in Britain in September.

### Gifts

The Bank of Ghana continued to finance the M.Sc. (Economics) programme of the Department.



## DEPARTMENT OF HISTORY

### Staff

Professor A. A. Boahen returned from a year's Sabbatical leave, and Mr. R. G. S. Sprigge, a Senior Lecturer went on a year's Sabbatical leave.

### Students

During the session, a total of 257 undergraduates were registered to read History, including 155 F.U.E. students. Six M.A. candidates and four Ph.D. candidates also registered.

### Courses

Two new courses were introduced for B.A. Part I—"Archaeology of West Africa" and "History of Modern South Asia". Two other new courses were also introduced for Part II—"World History since 1914 and History of Science and Technology". Fourteen final year students presented Long Essays to the Department as part of their final B.A. examinations under the new Degree Structure.

### Research

The Research Committee of the University allocated ₵5,573 to the Department of History for the History of Ghana Project, out of the amount granted by Pioneer Tobacco Company to the University of Ghana. During the session, a National Service Research Assistant, Miss Consolata Akoto-Ampaw was assigned to the Department to work in connection with the project and she collected the oral traditions of the Hohoe and Peki areas in the Volta Region of Ghana. The proceedings of the three-day Seminar on Ghanaian Historiography and Historical Research held in May 1976 was published during the year, and work on the bibliography of Ghana is still in progress.

The Department organised ten staff and Graduate Seminars during the session as part of the Department's normal fortnightly series. Dr. C. N. Wadia, a Senior Lecturer delivered an Inter-Faculty Lecture on the topic: 'Gandhi; the Other Side of the Medal'.

At the beginning of the session, a project was launched for the writing of a book—*The University of Ghana: Its History and Impact* to commemorate the thirtieth anniversary of the

founding of the University under the General Editorship of Professor A. A. Boahen. An American Graduate, Miss. Diana Wylie was appointed as a Research Assistant on the Project. Fifteen members of the University including the Medical School were invited to contribute chapters to the book.

### **Publications**

The following publications were made during the session :

**PROFESSOR J. O. HUNWICK :**

- (1) 'The Islamic Theme in Ghanaian History' in *Proceedings of the Seminar on Ghanaian Historiography and Historical Research* (edited by J. O. Hunwick), Legon, 1977, pp. 240-57.
- (2) Article 'Kunta' for the new edition of the *Encyclopaedia of Islam*.
- (3) 'An 18th Century Scholar and mujaddid: Salih al-Fulani of Futa Jallon' accepted for publication in *Research Bulletin* (Centre of Arabic Documentation, Ibadan).
- (4) 'Arabic Language and Muslim Society in West Africa' accepted for publication in *Ghanaian Journal of Social Sciences*.

**PROFESSOR A. A. BOAHEN :**

- (1) 'The effect of the Atlantic Slave Trade in West Africa - A rejoinder', *Ufahamu*, VII, 2, 1977.
- (2) 'Towards a new categorization and periodization of African responses and reactions to colonialism. Paper presented at the Departmental Seminar, October, 1976.
- (3) 'The teaching of African History in English-speaking West African Universities', a Paper presented at the Workshop on the Teaching of African History organised by the Association of African Universities at the University of Lagos, Nigeria—September, 1977.

**PROFESSOR MARGARET (BAX) PRIESTLEY :**

- (1) 'Nana Ofori Atta I and Public Financial Affairs in Ghana, 1916-1943' in *Legon Journal of Humanities*, Vol. 2, 1976.

- (2) 'Government Accounting in Ghana': 'Survey of Problems and Possibilities' (with Neil Bax) in *Greenhill Journal of Administration* (Ghana Institute of Management and Public Administration), Vol. 2, No. 2, 1975.
- (3) 'Colonial Policy and Administration' in *Proceedings of the Seminar on Ghanaian Historiography and Historical Research* edited by J. O. Hunwick, Legon, 1977.
- (4) *Public Financial Administration in Ghana and its Historical Sources* (Occasional Paper No. 14) Department of Library and Archival Studies, Legon, 1977.
- (5) 'R. Brew' in *Dictionary of African Biography* (The Encyclopaedia Africana), Vol. 1 (New York, 1977).

**DR. A. VAN DANTZIG**

- (1) Parts III and IV of English Bosman and Dutch Bosman, a Comparison of texts, in *History of Africa*, Vols. 3 and 4.
- (2) The Excavation of Fort Ruychaver (with M. Posnansky in *Sankofa* No. 2.
- (3) South-western Ghana and the Akan-speaking areas of the Ivory Coast: a survey of the evidence; and A short bibliography of Dutch and German printed material relating to the history of Ghana in: *Proceedings of the Seminar on Ghanaian Historiography and Historical Research*, Legon, 1976, edited by J. O. Hunwick.

**DR. R. H. K. DARKWAH:** 'The Ghana Police 1894-1910', Paper read at the Annual Conference of the Historical Society of Ghana held at Cape Coast in April 1977.

**MR. ADDO-FENNING:**

- (1) The Gold Mining Industry in Akyem Abuakwa c.1850-1910 in *Sankofa, The Legon Journal of Archaeological and Historical Studies*, Vol. 2, 1976.
- (2) Nsuaem Ferry Crisis 1888: An Episode in Abuakwa-Kotoku Relations in *Ghana Social Science Journal*, Vol. 4, No. 1, May, 1977.
- (3) 10 Biographical Articles in Vol. (i) of *Encyclopaedia Africana: Ghana and Ethiopia*, 1977.

MR. R. G. THOMAS (with Dr. A. A. Iliasu): 'Northern Ghana' in *Proceedings of the Seminar on Ghanaian Historiography and Historical Research*, edited by J. O. Hunwick (Legon 1977) pp. 113-152.

### Visitors

The Department was visited by the following colleagues:— Professor Michael Crowder, University of Lagos, Nigeria; Professor John Middleton, School of Oriental and African Studies, University of London; Professor Michael Dei-Anang, University of Brockport, U.S.A.; Dr. David Meredith, University of South Wales, Australia; Professor Peter Gutkind, McGill University, Canada; and Dr. Alvin O. Thompson, University of West Indies, Kingston, Jamaica.

At the end of the session, Professor J. O. Hunwick, Head of Department, resigned to take up appointment as Director of the Centre for Arabic Studies at the American University in Cairo, Egyptian Arabic Republic, and Professor A. A. Boahen was appointed to succeed him.

## DEPARTMENT OF LIBRARY AND ARCHIVAL STUDIES

### Staff

The Acting Head of Department, Mr. S. I. A. Kotei, was promoted Associate Professor in November, 1976. With his promotion the vacant post of Head of Department was filled after a lapse of two academic years.

Mr. M. G. Cook, University Archivist of Liverpool and Senior Unesco Expert in archival studies, resigned from the service of the University in September. Miss D. G. Keswani, a Unesco Expert on long-term release from the National Archives of India retained her post, pending replacement by personnel from within the English-speaking region of West Africa.

Similarly the former Chief Archivist of the Ghana National Archives held his appointment after serving for one academic year. He was appointed in April, 1976 after retirement from the National Archives which he founded and directed for 25 years.

In the course of the 1975-76 academic year Mrs. C. O. Kisiedu was awarded a British Council staff development scholarship to read courses leading to the M.A. in Information Studies at Sheffield University's Graduate School of Library

and Information Studies, in Britain. She successfully completed the course in June, 1976. Meanwhile she had received an award given annually to students in librarianship who wish to conduct research in a particular area within their geographical sphere and discipline. The award, entitled Nancy Stirling Lambert Scholarship was tenable at the College of Librarianship, University of Wales. She obtained the *Magister in Scientia Bibliothecaria* after completing a thesis on "A Special Classification for Africana with Special Emphasis on West Africa"

Mr. F. K. Nyarko also submitted a Master's thesis on "An Analysis of the Concept of a National Information System and a consideration of the Factors for its Implementation in the Ghanaian context" to the University of Loughborough in September, 1976 and returned to his lectureship appointment in December. He received honourable mention for having won the "Sisson and Parker Prize" given annually to the best graduate library studies candidate for a Master's degree.

Mr. R. Nartey also obtained a Master of Science degree in Information Science with a slant to the pure and natural sciences from Case Western Reserve University, U.S.A. He took up appointment in the Department as an assistant lecturer, in February, 1977.

Professor Margaret Bax (Priestley) was in October, 1977 appointed Visiting Professor to the Department, specifically to teach Administrative History in the graduate diploma in archival studies course. Previously, she had been visiting in the Department of History where she had taught intermittently for several years. It is expected that she would evolve a distinctly novel approach to the treatment of administration from colonial times into the present era.

### Students

The following number of students were registered:

Certificate in Archives Administration	..	20
Certificate in Librarianship	.. ..	19
Graduate diploma in Library Studies	..	17
Graduate diploma in Archival Studies	..	8

The Department recruited students from the following African countries: Ethiopia, the Gambia, Lesotho, Tanzania, Kenya.

Malawi, Sierra Leone, Botswana, Nigeria, Uganda and Zambia, Ghana.

## Courses

### (a) *Graduate Diploma in Library and Archival Studies*

Graduate diploma courses in library and archival studies were drastically revised to reflect recent evaluation of the function of professional librarians and archivists at the present time. Also the revisions were designed to reinforce the essential uniformity of objectives and functions of the two disciplines. The following combined courses were accordingly approved by the University:

- (i) Management Studies
- (ii) Information science
- (iii) Conservation
- (iv) Research methods
- (v) Data processing.

In addition the new Regulations approved towards the end of the Academic year required submission of a Part II Written Project to be prepared from July until September. Accordingly the course for both Diplomas would henceforth extend over one year, i.e. from October to September.

### (b) *Certificate in Archives Administration*

Certain adjustments were made in the curriculum of the Certificate in Archives Administration course. This was partly designed to enable the trainees to perform more adequately as supporting assistants to their professional graduate diplomates, and partly to correct some anomalies in the subject combinations taught in the previous year.

### (c) *Non-Graduate Diploma in Library and Archival Studies*

As a total result of the increasing responsibilities imposed on library and archive assistants throughout the continent and in order to assuage the rising expectations of personnel with very limited prospects of career advancement, Certificate qualifications were upgraded to the diploma level. Unlike all other university diplomas, the candidates will not be required to continue as full-time students but would be supervised to carry out written investigations into a particular practical problem of their daily occupation.

## **Research**

As mentioned above, Mrs. C. O. Kisiedu carried out extensive and original research in the classification of Africana library materials, at the University of Wales. The result may well be that new schedules and more scientific criteria for organising Africana in specialised collections may soon emerge from the present indeterminate modes of arranging and retrieving such material.

Mr. M. G. Cook read a paper at the newly inaugurated staff-student departmental seminars on "An outline programme for establishing archives service in a small or intermediate corporation" in November, 1976. He also in the same month, delivered a lecture during the Inter-Faculty Lecture series on "On being an archivist in a developing society".

Other papers that were consequent to preliminary research were presented by Miss D. G. Keswani, on "Publication programmes at the National Archives of India" Mr. J. M. Akita, on "Some thoughts on major issues" raised at the 8th International Congress on Archives held in Washington D.C., U.S.A. from September 28-October 1, 1976, and Mr. F. K. Nyarko on "Design and structure of a national information system for Ghana".

In addition, an attempt was made to initiate research into the conservation of archival materials stored in humid tropical conditions. The Department intends to proceed with this project.

## **Conferences**

Mr. J. M. Akita took part in a Seminar organised by CRIT (Co-ordinating Centre for Regional Information Training) at Arusha in Tanzania, on "Records Management and Retirement" from 1st-20th November, 1976. He also attended a meeting of the Executive Committee of the International Council on Archives at Big Meadows, Virginia and the 8th International Congress on Archives in Washington D.C., U.S.A. in the month of September, 1976. He was elected Honorary Member of the International Council on Archives during the meeting.

Mr. M. G. Cook also went to a conference in Abidjan in the National Archives of the Ivory Coast at the newly established Unesco model archives for developing countries.

Professor S. I. A. Kotei participated in, and read papers at the following seminars and conferences:

- (a) Kinshasa, November 29 to December 8. Centre for Research and Documentation in Social Sciences in Africa (CERDAS). 'The education and status of Documentalists'.
- (b) Mexico City, September 18-27, 1976. FID/ UNESCO Seminar on Education and Training of Librarians and Archivists in Mexico.
- (c) London, March 15-23, 1977. Standing Conference on Library Materials on Africa (SCOIMA). "Trends in the classification and cataloguing of Africana".
- (d) Brussels, September 3-10, 1977. International Federation of Library Associations (IFLA) 50th Anniversary. "New dimensions for curriculum development: parameters of curriculum planning and programme development for library education in Ghana".

From July 17-23, 1977 the Department organised a Seminar on "Management of Information Systems: Libraries, Archives and Documentation", at the Ghana Institute of Management and Public Administration (GIMPA) Greenhill, Achimota. The seminar was specially convened for the benefit of directors of libraries and their deputies as a continuing education exercise. Seven papers were read, mostly by three permanent lecturers at GIMPA. The British Council provided a consultant on library management in the person of Mr. Len Schofield, former director of the Cambridge Library Management Research Unit, and subsequently Director of a similar institute at the University of Loughborough. The United States Information Service also provided some expertise and material support. There were 35 participants altogether including 3 from Nigeria, Zaire and Upper Volta.

### Visitors

Professor Peter Harvard-Williams was invited by the Department to assist with its curriculum revision exercise from April 11-22, 1977. His visit was made possible by the British Council. His advice was most valuable in affecting changes in the graduate diploma courses now in operation.



## DEPARTMENT OF NURSING

### Staff

There has been no increase in the number of staff which remains at 7 with a vacancy for a Psychiatric Nursing Lecturer still to be filled. This will complete the establishment of 8 approved by the Academic Board.

### Students

Students were enrolled in the under-mentioned courses as follows:

Diploma in Nursing Education—Year I .. ..	13
Diploma in Nursing Service Administration— Year I .. .. .	10
Diploma in Nursing Education—Year II .. ..	15
Diploma in Nursing Service Administration— Year II .. .. .	9

### Courses

The Department continues to offer three courses. These are:

- (a) Diploma in Nursing Education;
- (b) Diploma in Nursing Service Administration; and
- (c) Certificate in Nursing Administration (formerly Management Course in Nursing).

This course under its new name is an improvement of the former one term course offered in Nursing Management. It has now been extended to cover a whole academic year to allow the topics to be treated in greater depth and also to allow time for the students to absorb and assimilate the knowledge gained from the course. It also cuts down on turn-over, since there will now be only one intake of students a year and not two, as before.

During the year, the Academic Board approved a programme for the award of B.A./B.Sc. degrees in Nursing.

Family Health which is the central focus of the new programme will form the basis of the Department's research activities in the next few years. It is proposed to develop a number of laboratories both in hospitals and in the community for teaching and research purposes during the next year.

### Publications

The International Union of Nutrition Sciences Committee V/II of which Mrs. Alice Akita is a member, published the

results of its study on " Nutrition Education in Nursing " in *Environmental Child Health*, Vol. 21, No. 6 (December, 1975), pp. 345-355.

MR. S. K. DOKU 'The Nurse as An Instrument of Change' *Daily Graphic*, May 9, 1977.

MISS A. AKIWUMI, 'Degree for Nurses' *Ghanaian Nurse*, Vol. 9 No. 1, June, 1976.

'Controls in Hospital Nursing Service' accepted for publication in the *International Nursing Review*.

### Conferences

The Department in co-operation with the African Health Training Institutions Project, based at University of North Carolina, organized a Workshop on Systematic Curriculum Planning from 2nd January to 13th January, 1977.

At a Seminar for Nurses and Midwives at the Ghana Institute of Management in Public Administration in September, 1976, Mr. Doku read two papers:

'Leadership Attitudes in Hospitals' and  
'What is Nursing Administration'

Miss Akiwumi read a paper entitled 'Total Patient Care'

Dr. D. A. N. Kisseih read papers entitled 'Regional Approaches to the Use of Health Auxiliaries and the Health Team' at the Conference of the International Federation of Hospitals held in Tokyo, Japan in May, 1977.

Mrs. Alice Akita was a participant in a panel discussion at the recent International Council of Nurses quadrennial congress held in Tokyo from 30th May-3rd June, 1977 and presented a paper on 'Distinction of Primary from Secondary Health Care.' Also as a member of the Ghana delegation she participated in a panel discussion by the delegation on the topic 'Environmental and Social Change—The Effects on Nursing Practice' at the same conference.

### Visitors

The following distinguished visitors were received during the year:

1. Omoyen Mends, Principal, National School of Nursing, Freetown, Sierra Leone.
2. Alan W. Zeller, M.D., C.M.O., Valco, Tema.
3. S. A. Banful, Director of University Health Services, University of Ghana Hospital, Legon.

4. Dora Amoako, Chief Nurse, Valco Hospital, Tema.
5. Helga Morrow, P.O. Box 1650, Accra.
6. Enaam Y. Abou-Youssef, African Health Training Institutions Project, University of North Carolina, Chapel Hill, N.C., U.S.A.
7. Catherine Murphy, African Health Training Institutions Project, University of North Carolina, Chapel Hill, N.C., U.S.A.
8. Raymond Aisely, African Health Training Institutions Project, University of North Carolina, Chapel Hill, N.C., U.S.A.
9. Dr. Saville, Inter-University Council, England.
10. Gladys Sorensen, University of Arizona, Tucson.
11. C. E. P. Samarasingh, University of Ghana Medical School.
12. C. A. Djokotoe-Gliguie, Chairman, Special Committee in Nursing.
13. F. I. Nwoblo, Member, Special Committee in Nursing Education in West Africa.
14. E. Olu Adelowo, Member, Special Committee in Nursing Education in West Africa.
15. Olga L. Robert, School of Nursing and Midwifery, The Gambia.

### **Benefactions**

The Ministry of Health contributed more funds towards the construction of a permanent building for the Department. It is hoped that it would be ready by the end of the 1977-78 academic year.

### **Extension and other Activities**

Members of Department participated extensively in professional activities in the

*Ministry of Health*—Miss A. Akiwumi participated in meetings to estimate nursing staffing requirements for the delivery of health services in the country and helped with the development of a formula.

*Nurses and Midwives Council*—Mrs. Akita served on the Council and its sub-committees. Miss Abadoo gave extensive service to the Council on its Examination Committee.

*Ghana Registered Nurses Association*—Miss Abadoo, Miss Akiwumi, Mr. Doku served on various committees of the Association. Dr. Kisseih served on its Advisory Council. All participated in Nurses Week activities.

*International activities include*

Dr. Kisseih

- (i) Attendance of I.C.N., Board of Directors meeting in Geneva.
- (ii) Acted as Chairman at the Expert Committee Meeting of W.H.O. in Brazaville in June, 1977 under the theme "Health Manpower Development—Problems of the Health Team."
- (iii) Was External Examiner at the Department of Advanced Nursing, University of Nairobi.

Miss Akiwumi

- (i) Attended Professional Services Committee Meeting of the I.C.N. in Geneva December, 1976 and
- (ii) Consultative Group Meeting of African Health Training Institutions Project in Nairobi in September, 1977.
- (iii) Was external examiner of the Department of Advanced Nursing, University of Ibadan, Nigeria.
- (iv) Attended Meeting of Anglophone West African Chief Nursing Officers in October, 1976 as consultant.
- (v) Attended meeting of the Special Committee on Nursing Education in West Africa in Nigeria. May, 1977 and again in Accra from 13th–15th October, 1977 as consultant.

## DEPARTMENT OF POLITICAL SCIENCE

### Staff

The Department had ten permanent senior members on the staff, including Dr. K. A. Ninsin who was appointed Lecturer in December, 1976. Professor Donald Rothchild left the University in July, 1977 at the expiry of his two-year contract as Visiting Professor in the Department.

## Students

There was a total student population of 678. The breakdown was as follows:—

F.U.E. .. ..	236
B.A. Part I .. ..	266
B.A. Part II .. ..	100
Diploma .. ..	35
Occasional .. ..	19
Cadets .. ..	20
M.A. .. ..	2

## Courses

A one-year training programme for foreign service personnel at the graduate diploma level was started at the instance of the Ministry of Foreign Affairs. The first batch consisted of 20 cadets. The aim of the course is to equip the Ghanaian foreign service officer with enough knowledge about the world outside and his own country to enable him appreciate Ghana's problems and needs within the wider context of the international community. It is also to equip him with analytical tools to be used by him when he becomes a diplomat to get at the inner meaning of international affairs. It is anticipated that an International Affairs Unit, consequently established at the Department, will in future develop into an autonomous institute in some, as yet undefined, association with the University. The Unit is headed by Dr. Yaw Saffu.

Courses at the Department were restructured to provide more concentration on problems of development and to provide students with greater command of tools for social research. The revision was also to provide greater variety of courses, partly in the hope that this will break down the intolerably large classes in the Department.

The Graduate programme was completely revamped. It was made at once more comprehensive and more specialised. The next stage of the Graduate programme in the Department will now centre around problems of staffing.

Senior members of the Department continue to offer services to the External Degree Centre of the Institute of Adult Education.

## Research

Attempts to revive the Local Government Research Project has proved difficult and protracted. Considerable sums of money are needed for this, but approaches to the Ministries of Finance, Economic Planning and Local Government, as well as the Bank of Ghana, have all proved unsuccessful. There is serious doubt as to whether it can be revived at all.

## Publications

PROF. KWEKU G. FOLSON:

1. "Afro Marxism" accepted for publication by *The African Review* (Dar-es-Salaam, Tanzania).
2. Manuscript on "Socialism Thinking in Africa" accepted for publication by the *Universities Press*.

DR. YAW MANU:

1. "Preventive Diplomacy in the Congo—An Assessment, *Ghana Social Science Journal*, Vol. 3, No. 2.
2. "Conflict and Consensus in Ghanaian Politics" *Conch*, Vol. VII, Nos. 1 and 2.

DR. J. A. PEASAH:

1. "Politics in Abuakwa" Dennis Austin and Robin Luckham (eds.) *Politicians and Soldiers in Ghana* (Fran Cass, London, 1975).
2. Review of John Dunn and A. F. Robertson, "Dependence and Opportunity: Political Change in Ahafo (1973) *Ch'indaba* 2.

DR. S. K. B. ASANTE:

1. "South Africa and the Italo-Ethiopian Crisis", *Ghana Social Science Journal*, Vol. 3, No. 1, May 1976.
2. "I. T. A. Wallace-Johnson and the Italo-Ethiopian Crisis", *Journal of the Historical Society of Nigeria*, Vol. 7, No. 4, June 1975.
3. Six biographical articles in *Dictionary of African Biography*, Vol. 1, 1977.

DR. EMMANUEL HANSEN:

1. "Frantz Fanon: Social and Political Thought" (Columbus, Ohio University Press, 1977).
2. "Freedom and Revolution in Frantz Fanon", *Universitas*, Vol. 5, No. 2, May/November, 1976.

DR. K. A. NINSIN:

1. "The Convention People's Party Socialism and Indigenous Ghanaian Entrepreneurs 1951-1965: A Reappraisal" *Ghana Social Science Journal*.
2. 'The Cape Coast "Basic Rate" Controversy of 1954-56. A Case of State Power Versus Traditionalism in Ghanaian Politics' *Canadian Journal of African Studies*.

### Conferences, Seminars and Meetings

The Department hosted the Executive Committee meeting of the African Association of Political Science in Legon from the 24th to 27th of April, 1977. The aim of the meeting was to plan the Third Bi-Annual conference of the Association which was held in Rabat from 23rd to 27th September, 1977. The conference itself was attended by Dr. Emmanuel Hansen and Dr. Ebo Hutchful. They both read papers and were among seminar chairmen for the various topics discussed.

Dr. S. K. B. Asante read a paper on 'Impact of External Linkages on Regional Economic Groupings in Africa' at a seminar organised by the Institute of African Studies, Hamburg in August, 1976.

Mr. Chris Hesse presented a paper on 'Political Mobilisation for Rural Development' to the International Conference on Rural Development and Regional Planning organised jointly by the Department of Agricultural Economics, University of Science and Technology, Kumasi, Virginia State University, U.S.A. and the Pan-African Institute for Development, Yaounde, held at the U.S.T., Kumasi from 11th to 16th April, 1977.

Dr. J. A. Peasah and Dr. S. K. B. Asante participated in the Inter-Faculty Lectures. 'The Legislature in Ghana, 1969-1972' was given by the former on 3rd February, 1977 and the 'Politics of Regional Integration: The case of the Economic Community of West African States' was given on 3rd March, 1977 by the latter.

The following seminars were organised in the Department :—

<i>Topic</i>	<i>Speaker</i>	<i>Date</i>
The National Language Issue in Africa.	Dr. I. K. Chinebuah, Senior Research Fellow, Inst. of African Studies.	8-12-76
The Peasantization of the Ghanaian Cocoa Farmer.	Miss Beverly Crier	23-2-77
Moroccan Foreign Policy with Special Reference to Zaire.	Dr. A. M. Bouzidi, Professor of Political Science, Mohamed V. University, Rabat, Morocco.	26-4-77

### Visitors

Dr. Klaus Hutschenreuter, Deputy Director, Centre of African and Near Eastern Studies, Karl Marx University, Leipzig, German Democratic Republic, visited the Department in February 1977. He met and had discussions with the staff and also led a seminar organised jointly by this Department and the Institute of African Studies, Legon at the Departmental Lecture Room on 28th February, 1977. The subject of the seminar was 'State Power and Socio-Political Orientation in Developing Countries (Some Remarks on Typology and Approach)'.

### Benefaction

The Department received a grant of ₦2,000.00 from the Managing Trustees of the Valco Fund to meet organisational costs of the meeting of the Executive Committee of the African Association of Political Science.

### Other Activities

Dr. Yaw Saffu, Co-ordinator of the foreign service officers' training programme, visited the University of Nairobi during the Long Vacation to acquaint himself with the organisation and operation of the diplomacy training programme run by that University.

Professor O. Ola, Dr. Michael Olisa, and Dr. Peter Eke of the Political science departments of the Universities of Lagos, Nsukka and Ibadan, Nigeria, respectively acted as External Examiners. Professor Kweku G. Folson was in the Universities of Lagos and Ahmadu Bello, Kaduna, as External Examiner.



## DEPARTMENT OF PSYCHOLOGY

### Staff

Dr. Cathy Colman resigned her appointment on the completion of her contract.

### Students

The distribution of students for the session was as follows:

				<i>Arts</i>	<i>Science</i>
1st year	..	..	..	50	32
2nd year	..	..	..	40	2
3rd year	..	..	..	17	2
M.A.	..	..	..	1	—

### Courses

Courses continued to be offered to students in the Departments of Home Science, Sociology, Nursing and Social Administration.

### Research

Dr. C. E. Fiscian completed his research on Some Psychological Aspects of Fertility Behaviour. Dr. Ayisi continued his research in the field of Parapsychology based at the Akonedi Shrine at Larteh and Mr. Bulley completed his study of Values.

### Conferences

Dr. Ayisi attended the third International Congress on Psychotronic Research in Tokyo from June 27th to July 2nd, and read a paper "Fetish Lore in Ghana".

The Second Joint Student/Staff Seminar with the University of Lagos took place in Lagos from 1st to 5th April. The following papers were presented:

1. Creativity As Measured Among Students in Arts, Social Sciences, Architecture and Engineering. (B. Ackah-Yensu—Legon).
2. Some Psychological Factors In Smoking Behaviour Among Ghanaian University Students. (Elizabeth Ghanney—Legon).
3. Differences between Hand and Foot Reaction Time. (Dr. Segbefia—Legon).
4. Some Problems of Psychological Research in Ghana. (Dr. K. Adjei—Legon).
5. Racial Differences In Intelligence. (Adem Emaiku—Lagos).

6. Dreams. (F. Ogunlehre—Lagos).
7. Husbands and Wives in Lagos. The Effects of Socio-Economic Status on the Pattern of Family Living. (Dr. D. Mack—Lagos).
8. Cross-Cultural Studies on Visual Development in Infancy. (Professor A. C. Mundy—Castle).

Two members of the Department gave two Inter-Faculty Lectures, as follows:

1. Dr. C. H. Ayisi: 'New Frontiers of the Mind'.
2. Mr. H. C. A. Bulley: 'The Psychologist and National Development'.

### Publications

FISCIAN, C. E.:

- (a) 'Some Psychological Aspects of Fertility Behaviour in Ghana', Legon, P.D.P.
- (b) Book Review: 'A New Introduction to Educational Psychology' by M. O. A. Durojaiye, *Ghana Social Science Journal*.

BULLEY, H. C. A.: 'The Selection of Trainee Managers', *Ghana Social Science Journal*, Vol. 3 No. 2, 1977.

AYISI, C. H.:

- (a) 'New Frontiers of the Mind', *Universitas*.
- (b) 'Fetish Lore in Ghana', *Journal of Holistic Health*.

### Gifts

The Department acknowledges with thanks the gift of a large consignment of books on Psychology from the University of Guelph.

### Other

Dr. Fiscian continued to serve as External Examiner in Psychology at the University of Lagos, and also as a member of the Editorial Board of *Universitas*. Mr. Bulley continues to serve as External Examiner in Educational Psychology at the University of Cape Coast.

## DEPARTMENT OF SOCIOLOGY

### Staff

Dr. Twumasi was promoted Senior Lecturer with effect from December, 1976.

Miss Mollard was appointed Lecturer in March, 1977 and assisted with the teaching of courses in Population Studies for the rest of the year.

Mr. S. Opoku was away on study leave at Bielefeld University, West Germany. He is expected to resume in October for the next academic year.

Mrs. Jones-Quartey resigned from the service of the University at the end of the academic year.

### Students

Sociology continues to be a very popular subject among first year students although the Department is still plagued by shortage of staff. Over-all registration for the year was as follows:—

F.U.E.	..	..	..	..	..	206
B.A. Part I	..	..	..	..	..	202
B.A. Part II	..	..	..	..	..	76
Social Administration Part I	..	..	..	..	..	26
Social Administration Part II	..	..	..	..	..	25
Postgraduate Diploma in Social Administration	..	..	..	..	..	4
M.A. in Sociology 1st Year	..	..	..	..	..	5
M.A. in Sociology 2nd Year	..	..	..	..	..	3

### Publications

The Department publishes the *Ghana Journal of Sociology* in collaboration with the Ghana Sociological Association.

### Associations

The Department partly sponsors two associations:

- (a) The Ghana Sociological Association
- (b) The Association of Social Workers in Ghana.

### Research projects

The department's research project on "Study of Funeral Customs in Ghana" continued. Small-scale researches undertaken by lecturers during the year included:

*Dr. (Mrs.) E. Date-Bah*

1. Ghanaian Women in Co-operatives. Read a paper on this in April, 1977 at the Ghana Sociological Conference in Cape Coast.

2. Continued with the writing up of research done on Ghanaian Commercial Drivers.
3. Started work on *Ghanaian Women in Academia*.

*Dr. J. M. Assimeng*

1. Continued with study of the relationship between religious affinity and demographic behaviour.
2. Initiated study of social thought in Black Africa.

*Mrs. J. H. K. Peasah*

1. Follow-up study on Certificate/Diploma holders in Social Administration.
2. Manual production for supervisors in social work.
3. Participation in the proposed book project of the Department of Sociology on "Tradition and Change in Ghanaian Society"

*Dr. P. A. Twumasi*

1. A Sociological Study of Rural Water use—completed.
2. "Health Problems of Rural Women" completed 1977.
3. "Population, Food Supply and Health Project in the Bawku area. An inter-disciplinary study (Prof. Benneh, Dr. Oracca-Tetteh and Dr. P. A. Twumasi)—in progress.

*Mrs. Yvonne Asamoah*

Conducted follow-up study on students who have earned Certificates/Diplomas from the Social Administration Unit since 1970. Results now being tabulated.

*Dr. Yvon Yangyuru (Rev.)*

A Sociological Study of Rural Water use (Co-author).

*Mr. E. H. Mends*

1. Departmental Research Project on Funerals in Ghana.
2. P. D. P. Ethical and Religious Aspects of Population.
3. Personal Research on (a) Clan Association in Cape Coast—adaptation of Social Institutions, (b) Sociological relevance of 19th century Ghanaian nationalist writings.

*Mr. D. N. A. Nortey*

Baseline Survey, Mampong Valley Social Laboratory.

Miss E. Mollard

1. Infecundity in Africa.
2. Population and Food researches: elaboration of a new model.

Prof. D. K. Fiawoo

Socio-Economic Survey of the Abor-Akatsi area in the Lower Volta—a Government Project (in collaboration with Dr. Dadson and Prof. Benneh)—Project completed.

## Publications

E. DATE-BAH "Commercial Driving as an Occupational Avenue for the less Educated in Ghana" *Manpower and Unemployment Research* Vol. 10, No. 1, pp. 39–45 published by the Centre for Developing Area Studies, McGill University. April 1977.

"Absenteeism and Turnover in a Ghanaian Factory" *Greenhill Journal of Administration*, Vol. 2, No. 4, pp. 75–91. This is a reprint from I.E.M.E. No. 4138, published by the International Labour Institute, Geneva 1977.

J. M. ASSIMENG "Sociology in Ghana: Context and Institutionalization" *Universitas* (Legon) 5 (2), 1976: 100–125.

"Traditional Religion in Ghana: a preliminary guide to research" *Thought and Practice* (Nairobi) 3 (2), 1976: 65–88.

"Traditional Religion in the study of Ghanaian Social Structure" Proceedings of Seminar on Ghanaian Historiography and Historical Research, 1977. Edited by J. O. Hunwick.

"The witchcraft scene in Ghana: a Sociological comment" *Ghana Social Science Journal* Vol. 4 (1), 1977: 54–78.

"Religion in Ghana: a Sociological Introduction: Accepted, in 1976, for publication by Ghana Publishing Corporation. Probable date of publication 1978.

P. A. TWUMASI: 'Social Aspects of Health and Illness' *Ghana Medical Journal* Vol. 15 No. 1, March 1976.

'Parsonian Sick Role Formation and Illness Behaviour in Ghana' *Ghana Journal of Social Science* Vol. 3, No. 2, 1976.

'Background Characteristics of Ghanaian Medical Students' *Universitas* November, 1976.

'A Sociological Study of Rural Water Use' Project Report for Ghana Water and Sewerage Corporation, Accra, Ghana. May, 1977.

'The Working Day of a Woman Trader' *Economic and Social Affairs* Vol. 2, July, 1976: No. 3.

'Co-Author of W.H.O. monograph No. 65 "Social Health Aspects of Sexually Transmitted Diseases". Geneva 1977 (Technical Discussion, Sub-group Rapporteur).

MRS. YVONNE ASAMOAH: Co-editor, *Education for Family Welfare: A component of Development report of West African Sub-Regional Seminar on Family Welfare held in Ghana in February 1976 under auspices of International Association and the Department of Sociology*. Published by International Association of School of Social Work, New York, 1977.

'Training for the Integrated Approach', *Family Welfare in Africa: Educational Strategies* by International Association of Schools of Social Work, 1977.

E. H. MENDS with J. S. Pobee 'Social Change and Traditional African Religions' *Sociological Analysis*, Spring 1977: 38.1.

D. N. A. NORTEY 'Mampong Valley Laboratory-Baseline Survey' (ed. N.O. Addo) Published by Institute of African Studies 1977.

D. K. FIAWOO 'Characteristic Features of Ewe Ancestor Worship' *Ancestors*, William Newell Mouton, 1976.

'Abor-Akatsi Socio-Economic Survey'—Report of a feasibility Study of a Sugar Project—submitted to Government 1977 (with John Dadson and George Benneh).

### Conferences

As in previous years, the Ghana Sociological Association Conference was organized in collaboration with the Department of Sociology. The theme for the Conference was Tradition and Change with the following sub-themes: 1. Chieftaincy, 2. Religion, 3. Women, Family life and Development.

### Extension and other Activities

Members of Department served on Government boards and delegations, participated in radio and TV talks and, as in previous years, participated in researches initiated and supported by Ministries and Government departments.

## INSTITUTE OF AFRICAN STUDIES

### Staff

Doctors S. D. Asiama and N. Fiagbedzi resumed duty in the School of Music, Dance and Drama after their study leave periods.

Prof. Joe de Graft joined the staff of the Institute as the Head of the School of Music, Dance and Drama. Other new appointees to the School were Dr. Appianda Arthur and Mr. William Anku, both as lecturers. Mr. Nee Owoo was appointed a Research Associate in the Film Department of the Institute.

### Students

There were sixteen students doing the M.A. African Studies Programme. Their courses were in the Arts and Social Sciences. Twelve of these were in First Year and four in Second Year.

The School of Music, Dance and Drama had students as follows:

#### *Drama Division*

F.U.E. . . . .	35
1st Year Diploma . . . . .	18
2nd Year Diploma . . . . .	18
3rd Year Diploma . . . . .	13
Certificate in Drama . . . . .	7

#### *Music Division*

F.U.E. . . . .	4
B.A. Music . . . . .	1
B.Mus. . . . .	3
Diploma in African Music . . . . .	5

#### *Dance Division*

Certificate in Dance . . . . .	3
1st Year Diploma . . . . .	11
2nd Year Diploma . . . . .	5
3rd Year Diploma . . . . .	5

### Publications

The Institute continued to publish its periodicals *Research Review*, *Research Supplement*, *Collected Language Notes*, and *Oral Traditions*. *Odawuru* No. 7, the Institute's Twi magazine, was submitted for publication at the Presbyterian Press, Accra. An Akan calendar, *Akanfoɔ Asranna ne Nnabone—1977* was also published. Other works submitted for publication included

PROFESSOR J. H. NKETIA:

1. *New Perspectives in Music Education*. Quarterly Journal, National Centre for the Performing Arts Vol. VI No. 2 June, 1977 p. 1-11.
2. *The Role of the University in Cultural Development in Africa* November, 1976: Association of African Universities.
3. *Development Programmes for Music and the Performing Arts of Africa*: Paper submitted to UNESCO, March, 1977.
4. *Traditional and Innovation in African Music*, I.A.S. Legon, April, 1977.
5. *Collating and Disseminating Oral Sources of Music Information*. Presented to the Seminar on "The Nature and Scope of Musical Information" organised by the International Music Council, Lisbon. July 4-9, 1977.
6. *The Performing Musician in a Changing Society*, Quarterly Journal, National Centre for the Performing Arts (forthcoming).
7. *African Roots of Music in the Americas*: Paper read at the Twelfth International Congress of International Musicological Society, Berkeley, University of California: August 20-August 26, 1977.
8. *Music in Traditional African Worship and Christian Worship*, I.A.S., 1976. Report of the All Africa Conference of Churches (A.A.C.C.) Consultation on African Church Music p. 22-42.

DR. I. K. CHINEBUAH

1. The Aspect of Stativity in Nzema in *Papers in Ghanaian Linguistics II: Transactions of the Linguistic Circle of Accra*, Legon Ghana: I.A.S. University of Ghana, 1977, 23-46.
2. The National Language Issue in Africa: The Case for Akan in Ghana, *African Languages* Vol. III, 1977.
3. Aspects of the Intonational Features of Nzema, *Papers in Ghanaian Linguistics III: Transactions of the Linguistic Circle of Accra* (forthcoming).
4. *Let us now praise famous men: A tribute to Kwame Nkrumah* (accepted for publication by the Ghana Publishing Corporation).



DR. E. O. APRONTI

1. Sectional Head's Report on Literary Events in the Second World Black and African Festival of Arts and Culture (FESTAC), Lagos, January-February, 1977.

DR. C. OPPONG

1. Motherhood in a Changing World *UNICEF News*, 1976.
2. Financial Constraints and Family Size—*Canadian Journal of African Studies*, Vol. X No. 3, 1976.
3. A Note on Chains of Change in Family Systems and Family Size. *Journal of Marriage and the Family*, August, 1977.
4. 1977 (ed.) Caldwell, The Crumbling of High Fertility Supports *The Persistence of High Fertility*, Australian National University Press.
5. Report on Research on the Status of Women in Nigeria and Ghana.

DR. M. E. KROPP-DAKUBU

1. Ga-Adangme Nominal Morphology (paper mimeographed for limited distribution).
2. The Contribution of Linguistics to the Study of Ghanaian History in J. O. Hunwick, ed.; *Proceedings of the Seminar on Ghanaian Historiography and Historical Research*, 1977, pp. 26-43.
3. With C. Reed, Language and Music in the Luna Drumming of Dagbon (paper to the Linguistic Circle of Accra), April, 1977.
4. A Note on Hausa in Ghana *Papers in Ghanaian Linguistics II* ed. M. E. K. Dakubu, 1977, pp. 14-22.

DR. A. K. TEKPETEY

1. Ghanaian Literature in *Russian Encyclopaedia*.

MR. B. A. ANING

1. Music of Ghana in *Encyclopaedia of World Music* (Publishers in Moscow—Commissioned by First Secretary, Russian Embassy, Accra).

DR. KWAME ARHIN

1. The Pressure of Cash and Its Political Consequences in Asante, 1700-1900 *UCLA Journal* Vol. 3, No. 4, 1976-77.
2. Kwame Nkrumah, 1909-1972 *Les Africains, Jeune Afrique*, Paris, 1977.

3. *The Evolution of Trade and Markets in West Africa: The Ghana Case*, Longmans.
4. The Akan, Mande and Mole-Dagbane Peoples, UNESCO General History Series Vol. VI, Chapter 25.
5. *Brong-Kyempim: Essays on the Society, History and Politics of the Brong Peoples*. Afram Publications.
6. *Rituals of Chiefship in Ghana: The Asante Poems*.
7. *The Traditional Public Finance System*, Information Services Department.

DR. A. K. QUARCOO

1. The visual Arts of Ghana—Contribution to the Russian Encyclopaedia requested by the Russian Embassy.
2. The Visual Arts as Source of History (forthcoming) *Sankofa* an Archaeological Magazine.
3. Cultural Exchanges and Modern Africa, Ghana-Liberian Cultural Exchange, Committee Report.
4. Contemporary Arts in Culture and Development, International Seminar Proceedings of Art Exhibition of the 4th Legon Festival of Arts, 1977.
5. Ghana and the Conclusions of the Inter-Governmental Conference on Cultural Policies A.C.I. Conference in Dakar, Senegal, 1976.
6. *4th Legon Festival of Arts—Contemporary Arts of Ghana*.

DR. K. N. BAME

1. The Influence of Contemporary Ghanaian Traditional Drama on the Attitudes and Behaviour of Play-Goers *Research Review* Vol. 9, No. 2, 1973.

DR. J. K. FYNN

1. Oral Traditions of the Fante States:
  - Vol. 5 A beadze
  - Vol. 6 Enyamaim, Enyan Denkyira and Aboadzi
  - Vol. 7 Kwamankese.
2. The Akyem Abuakwa Kings of the Eighteenth Century: A Chronology, *Ghana Social Science Journal* Vol. 3, No. 1, 1976.
3. The Nananom Pow of the Fante: Myth and Reality, *Sankofa*, The Legon Journal of Archaeological and Historical Studies, Vol. 2, 1976.

4. The Etsi of Ghana. *Ghana Social Science Journal* Vol. 3, No. 2, 1976.
5. The Gold Coast (Ghana) 1400-1800. *Proceedings of the Seminar on Ghanaian Historiography and Historical Research*. J. O. Hunwick, Legon, 1977.
6. Culture and Development: The Historian's Dilemma in Africa, Paper read at the Symposium on Culture and Development, Dakar, Senegal, September, 1976.
7. The Building of Fort Good Hope; An Episode in Anglo-Dutch Rivalry on the Gold Coast, Paper read at the Conference of the Historical Society of Ghana at Cape Coast, April, 1977.
8. With Professor M. Hiskett: A Review of *Asante in the 19th Century* by Ivor Wilks, Cambridge, 1975 (forthcoming in THSG).

MR. K. A. OPOKU

1. *West African Traditional Religion* (forthcoming) Far Eastern Publishers, Jurong, Singapore, October, 1977.
2. The Compatibility between Biblical Religion and African Traditional Religion, in *Catholic Voice*, Vol. 52, No. 8, July-August, 1977.

MR. G. O. TWEREFOD

1. *External Certificate Courses in the Performing Arts* (a programme).
2. *Because We Care* (Report on the Activities of the Extension Programme), 1975-76.

MR. B. A. FREMPONG

1. Hints on the Learning of Twi (one-day school for foreign students).
2. *Aman ne Nkuro so mpaninsem*—
  - (1) *Asumagya*
  - (2) *Kokofu*
  - (3) *Twenedurase*
  - (4) *Asante Mampon*
3. Akanfo Asranna ne Nnabone—1977
4. *Odawuru* (in Press) Presbyterian Press, Accra.

MRS. N. AKWA

1. 'African Music History, Problem of the Student'.
2. 'Sculptor and Creativity in African Traditional Society'. (Seminar Papers).

MISS S. D. LOKKO

1. 'Festival Drama' *Research Review* Vol. 10, No. 3 (forthcoming), I.A.S. Legon.
2. 'Drama in Education in Ghana', Society of Teachers of Speech and Drama, London.

DR. ASANTE DARKWA

1. *Atente: A Study of an Akan Flute Music*, I.A.S., Legon.
2. *Bima: A Study of Zoko-Ghambrongo (Frafra) Flute Music*, I.A.S., Legon.

MR. W. O. ADINKU

1. *Danyigba (My Country)*—A Composition for Solo Voice and Piano.
2. *Assessment Guide to String Instruments Examination*.

DR. N. FIAGBEDZI

1. *The Music of the Anlo: Its Historical Background, Cultural Matrix and Style*, Ph.D. Dissertation, UCLA: University Microfilms, Ann Arbor, Michigan.

DR. A. A. R. TURKSON

1. *Three Pieces for Flute and Piano*, University of Ife Press. 1976.
2. 'The Evolution of the Fante Sacred Lyric', *Research Review*, Vol. 9, No. 3, 1973, I.A.S., Legon.
3. 'Guidelines on Sacred Music' (Prepared for the National Catholic Commission on Sacred Music).

MISS ABA HAYFORD

1. 'Traditional Culture as Basis for Communication Through the Media—Campaigns' UNESCO Fel. Seminar--Workshop on Radio Campaigns.

### Conferences

Professor J. H. Nketia attended a number of conferences, committee and executive board meetings, and participated in symposia and schools. He read papers at some of these conferences, etc. notable among them were papers on "African Roots of Music in the Americas" at the Twelfth International Congress of the International Musicological Society in Berkeley, University of California; and "New Perspectives in Music Education" in Berlin.

Miss Aba Hayford also participated in seminars and workshops on mass communication in Tanzania and Botswana.

Some other fellows of the Institute attended conferences and participated in a number of international conferences and seminars. Among them were Dr. J. K. Fynn and Dr. A. K. Tekpetey who read papers at a Conference on Development and Culture in Connection with the 70th Birthday Celebrations of President Leopold Sedar Senghor in Dakar from the 2nd to the 8th of October, 1976.

The 2nd World Festival of Black and African Arts in Lagos, Nigeria was attended by several members of the Institute. The Ghana Dance Ensemble of the Institute performed at this festival.

### Visitors

The Institute hosted the following distinguished visitors: Mr. Apisai Enos of the Institute of Papua New Guinea Studies, Papua, New Guinea; Mr. Alberto Paudolf of Italian Television, Rome, Italy; and a team of NAACP Task force from the U.S.A. They were Messrs. Virginia C. Danold, Karl G. Gregory, George I. Lythcott and John B. Ervin. Other distinguished visitors were Mr. E. K. W. Dadzie of Bureau Regional Pour L'Education en Afrique (UNESCO), Dakar, Senegal; Mr. S. Fanchette, Chief of the UNESCO Division of Statistics on Culture and Communication based in Paris; Mr. Albert Bothol, Head of the UNESCO Section of Cultural Policies also based in Paris. The President, Mr. Orlando Margues de Paiva, the Director of African Studies, Mr. F. A. Albuquerque Mourao and Messrs. J. R. Franco da Foureca and Luciano Bernini, all of the University of Sao Paulo, Brazil also paid the Institute a visit. Mr. Scott Sinclair, Project Leader led some teachers including two headmasters and an education inspector from West Midland, Birmingham, England on a visit to the Institute.

Our visiting professors included Professor John Hope Franklin, a distinguished American Historian, an educator and author who gave a seminar and led a discussion "Black Americans and American Politics" and "Trends in Higher Education in the United States"

Mr. Rolf Scharie from the Federal Republic of Germany conducted a Pantomime Workshop for students. Dr. Roberg

Corrigan and Professor Joyce Hobley, Specialists in American Literature and Theatre visited the Institute.

### **Benefactions**

The Managing Trustees of the Valco Fund, Accra presented the Institute's Kusum Agoromba group with a Mercedes Benz Bus (Reg. No. GZ 7785). A set of records was also donated by UNESCO, Paris and another set was received from Deutscher Musikrat, Verbindungsstelle of the Federal Republic of Germany.

The Children's Drama Development received a cash grant of \$5,000.00 and a set of equipment from UNICEF.

## **SCHOOL OF JOURNALISM AND COMMUNICATION**

This has been another year of consolidation. The School has become more widely known and it has received many requests from individual countries and international organisations for advice and assistance in setting up communication training institutions in other parts of Africa. The School has not been able to accommodate all the requests. It is hoped that more assistance can be given in the coming years as the school expands its resources and gains more experience.

### **Staff**

The staff for this year consisted of Dr. P. A. V. Ansah, Senior Lecturer and Acting Director, Dr. Yaw Twumasi, Senior Lecturer, Professor Sydney W. Head, Visiting Fulbright Scholar and Miss Marie Riley, Lecturer. The School also had the services of Mr. John Brouhard, a graduate scholar from the University of Indiana under a MUCIA exchange programme, who lectured in Photojournalism. In addition three senior producers from the Ghana Broadcasting Corporation helped in radio and television production laboratory work.

Professor Head who was scheduled to spend one year here could not complete the year. He was taken ill and he went back to the U.S. in the middle of March. Mr. Brouhard also left Ghana in July, 1977.

### **Students**

There were ten students in the diploma class and four in the M.A. course. All the M.A. students were non-Ghanaian, and

the diploma class also included one non-Ghanaian. Three other students who had completed their M.A. course work requirement were writing their thesis off campus.

### **Courses**

Courses remained generally unchanged; the only modification made was that Broadcast Journalism which has been an elective so far was made a compulsory subject for all diploma students. A basic course in Statistics and an introductory course in communication research methods were introduced for the first year students. These subjects are not examined. Proposals have been made for a revision of the syllabus, but the new staff members who will be joining us in the 1977-78 academic year will be consulted before the proposals are submitted to the appropriate boards for the necessary action.

### **Research and Publications**

The School continued with the 'Densu Times' project which entered its third and final year. Two interim reports on the results have been already presented to the Ministries of Information and Education. The results of the final year of the experiment are being analysed for submission to the interested ministries.

### **Publications**

- P. A. V. ANSAH, I. "The Coverage of Foreign News in Four African Dailies"—Universitas, Vol. 5 No. 2, pp. 3-18.
2. 'The Press Trust—A New Theory of the Press for Africa'—Universitas—to be published in June.
- YAW TWUMASI, I. "J. B. Danquah: Towards An Understanding of the Social and Political Ideas of a Ghanaian Nationalist and Politician" (African Affairs, January, 1978).
2. 'Rumour as a Communication Phenomenon: A Study in Variable Relationships' (Nigerian Journal of Economic and Social Studies, forthcoming 1978).
3. 'Smallness and the Human Factor in Development' A review article for Ghana Social Science Journal, forthcoming 1977-78.

### **Conferences**

A training workshop jointly sponsored by the World Bank, the Konrad Adenauer Foundation and the International Press

Institute which was going to be hosted by the School from September 27 to October 6, 1977 was called off because of the disruptions during the academic year.

The Acting Director attended a conference in Nairobi from 4th to 12th December, 1976 at which the newly formed African Council on Communication Education (ACCE) was formally inaugurated. He was elected the first president of the Council. (The preliminary meeting at which was mooted the idea of forming such an organisation grouping all communication training institutes in Africa was held at Legon in December 1974, under the joint sponsorship of the UNESCO and the School).

### **Benefactions**

The USIS has instituted another prize, the Russwurm Prize worth £100 to be awarded annually. It has been decided to award the prize to the student who produces the best diploma research project. The other prize is the Hamilton Fish award for the student who publishes the best articles on national and international affairs, and it has been in existence for the past three years.

The School also continued to benefit from the generous grant made to it by the Carnegie Corporation of New York.

## **INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH**

### **Administrative**

During the year the Population Dynamics Programme (PDP) was transferred to ISSER as a semi-autonomous unit. It is proposed to merge the activities of PDP with those of the Population unit of ISSER to form an effective population studies section.

### **Staff**

National Service	..	..	Akpade, J. K.
Study Leave	..	..	Aboagye, A. A., University of Columbia, 1975-76.



Study Leave	..	..	Akar, I. G., State University of New York at Buffalo, 1975-76.
Study Leave	..	..	Ahiakpor, J. C. W., University of Toronto, 1976-77.
Leave of Absence	..	..	de Graft-Johnson, K. T.

#### Degrees Awarded

Boateng, E. O.	..	..	Ph.D. (Liverpool)
Nyanteng, V. K.	..	..	Ph.D. (Ohio)
Twum-Barima, K.	..	..	D.Sc. (Honoris causa), Kumasi.

#### Staff Training Scheme

The 1976-77 academic year heralded the return of the first beneficiaries of this scheme, Dr. E. O. Boateng and Dr. V. K. Nyanteng, who had successfully completed their Ph.D. programmes. Mr. J. C. W. Ahiakpor departed to begin his Ph.D. programme under this scheme.

#### Students

		<i>No.</i>	<i>No.</i>
		<i>Enrolled</i>	<i>of passes</i>
Certificate in Statistics	..	25	21
Diploma in Statistics	..	15	14

#### Courses

ISSER continues to be responsible for vocational training in Statistics and the content of these courses remained unchanged. The certificate course includes training in survey work; the project undertaken in 1976-77 was the use of family planning techniques among Junior Staff at the University. As in the past, much teaching assistance has been given to other University Departments and the supervision of research students.

#### Research

Many research programmes at ISSER are of a long-term nature or continuous monitoring of Government programmes, which have progressed satisfactorily during the year. ISSER has suggested and implemented several changes in the record system of the Ghana National Family Planning Programme

which will facilitate the continuous evaluation for which ISSER is responsible.

With respect to the formulation of new research projects, priority has been given to research needs of the Government and University and many of the new projects initiated over the year stem from these requests for information. In some instances these projects have just dealt with an isolated topic, whereas others have been incorporated into a wider research area. Many requests have been received from other institutions and international organizations but staff constraints have limited the acceptance of such invitations to areas which are consistent with ISSER's research interests.

New projects initiated during the year include:

1. The trend of food crop prices in Ghana and the factors affecting them.
2. The structure, conduct and performance of absentee and part-time farmers in Ghana.
3. The demand, supply and distribution of inputs in the cocoa industry and the effect of input price subsidy and output price increase on the production of cocoa in Ghana.
4. Analysis of policies of raw material procurement by processing firms.
5. An evaluation of the Cocoa Rehabilitation and Replanting programmes in the Eastern and Ashanti Regions.
6. The role of women in productive activities in various size categories of settlements.
7. An evaluation of the Mampong Valley Social Laboratory.
8. Ghanaian women and co-operatives.
9. Evaluation of the vital registration system in Ghana and the generation of the patterns of mortality from the vital registration system and Danfa Comprehensive Rural Health and Family Planning Project.
10. Factors other than contraception affecting fertility from the World Fertility Survey.
11. A study of some socio-economic variables affecting infant and childhood mortality and fertility in Danfa.

12. Statistical analysis of expenditure on funerals in Ghana.
13. The development of a stratification system in rural Ghana; starting with Ashanti Traditional areas.
14. Organization of a stores system for the Manciple's Organization. University of Ghana.

ISSER also provided a base for both institutions and individuals from all over the world to pursue research in Ghana. Some of these programmes have been joint ventures with ISSER. The study of health delivery systems in Ghana, with special reference to the Eastern and Volta Regions, which was practically completed during the year, was conducted by a team from the Institute of Development Studies, Sussex in collaboration with ISSER.

The statistical and data processing sections in particular gave considerable assistance to research personnel both within the University and outside. It is of major importance that assistance be sought in the planning and design stage of such research, in order that optimal use may be made of the resources available which facilitate the processing. Unfortunately, many do not seek help until the later stages, which frequently leads to unwieldy processing, due to inefficient design of the earlier stages.

#### **Papers Read at Conferences**

*Urbanization and Rural Development, Legon, July 1976*

BOTCHIE, G.

1. Planning and implementation of development plans in Ghana.
2. Industrial raw materials and regional development plans in Ghana.
3. On measuring rural development impact.

EWUSI, K.—The measurement of development at the village and regional level.

*Seminar on Population Growth and Development Planning, Monrovia, August, 1976*

BOTCHIE, G.—Urban growth and regional development in Ghana.

*Symposium on International Cocoa Day, 1976*

DAPAAH, S. K.—Economic problems facing the cocoa industry.

*FAO/SIDA Expert Consultative Conference on Integrated Rural Development, Nairobi, September, 1976*

EWUSI, K.—A model for programming integrated rural development in Ghana.

*Inequality in Africa, New York, October 1976*

NUKUNYA, G. K.—Tradition and change in South Eastern Ghana: A Sociological study of the Anlo riots of 1953.

*Farming Systems Conference, Bamako, Mali, November, 1976.*

ATSU, S. Y.—Changes in farming systems in the Ashanti Region of Ghana.

*Codesria Conference on Industrialization and Income Distribution in Africa, Cairo, November, 1976*

EWUSI, K.—The evidence for income distribution in West Africa and its policy implication.

*UNRISD Workshop on Measurement of Real Progress, Geneva, December, 1976*

EWUSI, K.—Measurement of real progress at the local level.

*Codesria Workshop on Vital Statistical Registration in Africa, Dakar, March, 1977*

BATSE, Z. K. M.—Civil registration and vital statistics in Ghana.

*Second Anniversary Conference of the Statistical Society, Legon, March, 1977*

BOATENG, E. O.—Towards the formation of a statistical association in Ghana: the expected problems.

*Annual Conference of Ghana Sociological Association, Cape Coast, March, 1977*

KUMEKPOR, M. with KUMEKPOR, T. K.—Contraception and abortion practice and change.

*Tenth Annual Meeting of the Association of Population Libraries and Information Centres (APLIC/I) St. Louis, April, 1977*

AMONOO, P. G.—Towards a population information documentation system for Africa: Objectives and proposals.

*Conference on Rural Development and Regional Planning, Kumasi, April 1977*

BROWN, C. K.—Towards a meaningful approach to the organization of rural development.

EWUSI, K.—The meaning of Intergrated rural development and its implications for data needs for planners.

*Ghana Rural Reconstruction Movement Seminar, Legon, July, 1977. (Organized by Addo, N. O.)*

ADDO, N. O.—An experiment in rural development at the grass root level: the Mampong Valley Social Laboratory.

ADDO, N. O. and NYANTENG, V. K.—The structure of the labour force and economic activities in the Mampong Valley Social Laboratory.

ADDO, N. O. and BROWN, C. K.—The theoretical basis of integrated rural development.

ADDO, N. O., and BROWN, C. K. and Others—A Preliminary evaluation of the performance of the experiment in the Mampong Valley.

BROWN, C. K.—The strategies of rural development with special reference to Ghana.

NYANTENG, V. K.—Problems in the implementation of rural development programmes at the macro-level in Ghana.

*Family Education and Socio-Economic Development in Africa, 1977*

KUMEKPOR, M.

1. Family Planning and problems of implementation.
2. The role of evaluation in development programmes.

*Ghana Library Association Biennial Conference, Accra, August, 1977*

AMONOO, P. G.—The role of special and government departmental libraries in national development.

*Seminar on the Cocoa Industry, Legon, August, 1977. (Organized by the Cocoa Economics Unit, ISSER)*

DAPAAH, S. K.

1. Discussion on the returns to various cultural practices: a case study at Obogu.
2. Discussion of the need to re-organize the structure of the cocoa industry.

NYANTENG, V. K.—A review of some of the internal problems in the Ghana Cocoa Industry.

*Seminar on Environment and Development, Accra, July, 1977*

BOTCHIE, G.—Industrial development and quality of the human environment: the case of Tema.

*Seminar on Urban Planning and Environmental Quality, Accra August, 1977.* (Both seminars organized by ISSER in collaboration with the Centre for Education in International Management (CEI) and the Environmental Protection Council.)

*Computer Applications in Science, Management and Administration, Cape Coast, August, 1977*

ODAI, J. K.—Role of management in the development of a management information system and the computerization process.

## **Publications**

### *Books*

EWUSI, K.

1. 'Income inequality in Ghana', Accra, 1977.
2. 'Economic Growth and inequality in West Africa', Geneva: ILO (forthcoming).

Twum-Barima, K.

1. 'Development of Agricultural Education'. Accra: Ghana Publishing Corporation, 1977.

### *Monographs*

EWUSI, K.

1. 'The role of workers' and employers' organizations in promoting socio-economic development in East Africa', Geneva: ILO.
2. 'The development of manufacturing industries in Ghana and the government's role in it', Geneva: ILO, 1976.
3. 'Employment performance of Ghanaian manufacturing industries', Geneva: ILO, 1977.

NYANTENG, V. K. and HENDERSON, D. R., 'An empirical application of industrial organization to the study of vertical co-ordination'. The Ohio State University Agricultural Economics Paper No. ESS. 543, 1977.

OKYERE, W. A. with FUNK, T. F.

'An Economic analysis of full-time hired labour on Ontario Dairy Farms'. School of Agricultural Economics and Extension Education Research Bulletin AEEE/76/7, Guelph, 1976.

*Contribution to Edited Books*

EWUSI, K.

1. Ghana's labour force projections and its implications. In DAMACHI, C.U. (ed.) *Manpower Supply and Utilization in West Africa* London: Macmillan Press, 1977.
2. Economic determinants of labour force participation rates in Ghana. In DAMACHI, C.U. (ed.) *Manpower Supply and Utilization in West Africa*: London Macmillan Press, 1977.
3. Societal goals for English-speaking West Africa. In LASZLO, E. (ed.) *Global goals for future of mankind*. New York: E. P. Dutton, 1977.
4. Fiscal policies and employment generation in Ghana. In DAMACHI, U. (ed.) *Fiscal policies and employment generation in Africa*. Geneva: ILO (forthcoming).
5. Job expectations of university students in Ghana. In DAMACHI, U. (ed.) *High Education and manpower development in Africa*. New York: Praeger, Ltd., 1977.
6. Data needs and analytical framework for studies of the labour force in Ghana. In VAVRA, Z. (ed.) *Demographic analysis for national planning in Africa* (forthcoming).
7. Population and development in Ghana. In MABO-GUNGE, A. C. (ed.) *Population and development in West Africa* (forthcoming).

*Contribution to Journals*

BOATENG, E. O.

1. 'A general theory for rotation sampling 1—The general correlation pattern', *Journal of the American Statistical Association* (forthcoming).
2. 'A general theory for rotation sampling 2—The Markovian Correlation pattern', *Journal of the American Statistical Association* (forthcoming).

BROWN, C. K.

1. 'Some male-female differences in migratory behaviour in selected industrial centres in Ghana'. *Economic and Social Affairs* 2 (4) 1977.
2. 'Institutional reforms needed for a viable rural development programme in Ghana', *Greenhill Journal of Administration*.

DAPAAH, S. K.

'Effects of soils and seasonal time on accuracy of crop identification in S.W. Ontario from 1974 LANDSAT — 1 Imagery', *Canadian Journal of Plant Science* 57 (2) 1977.

EWUSI, K.

1. 'Measurement of levels of regional development in Ghana'. *Canadian Journal of Social Indicators* May, 1976.
2. 'The traditional and non-traditional roles of labour unions and employers' organisations in East Africa', *Labour and Society*, April, 1977.
3. 'Emergent development problems in West Africa', *Economic and Social Affairs*, 2 (4) 1977.
4. 'Rural-urban and regional migration in Ghana', *Manpower and Unemployment Research in Africa*, April, 1977.
5. 'The dimensions of rural poverty in Ghana', *Africa and Development*.
6. 'The towns of Ghana and their levels of development', *Universitas*.

OKYERE, W. A. with FUNK, T. F.

'Income determinants of Ontario dairy farm employees', *Canadian Journal of Agricultural Economics* 25 (1) 1977.

BOTCHIE, G.

1. 'Infrastructure and rural community development: a systems approach', *Africa Development*.
2. 'Rural development and demographic behaviour; a case study', IDEP.



## REPORTS

### *To United Nations Research Institute for Social Development*

EWUSI, K.—Social and economic indicators for planning and monitoring integrated rural development. 1977.

### *To IDRC*

EWUSI, K.—The impact of the Dr. Inset Rural Development Centre (IDRC) in the Edina-Abrem Local Council Area. 1977.

### *To Ministry of Economic Planning*

DAPAAH, S. K.—Analysis of short and long-term strategies for rehabilitation of the Ghana Cocoa Industry. 1977.

### *To Ghana Export Company Limited*

DAPAAH, S. K.—Ginger production in Ghana. 1977.

### *To Ghana Rural Reconstruction Movement*

ADDO, N. O.—(editor) Baseline Survey of the Mampong Valley Social Laboratory, 1977.

#### (Chapters)

1. Some aspects of community organisation and village infrastructure.
2. Social and demographic structure.
3. Economic organisation of the villages.
4. The Mampong Valley Social Laboratory: an overview.

### *To Ghana Tourist Control Board*

ADDO, N. O. with others—(Project Director) Impact of Tourism on Social life in Ghana.

ADDO, N. O. in collaboration with MABEY, S. J.—Volume 3: Expenditure patterns of out-going tourists.

### *To Ministry of Cocoa Affairs*

ADDO, N. O. with others—Evaluation of the World Bank/Ghana Government Cocoa Rehabilitation Projects, Interim Report, 1977.

### *Service on Boards and Committees Outside the University of Ghana*

ADDO, N. O.—Member, Ghana Manpower Board (Chairman of Population Committee).

- Chairman, Ghana Rural Reconstruction Movement and Member of Board of Trustees.
- AMONOO, P. G.—Member, Ghana Manpower Board: Population Committee.
- Member, APLIC International Activities Committee
- Member, APLIC Training Committee
- Chairman, Ghana Library Association: Special Libraries Group.
- ATSU, S. Y.—Member, Board of Directors, Ghana Food Distribution Corporation.
- Member, Management Committee of Cocoa Production Division, Ministry of Cocoa Affairs.
- Member, Project Technical Committee, Upper Region Agricultural Development Programme.
- EWUSI, K.—Member, Sugar Industry Board, Ministry of Industries.
- Member, Committee on Commodities, Ministry of Trade.
- NUKUNYA, G. K.—Member, Museums and Monuments Board.
- Member, Board of Directors of the Arts Council of Ghana.
- NYANTENG, V. K.—Member, Research Committee of Ghana Rural Reconstruction Movement.
- TWUM-BARIMA, K.—Chairman, Council for the Development of Economic and Social Research in Africa (CODESRIA).

## REGIONAL INSTITUTE FOR POPULATION STUDIES

### Activities of Staff

1. Professor C. Okonjo is the Project Leader of Nigeria Federal Capital City Demographic Survey.
2. Dr. K.V. Ramachandran visited Tripoli, Libya from 6th July–28th July, 1977 on mission at the request of E.C.A. to evaluate the 1973 census of Libya data. He prepared a paper on 'Population Projections and Planning' at the request of E.C.A. for the Seminars on Population and Development Planning, Mauritius, 14–21 November, 1977. He also prepared a paper on 'Statistical Evaluation and Adjustment of the 1973 Census Data of Libya and Population Projections for the period 1975–A.D. 2000'

3. Dr. M. Z. Vavra in May, 1977 attended the FAO workshop in Rome on the "Demography for Agricultural Planners" and took part in discussion on "Population and Employment Problems in less developed countries" organized by the ILO in Geneva. He continued his research on the "Urban-Rural Dichotomy in Economic Activity of Ghana"
4. Dr. A. F. Aryee is the Deputy Resident Field Director for Nigeria Federal Capital City Demographic Survey.
5. Mr. V. Y. Kofi supervised the compilation of articles for the RIPS Newsletter and acted as Editor for the publication of three volumes of the Newsletter. He participated in the deliberations of the "Working Committee on Births and Deaths Registration" at the Economic Planning Ministry in Accra. He assisted as a Co-director of the Northern Sierra Leone Demographic Sample Survey undertaken by the Institute in June-August 1977. He also prepared two papers "A simulation approach to the Teaching of Sample Survey", and "Food and Population in Ghana" in conjunction with Professor Chukuka Okonjo and Dr. K. V. Ramachandran.
6. Mr. G. A. Simon attended from 26th to 29th November, 1976 the Seminar on Demographic Research organized by IFORD (Institute de formation et de recherche demographique) in Yaounde. He presented a paper on "The Regional Institute for Population Studies and Research Co-ordination in Africa". He participated in the work of the commission 'Co-ordination and founding of Research'. He also attended on 8th March, 1977 a meeting in Paris on 'Collection and distribution of Demographic Information in Africa', organized by the French group of African Demography (IDP, INED, INSEE, ORSTOM, MINCOOP). He presented a paper on 'African Demography, a Newsletter published by the Regional Institute for Population Studies'. This meeting decided the transfer of the above newsletter to the Institute.

As editor, he supervised the publication of African Demography, a thrice yearly newsletter published by the Research Co-operation and Publications Unit of the Regional Institute for Population Studies.

## SCHOOL OF ADMINISTRATION

### Staff

#### *New Appointments*

The following appointments were made during the 1976-77 session:

Mr. A. K. Agyei	..	..	Lecturer in Business Management.
Miss Enid B. Jones	..	..	Lecturer in Business Management.
Mr. J. E. Kuada	..	..	Teaching Assistant in Business Management.
Mr. R. A. Stephens	..	..	Teaching Assistant in Business Management.
Mr. A. K. Tengey	..	..	Teaching Assistant in Accounting.

#### *Resignations*

The following resignations took place during the 1976-77 academic year:

Mr. F. O. M. Sakyiama	..	..	Lecturer in Business Management.
Mr. G. S. Aburam	..	..	Lecturer in Business Management.
Mr. K. A. Y. Amoah	..	..	Lecturer in Business Management.
Mr. Kwame Sarpong	..	..	Lecturer in Business Management.
Mr. Yaw Agyei	..	..	Lecturer in Accounting
Mr. Van N. Sesi	..	..	Lecturer in Accounting
Mr. A. K. Yeboah	..	..	Assistant Registrar.

Two deaths occurred during the period under review. They were:—

Professor Albert Hyndman	..	Acting Director
Mr. Patrick T. K. Aidam	..	Senior Lecturer in Accounting.

### Return from Study Leave

Members who returned from study leave during the 1976-77 academic year were:—

- |                           |   |
|---------------------------|---|
| Mr. S. A. Nkrumah .. ..   | Lecturer in Public Administration (Doctoral programme at New York University, New York, U.S.A.) |
| Capt. R. P. K. Boateng .. | Lecturer in Accounting (Master's programme at Columbia University, Columbia, U.S.A.)            |

### Staff on Study Leave

The under-mentioned were on study leave during the session:

- |                          |  |
|--------------------------|--|
| Dr. J. B. Ghartey .. ..  | Lecturer in Accounting, reading for his ACA professional examinations in the United Kingdom.   |
| Mr. Andrew Lawson .. ..  | Lecturer in Quantitative Methods, at present undertaking doctoral studies in Operations Research at the University of Strathclyde, United Kingdom. |
| Mr. Augustus Abbey .. .. | Teaching Assistant in Business Management, undertaking graduate Studies in Behavioural Science at the University of Arizona, U.S.A.                |
| Mr. Nicholas Asare .. .. | Teaching Assistant in Hospital Administration, reading for a Master's degree at Duke University, U.S.A.  |

## Student Numbers

First University Examination .. .. .	96
B.Sc. (Administration) Part I .. .. .	93
B.Sc. (Administration) Part II .. .. .	75
Graduate Diploma in Accounting .. .. .	12
Master in Business Administration Part II .. .. .	20
Master in Business Administration Part I .. .. .	14
Master in Public Administration Part I .. .. .	6
Master in Public Administration Part II .. .. .	6
Diploma in Accounting Part I .. .. .	47
Diploma in Accounting Part II .. .. .	42
Diploma in Public Administration Part I .. .. .	41
Diploma in Public Administration Part II .. .. .	23
	<hr/>
	475
	<hr/>

## Management Day, 1977

In the established tradition of the School, Management Day this year was held during the Lent Term on Thursday, 10th March, 1977. The Guest Firm was Volta River Authority.

## Other Activities

*Summer School on International Administration (from 29th July to 10th August, 1977)*

The School of Administration organized a Summer School on International Administration for a group of students from St. John's University, Minnesota, U.S.A.

## AKUAFO HALL

The Officers of the Hall for the year 1976-77 who were also *ex officio* members of the Hall Council were:

Rev. Professor G. Ansre ..	Master
Dr. A. K. P. Kludze .. ..	Vice-Master
Dr. K. Gyekye .. .. .	Senior Tutor
Mr. S. N. Woode .. .. .	Deputy Senior Tutor
Professor S. K. Gaisie .. ..	President, S.C.R.
Mr. K. Asare-Opoku .. ..	Hall Chapel Warden
Dr. F. S. K. Owusu .. .. .	Hall Librarian

The other members of the council were:—

Mr. Ofori Anyinam

Dr. Kodwo Ewusie

Mr. V. O. Nortey

Mr. B. A. Aning

Mr. S. B. Al-Hassan .. .. J.C.R. Representative

Mr. P. Agyiri .. .. J.C.R. Representative

Mr. J. I. Haizel .. .. Hall Bursar and Secretary.

We announce with regret that the Vice-Master of the Hall, Mr. S. B. Kwakwa, died during the year. Dr. A. K. P. Kludze was elected to succeed him. Mr. A. M. Kusi, a fellow of the Hall also died during the year. Both fellows were involved in a motor accident.

The Senior Tutor, Dr. K. Gyekye, resigned his post during the latter part of the year and proceeded to the United States on Sabbatical leave.

#### **Tutorial Board**

The following members were constituted as the Tutorial Board of the Hall:—

Dr. K. Gyekye .. .. Senior Tutor

Mr. S. N. Woode .. .. Deputy Senior Tutor

Dr. Kofi Darkwa .. .. Tutor

Dr. E. O. Otchere .. .. Tutor

Dr. J. G. K. Tengey .. .. Tutor

Dr. D. K. Berkoh .. .. Tutor

Dr. S. K. Britwum .. .. Tutor

Dr. C. N. Wadia .. .. Tutor

Mr. K. Asare-Opoku .. .. Tutor

Mr. V. O. Nortey .. .. Tutor

Mr. Ofori Anyinam .. .. Tutor

Mr. B. A. Aning .. .. Tutor

Mr. Van Sesi .. .. Tutor

Dr. C. H. Ayisi .. .. Tutor

Dr. D. B. Ampratwum .. .. Tutor

Dr. G. Botchie .. .. Tutor

Dr. K. D. Opere .. .. Tutor

Mr. F. S. K. Owusu .. .. Tutor

During the year Dr. A. O. Adjei and Dr. E. A. Gyasi replaced Dr. D. K. Berkoh and Mr. V. O. Nortey, who resigned their posts as Tutors.

Senior Common Room Committee Members were:

Dr. S. K. Gaisie .. .. *President*  
 Dr. M. D. Swaine .. ..  
 Mr. S. N. Woode .. ..

The Fellows of the Hall numbered 108, 6 of whom were on study/sabbatical leave.

### Junior Common Room

There were 708 members in the Hall during the year. A new J.C.R. Committee was elected for the 1976-77 academic year. The members of the Committee were:

Mr. Kwasi Addae .. .. *President*  
 Mr. Amoah Owusu .. .. *Vice-President*  
 Mr. S. Y. Salaam .. .. *Secretary*  
 Mr. O. G. Busia .. .. *Treasurer*

There was a constitutional crisis during the months of February and March of the year which resulted in the change-over of the governing body of the J.C.R.

The new members of the J.C.R. Committee were:

Mr. Van Perry Kyei-Baffour .. *President*  
 Mr. Emmanuel Sarpong .. *Vice-President*  
 Mr. Ziblim Yakubu .. .. *Secretary*  
 Mr. Yamoah-Kyei .. .. *Treasurer*

### Conferences/Seminars, etc.

Details of Residential conferences held in the Hall during the year are as follows:

<i>Conferences</i>	<i>Dates</i>	<i>No. of Persons</i>
Department of Sociology, Legon — Ghana Rural Reconstruction Movement conference.	30-6-77 to 3-7-77	50
Ghana Sports Council, Accra—National Sports Festival	9-7-77 to 16-7-77	620
United Presbyterian Church in the U.S.A. ..	9-7-77 to 18-7-77	26
Language Centre, Legon—		
(i) Language Centre Workshop .. ..	10-7-77 to 20-8-77	17
(ii) Residential Course for University of Niamey Students .. ..	8-7-77 to 7-8-77	13
(iii) Residential Course for lecturers and students of University of Gabon .. ..	23-7-77 to 13-8-77	23
Archaeology Department, Legon—University of Calgary Expedition Team .. ..	18-7-77 to 22-7-77	5
Registry, Legon—Residential Course for Administrative Staff .. ..	24-7-77 to 6-8-77	30
Social Security and National Insurance Trust, Accra—Residential Course for staff ..	7-8-77 to 20-8-77	43



## COMMONWEALTH HALL

Dr. S. A. Banful entered his third year of office as Master of the Hall with Dr. I. K. Chinebuah as his Vice-Master. Dr. J. K. Nsarkoh continued as Senior Tutor with Mr. A. K. Acorlor as Acting Hall Bursar and Rev. T. S. Annobil as Hall Chaplain.

The 1976-77 academic year began with 560 students of whom 84 were non-Resident Students. 10 students spent the session in various Universities abroad.

### Fellows of the Hall

Assigned Fellows at the beginning of the year numbered 148. 14 new Fellows were assigned to the Hall during the session while the Hall lost 8 Fellows through resignations/deaths.

### Hall Council

The Hall Council for 1976-77 was constituted as follows:—

(i) *Ex Officio*

- Dr. S. A. Banful (Master)
- Dr. I. K. Chinebuah (Vice-Master)
- Dr. J. K. Nsarkoh (Senior Tutor)

(ii) *Governing Body Representatives*

- Prof. L. A. Boadi
- Dr. J. M. Hyde
- Dr. Jones Ofori Atta
- Dr. K. G. Erbynn
- Dr. J. A. Peasah
- Dr. G. K. Nukunya
- Prof. D. A. Akyeampong
- Prof. S. I. K. Odoom
- Dr. V. K. Nyanteng

(iii) *J.C.R. Representatives*

- Mr. V. J. M. Dotse
- Mr. K. Gyan
- Mr. S. O. Brown

(iv) *Secretary*

- Mr. A. K. Acorlor (Acting Bursar)

### *Tutorial Board*

Dr. J. K. Nsarkoh	..	Senior Tutor/Chairman
Dr. G. P. Hagan	..	Deputy Senior Tutor
Mr. C. K. Brown	..	Tutor
Dr. V. K. Nyanteng	..	Tutor
Mr. K. A. Asare	..	Tutor
Dr. G. K. Boateng	..	Tutor
Dr. J. K. Ansere	..	Tutor
Rev. Fr. Patrick Ryan	..	Tutor
Dr. E. T. Micah	..	Tutor
Dr. A. Van Dantzig	..	Hall Librarian
Rev. Fr. T. S. Annobil	..	Hall Chaplain

### *Joint-Tutorial Board*

Composition:—Members of the Tutorial Board and J.C.R. Executives.

### *Tutors with Special Responsibilities*

Dr. G. P. Hagan	..	Sanitation and Accommodation.
(Deputy Senior Tutor).		
Dr. S. Asante-Poku	..	Catering
Dr. V. K. Nyanteng	..	Finance
Mr. C. K. Brown	..	Sports

### **J.C.R. Executives, 1976-77**

<i>Michaelmas Term:</i>	President	..	Ofori-Kuragu, M.
	Vice-President		Owusu-Ansah, E. A.
	Secretary	..	Tackie-Yarboi, E. N. Y.
	Treasurer	..	Anyidoho, E. K. A.
<i>Lent Term:</i>	President	..	Addo, A. K. A.
	Vice-President	..	Wumbei, A. S. D.
	Secretary	..	Sackeyfio, E. L.
	Treasurer	..	Twum-Ampofo, N. K.

<i>Trinity Term:</i> President	..	Adamu, S. P.
Vice-President	..	Agyeman-Manu, T.
Secretary	..	Sarpong-Appiah, S.
Treasurer	..	Antwi, B. A. K.

Mr. P. Dei-Kwarteng, a Professional Law I Student, was elected President of N.U.G.S. for the year under review.

### **Disciplinary Action**

Four Students were suspended during Lent Term for the rest of the session.

### **Obituary**

The Hall lost one student—B. O. Ishola, through a motor accident on December 24, 1977.

### **St. Cecilia's Day Concert**

St. Cecilia's Day was observed with a Choral Concert in the Hall Chapel on Monday, 22nd November, 1976. Performance was by the Kaneshie Orpheus Choir led by Prof. J. H. Nketia and the Madina E.P. Church Choir led by Mr. K. Kafui. Miss J. Banful and others also thrilled the audience with delightful Piano Solos.

### **Conferences**

The Hall hosted the following Conferences:

1. The 1977 Summer School under the auspices of the Institute of African Studies. Twenty-six participants came from Consortium University (6th–31st July, 1977).
2. The 3rd National Sports Festival organised by the Sports Council of Ghana (8th–18th July, 1977).
3. I.A.P. Delegates Conference organised by the Department for the Study of Religions (13th–17th July, 1977).
4. The Ivory Coast National Association of Teachers visited Ghana and stayed in the Hall.

### **S.C.R. Common Room Facilities**

The Hall has installed a Draught Beer system in the S.C.R. for use by its Fellows and other Senior Members. There was also the "do-it-yourself Saturday Khebab Service" every Saturday from 11.30 a.m. to 4.30 p.m.

## LEGON HALL

### Hall Administration

Professor J. K. M. Hodasi continued as Acting Master. There was, however, a change in the administration of the Hall. Professor E. Laing resigned from the Mastership of the Hall following his re-appointment as Pro-Vice-Chancellor. Mr. E. A. Haizel, a foundation Junior Member of the Hall was elected as Master on 11th March, 1977 to succeed him. He assumed office on 1st April, 1977.

### Staff

Dr. W. A. Asomaning the Senior Tutor, having been granted sabbatical leave, resigned his appointment at the end of the session with a year more to complete his three-year term of office.

The following promotions took place in the year :

Mr. V. A. K. Dzotefe	..	Principal Accounting Assistant
Mr. A. R. Nyarko	..	Administrative Assistant
Miss Annie Addo	..	Senior Domestic Assistant
Mr. Y. Djevanor	..	Senior Clerk
Mr. Daniel Essiet	..	Senior Departmental Assistant.
Mr. Kwadwo Doe	..	Departmental Assistant Grade I.
Mr. R. S. Oppong	..	Departmental Assistant Grade I.
Mr. E. Frempong	..	Departmental Assistant Grade I.
Mad. Grace Abaka	..	Senior Cook
Mad. Paulina Kudoga	..	Senior Cook
Mad. Augusta A. Bene	..	Senior Cook
Mad. Mary Issifu	..	Senior Cook
Mad. Mary Okine	..	Cook
Mad. Juliana Baidoo	..	Cook
Mr. Mawusi Amaglo	..	Senior Steward
Mr. Kabiebeta Dagarti	..	Senior Steward
Mr. John Ayisah	..	Senior Steward
Mr. V. T. Laryea	..	Senior Steward
Mr. D. K. Agbenavor	..	Senior Steward

Mr. Atia Bayane	..	Senior Steward
Mr. Emmanuel Atsu	..	Senior Steward
Mr. Anude Akade	..	Senior Steward
Mr. John Mamprusi	..	Senior Steward
Mr. Issaka Dargati No. 1		Senior Steward
Mr. Emmanuel Kofi	..	Steward
Mr. Gilbert Botchway	..	Steward
Mr. Phillip Yambilla	..	Steward
Mr. Blaise Anasema	..	Steward
Mr. Issaka Dagarti No. 2		Steward
Mr. Michael Kwadjo	..	Steward

The following resigned their appointments:

Mr. M. E. Nkansah	..	Porter
Mr. A. O. Fianko	..	Porter

Mr. Daniel Essiet, Senior Departmental Assistant in charge of the J.C.R. Canteen and popularly called "Uncle Dan" retired after 23 years of devoted service. A send-off party was organised for him.

### Students

The number of students resident in the Hall was 825 made up of 762 undergraduates and 63 graduates. In addition, 95 non-resident students were attached to the Hall.

Thirty-three students were of foreign nationality and seven students spent the session abroad.

### Fellows

The session started with 104 Fellows. 17 new Fellows including 7 former Junior Members were assigned during the year. Eight Fellows, namely, Prof. K. T. de Graft-Johnson, Dr. W. M. Hutchinson, Dr. J. M. Lock, Dr. K. A. Haizel, Mr. J. M. Lebreton, Mr. P. G. Cantin, Mr. Yaw Agyei and Mr. Kay Amoah resigned their appointments with the University. Mr. P. T. K. Aidam died on 18th November, 1976. The total number of Fellows at the end of the session was therefore 120, 70 of whom were former Junior Members.

The Hall also suffered a serious loss in the death of Prof. K. A. B. Jones-Quartey, former Vice-Master and since his retirement an Honorary Fellow of the Hall.

## Hall Activities

Internal life of the Hall was eventful due to demonstrations and boycotts of lectures by students. Four first-year students of the Hall were among 13 students found guilty by a committee set up after the freshmen demonstrations in December. They were rusticated for the rest of the session.

The Hall again performed creditably in the field of sports and games. It regained the Inter-Halls Championship Trophy in Athletics and won the Fiat Cup. It also retained the Sinnedurai Shield for being the best Sports Hall for the year.

The Voice continued to discuss Hall and general affairs and improved upon its standard of journalism.

The following students served on University Committees:

Ameen-Muhammad, M. . . . . *Residence Board*

Mireku, O. . . . . *Students' Representative Council.*

The Hall lost, through death, Mr. S. Osew, a first-year Diploma student in Social Administration on 8th October, 1976.

Activities in the Chapel followed the pattern set in previous years. The standard of participation by worshippers was high. Despite the continued downward trend in the numbers of choristers and frequent breakdowns of the organ and its eventual muteness, singing was quite good. The Hall choir also gave leadership in University United Services. From the regular Chapel collections, gifts were presented to the following charitable organisations: Society of Friends of Mentally Retarded Children, Society for the Prevention of Tuberculosis, Ghana Cripples Aid Society, Destitutes Home, Chorkor, and the children's ward of the University Hospital.

The Hall Library acquired 84 books most of which were recommended by students. A move was initiated for recataloguing of the books in the library. The holdings of the Library stood at 8,869 volumes.

The Senior Common Room continued to thrive under its new President, Dr. E. V. Doku. The Fellows Garden and the Coffee Room maintained their position as the most popular spots for Senior Members of the University and fourth-year/post-graduate students respectively. The Christmas Dinner held on 20th December, 1976 was most successful. At the Annual Fellows Dinner held on 9th July, a number of Fellows were

presented with tankards in recognition of their ten years' active participation in Hall and S.C.R. affairs. They were Mr. S. D. Mark, Dr. Yaw Twumasi, Professor R. Kumar and Mr. J. D. Watson.

The Commemoration Day Service which fell on 5th June, 1977 could not be held due to the closure of the University but the Anniversary Dinner and the Annual Students Ball were held in the extended third term.

In spite of the financial constraints, the Hall managed to provide a few amenities and improved upon some services. The Junior Common Rooms of the three annexes were provided with modern and comfortable furniture, and a ceiling fan was installed in one.

### Officers of the Hall

The principal Officers of the Hall were:

Professor J. K. M. Hodasi	..	<i>Acting Master (up to 31-3-77).</i>
Mr. E. A. Haizel	.. ..	<i>Master (from 1-4-77)</i>
Dr. E. V. Doku	.. ..	<i>President, S.C.R.</i>
Dr. W. A. Asomaning	.. ..	<i>Senior Tutor</i>
Dr. K. N. Bame	.. ..	<i>Deputy Senior Tutor</i>
Mr. J. N. Kudadjie	.. ..	<i>Chapel Warden</i>
Dr. Afari Gyan	.. ..	<i>Librarian</i>
Mr. E. K. Agbemafe	.. ..	<i>Hall Bursar</i>

Other members of the Hall Council were:

Mr. E. Y. Egblewogbe	.. ..	<i>(from 9-6-77)</i>
Professor J. K. M. Hodasi	.. ..	<i>(from 15-4-77)</i>
Dr. Paul Lamptey		
Dr. J. E. A. Mills		
Professor E. N. W. Opong		
Dr. W. R. Phillips		
Dr. G. E. Sydney Williams		
Dr. Yaw Twumasi		
Mr. K. Mensah-Bonsu		
Mr. S. M. Hutchful		

Tutors for the session were:

Dr. W. A. Asomaning .. ..	<i>Senior Tutor</i>
Dr. K. N. Bame .. ..	<i>Deputy Senior Tutor</i>
Mr. Yaw Agyei	<i>(up to 15-2-77).</i>
Mr. J. Akuamoah-Bonsu	
Dr. R. K. Anteson	
Mr. S. N. Amanquah .. ..	<i>(from 1-2-77)</i>
Mr. J. O. Ashong	
Mr. J. K. S. Arku	
Mr. A. Baah-Nuakoh	
Mr. B. A. R. Braimah	
Mr. E. Y. Egblewogbe	
Dr. P. C. Goswami	
Dr. F. N. Gyang	
Mr. J. K. T. Kafe	
Prof. R. Kumar	
Dr. R. Kwadjo	
Dr. E. N. A. Mensah	
Dr. J. E. A. Mills	
Dr. W. R. Phillips	
Dr. S. Sinnadurai	
Dr. Yaw Twumasi	
Mr. J. D. Watson	
Dr. G. E. S. Williams	

The S.C.R. Committee was made up of:

Dr. E. V. Doku, <i>President</i>
Dr. W. A. Asomaning
Dr. W. O. Animfen
Mr. S. D. Mark
Dr. S. Sinnadurai
Dr. G. E. S. Williams
Mr. E. K. Agbemaflle, <i>Secretary.</i>



The Principal Officers of the J.C.R. were:

*January 1977 to December 1977*

Mr. M. Ameen-Muhammad	<i>President</i>
Mr. J. Atta-Boateng ..	<i>Vice-President</i>
Mr. D. D. Appiah ..	<i>Secretary</i>
Mr. A. M. Akuoku ..	<i>Vice-Secretary</i>
Mr. E. A. S. Bennin ..	<i>Treasurer.</i>

### Hall Prizes

Hall Prizes were awarded as follows:

Mr. P. F. Arthur .. ..	Hall Scholarship
Mr. K. Mensa-Bonsu ..	Hall Scholarship
Mr. J. I. Addae .. ..	Hall Exhibition
Mr. J. M. Allotey ..	Hall Exhibition
Mr. E. S. Asamoah ..	Hall Exhibition
Mr. C. M. Darkwa ..	Hall Exhibition
Mr. D. Kodua .. ..	Hall Exhibition
Mr. G. A. Sawyer ..	Hall Exhibition
Mr. M. Ameen-Muhammad	Sprott Prize
Mr. K. Ansa-Asare ..	Sprott Prize
Mr. D. D. Appiah ..	Sprott Prize
Mr. C. A. Avoka .. ..	Sprott Prize
Mr. J. K. Ebbah .. ..	Sprott Prize
Mr. C. M. K. Kamassan ..	Sprott Prize
Mr. K. A. Wadee ..	Sprott Prize
Mr. M. A. Eiwuley ..	Sportsman of the Year
Mr. C. A. Avoka .. ..	Outstanding Sportsman
Mr. L. S. Teye-Botchway	Outstanding Sportsman
Mr. J. I. Addae .. ..	Hall Colours
Mr. M. Y. O. Akrasi ..	Hall Colours
Mr. S. N. Ashong ..	Hall Colours
Mr. R. J. Atombo ..	Hall Colours
Mr. G. M. Azu .. ..	Hall Colours
Mr. S. Bannerman-Woode	Hall Colours
Mr. Y. Y. Buachie ..	Hall Colours
Mr. K. B. Danquah ..	Hall Colours
Mr. S. M. Hutchful ..	Hall Colours
Mr. P. G. O. Kpordugbe ..	Hall Colours
Mr. K. Mensa-Bonsu ..	Hall Colours
Mr. F. S. K. Norgbey ..	Hall Colours
Mr. L. T. Ofosu .. ..	Hall Colours
Mr. B. A. Quaye .. ..	Hall Colours
Mr. A. Y. Tetebo .. ..	Hall Colours
Mr. J. K. B. Yamoah ..	Hall Colours
Mr. E. Yentumi .. ..	Hall Colours.

## Conferences

Conferences were organised by the Sports Council of Ghana, West African Examinations Council and the Canadian University Service Overseas.

## Visitors

Among distinguished guests entertained in the Hall were:

H.E. the French Ambassador, Mr. Chaillons

H.E. the British High Commissioner, Mr. Frank Mills

H.E. the German Ambassador, Mr. Herbert Weil.

The Governor of the Prefecture of Fukushima, Japan, Mr. Isao Matsudaira, also visited the Hall.

## MENSAH SARBAH HALL

The Hall began the year with the Hall Master, Professor W.Z. Coker, but he had to leave for the United States of America on 17th January, 1977, on Sabbatical Leave. From January, Dr. E. Andah, the Vice-Master of the Hall, acted in his stead. Professor Coker was due back to his post in January 1978. Apart from this, the principal officers of the Hall remained the same as last year.

The Hall was assigned 17 new Fellows and at the end of the session, lost three as a result of resignations. The numerical strength of Fellows of the Hall now stands at 114.

The maximum number of student places in the Hall, as a result of the conversion, is 812. In the Michaelmas Term, there were 809 in residence in the Hall. The number was reduced to 807 with the deaths of Messrs. S. B. Asare and G. O. Dakpoe, both final year students. Non-residents attached to the Hall were 117. Eight students in the Department of Modern Languages spent the session abroad.

Due to the unfavourable academic year, no major sporting activities were held. Sarbah Hall could not raise the required team for the only Inter-Halls Sporting meeting held during the year.

Unlike last year, the Sarbah Day celebration was very successful. Many invitees attended the Dinner and students demonstrated the kind of discipline, sense of maturity and social norms required of them. The following academic prizes were awarded during the Sarbah Day Dinner:

1. Mr. A. K. Gemega .. B.A. Part I
2. Mr. D. K. Mensah .. B.A. Part I
3. Mr. P. Taylor .. B.A. Part I
4. Mr. S. K. Akafo .. F.U.E. Medicine
5. Mr. M. P. Y. Ashigbi .. F.U.E. Medicine
6. Mr. S. Sampanye .. B.Sc. Administration  
Part I.
7. Mr. F. K. Sakyi .. B.Sc. Administration  
Part I.
8. Mr. E. N. Ako-Nai .. B.Sc. Agriculture Part I
9. Mr. S. C. A. Allotey .. B.Sc. Agriculture Part I
10. Mr. J. C. Otaah .. Diploma in Account-  
ing.
11. Mr. W. N. Kissiedu .. Diploma in Account-  
ing.
12. Miss Joyce Misa .. Drama and Theatre  
Studies.
13. Miss P. Adu .. Diploma in Home  
Science.
14. Miss P. A. Zigah .. Diploma in Home  
Science.
15. Mrs. Lydia Sasu .. Diploma in Home  
Science.
16. Mr. C. Ofori-Mensah .. 1st Class—B.A. Part II
17. Mr. N. Amoako-Asante .. 1st Class—B.A. Part II

Certificate prizes were awarded to 30 students for their distinctive contribution to the welfare of the Hall and sports. Some stewards and cooks also received certificates. Among the distinguished guests invited to the function were Mr. Owusu-Fordjour, Commissioner for Education, Professor S. Sey and Mr. J. Frimpong-Ansah. The Commissioner, Mr. Owusu-Fordjour, a former student of the Hall, donated one refrigerator to the students of the Hall.

An Administrative re-organisation was carried out during the year which resulted in changes in some of the offices in the Hall. Mr. A. N. Aboagy, the Principal Administrative Assistant and former Secretary to the Master, was assigned new duties. Mr. Samuel Afum, the former Tutorial Secretary, became the Master's Secretary. A new Tutorial Secretary was being sought since Mr. L. Atikpo who took over from Mr. Afum at the Tutorial Office was promoted on transfer to the Faculty of Agriculture.

On the whole, the year under review was not a smooth one. The double occupancy exercise made it difficult to settle the students during the early part of the session. The increased number of students gave rise to legitimate complaints to increase the number of facilities in the Hall. The events of 13th May gave rise to uneasiness among both the students' population and Fellows of the Hall. It was, however, appreciated that many Tutors were always around to help the authorities of the Hall in maintaining law and order under the circumstances.

#### VOLTA HALL

Volta Hall had 405 students during the 1976-77 academic year. Of this number 352 were resident in the Hall and 53 were non-resident, even though the Hall now has a capacity for accommodating 370 students.

#### Foreign Students

Of the 405 students, there were 30 foreign students: from America (10), Uganda (3), 2 each from Poland and Sierra Leone, and 1 each from Benin, Great Britain, Canada, Holland, Gambia, Guinea, Ivory Coast, Kenya, Malaysia, Nigeria, Swaziland, Tanzania and Zambia. This is the first time that the Hall has had students from such a large number of foreign countries.

#### Hall Officers

Dr. F. A. Dolphyne started her term of office as Warden of the Hall in October, 1976. For the first time, Hall Council decided to appoint a Deputy Senior Tutor to assist the Senior Tutor in handling student affairs. The Officers of the Hall were:

<i>Warden</i>	..	..	..	..	Dr. F. A. Dolphyne
<i>Deputy Warden</i>	..	..	..	..	Mrs. A. Kuenyehia
<i>Hall Bursar</i>	..	..	..	..	Mrs. Grace Bentil
<i>Senior Tutor</i>	..	..	..	..	Mrs. T. Dadson
<i>Deputy Senior Tutor</i>	..	..	..	..	Mrs. P. Amonoo

Other members of the Hall Council were:

Mrs. C. Bannerman  
Miss E. Asafo-Adjei  
Miss N. Chapman Nyaho  
Mrs. M. Laing  
Mrs. C. Opere-Obisaw  
Dr. R. T. Blay  
Miss Joyce Bruce  
Miss Amowi Sutherland } .. Student representatives

The Hall Tutors were:

Miss S. D. Lokko  
Dr. E. Date-Bah  
Miss N. Chapman Nyaho  
Miss A. Kuenyehia  
Mrs. P. Amonoo  
Dr. Irene Odotei  
Mrs. C. Opere-Obisaw  
Mrs. D. Fianu  
Dr. E. T. Blay  
Miss P. Dowuona-Hammond.

### Fellows

The total number of assigned fellows by January, 1977 was 60, representing an increase of 3 over the previous year. The number of Associate Fellows remained at 19.

Her Excellency the Ambassador of the Netherlands to Ghana, accepted the Hall Council's invitation to become the third Honorary Fellow of the Hall.

### The Junior Common Room

The Officers of the Hall J.C.R. performed very creditably, and in spite of the difficulties experienced during the year, successfully celebrated Volta Hall week in February, 1977.

The J.C.R. Officers were:

Miss Joyce Bruce .. .. *President*  
Miss Karen Akiwumi .. .. *Vice-President*  
Miss Amowi Sutherland .. .. *Secretary*  
Miss Gloria Edusei .. .. *Treasurer*

Hall Prizes were awarded to the following students for their performance during the 1975-76 academic year:

McCallien Prize — Best Graduating Student—1st  
Class in B.Sc. Administration  
—Miss Joyce Appiah .. .. ₵40.00  
Tazelaar Prize — Best F.U.E. Science Student—  
Miss Mary Larbi .. .. ₵20.00

Volta Hall Prize	— Best F.U.E. Arts Student —Miss Hannah Asante .. ..	£20.00
Bannerman Prize	— Best F.U.E. Administration Student—Mrs. Viola Grace Biaku	£20.00
Bannerman Prize	— Best Final Year Diploma Student (Nursing Education) —Mrs. L. Stanley-Pierre— (Non-resident) .. ..	£20.00
Special Prize	— Distinguished Service in the Hall (£10.00 each)	
	— Miss Phyllis Christian	
	— Miss Sylvia Lartey	
	— Miss Rosaline Gbeho	
	— Miss Evelyn Ofori	

Twelve other students received prizes of smaller value for their contribution to student activities in the Hall.

### Visitors

The only visitor to the Hall during the year was Major General S. K. Leckey, from Great Britain, who paid an official visit to the University on January 12, 1977.

### Conferences

The main Conferences/Workshops held in the Hall during the year were those for Peace Corps Volunteers; Temple University Law Students; Members of the Educational Tourist Association; Cowpers and Lybrand Ltd., and examiners of the West African Examinations Council. The Hall also played host to Sportsmen and women of the Ghana Sports Council in July and August, 1977.

## THE BALME LIBRARY

In common with all other departments of the University, the Balme Library has suffered from the effects of the disturbances and interruptions of normal academic life of this past year. Some of these effects are reflected in the statistics of use, since students were absent from the campus for part of the period under review, particularly at the end of the Trinity Term, when we would have expected maximum use of library facilities. Certain projects planned for the Long Vacation could not be fully carried out because of the disruption of the

normal calendar, and the shortened working hours adopted by the University in August. As individuals, library staff were also affected in various ways. With the uncertainties that so often prevailed, it was not always easy to maintain the same momentum in work. However, staff at all levels did their utmost to ensure that maximum service was provided to readers.

Fortunately, when students were on the campus, there was never any attempt to prevent those students who wanted to do so from entering the Library and attempting to read, even if the noise from outside demonstrations made serious study virtually impossible.

### **Library Board**

Membership of the Library Board, which met three times during the year, was as follows:

- Vice-Chancellor, Dr. D. A. Bekoe (Chairman)
- Dr. M. Dakubu (Finance Committee)
- Mr. Chris Hesse (Finance Committee)
- Dr. R. B. Dadson (Faculty of Agriculture)
- Mr. R. E. Wilson (Faculty of Arts)
- Prof. S. I. A. Kotei (Faculty of Social Studies)
- Mr. T. Tsikata (Faculty of Law)
- Dr. K. Maison (Faculty of Science)
- Prof. S. K. Addae (Ghana Medical School)
- Mr. F. O. M. Sakyiama (School of Administration)
- Mr. J. M. Walpole (Secretary)
- Mr. J. K. T. Kafe (In attendance)
- Mrs. N. Amenu-Kpodo (Recorder)
- S.R.C. Representatives—Nil

Mr. Henry Dua-Agyemang represented the Board of the Medical School Library Committee.

### **Building and Accommodation**

The annual report for 1975-76 began on an optimistic note, with the expectation that tenders would be invited for the new Library Building in October, 1976. Unfortunately working drawings were not completed by that date, and tenders were not invited until May 1977. No tenders were received by the University, and at the time of writing further invitations to tender are awaited in October, 1977. Thus the date for a possible completion of the building has been set back by a year.

During the year fluorescent lighting was extended to all parts of the Library. This means that once again all sections of the Library are usable after hours of darkness.

The Library Board did approve the use of money from the Bookshop Reserve Fund for providing a micro-film room and a staff seminar/room. Not much progress has yet been achieved, owing to the delay in providing the necessary furniture and equipment. However, one of the two new micro-film readers to be donated by the Inter-University Council has arrived. It was damaged in transit, but replacements for the damaged parts were obtained from the U.K., and it is now in use.

### **Bookstock**

During the year a total of 9,587 items was accessioned and added to stock. This was made up of 4,719 books for the Main Library, 843 for the Students' Reference Library, and 4,025 bound volumes of periodicals. The grand total of the Library stock is now 293,500.

The number of current subscriptions to periodicals stands at 5,210.

Included among the total of books accessioned are 45 theses.

The position over obtaining new books and current periodicals continues to cause serious concern. Checks made throughout the year have revealed that the average time that elapses between placing an order with the Bookshop and its receipt in the Library varies between ten and fourteen months. This average, however, hides enormous variations, so that a two-year interval is by no means uncommon. By the end of the year, only 21 per cent of the orders placed during the year had been replaced. The total number of standing orders now stands at 6,461. Academics expect to be able to read significant new monographs in their subject sooner than this. Moreover, making adequate provision for new courses or areas of research is difficult under these conditions.

The situation with periodicals is no happier. Half-way through the calendar year issues of only 10 per cent of the library's current titles had been received, and only 50 per cent of the previous year's.

### **Gifts**

Gifts continue to play an important part in adding to the library's collections. Throughout the year both books and periodicals requested under the Netherlands Literature



Programme for 1966 were received; and immediately before the end of the year under review, notification was received that the library was to be included in the 1977 Programme. Books up to the value of \$10,000 were accordingly requested, and it is hoped that they will soon be on the way.

Mrs. P. W. Jones-Quartey donated a collection of books and periodicals from her late husband's library, many of which were particularly valuable in filling gaps in the Africana collection.

Other gifts of books were received from the United States Information Service, the Brazillian Embassy and the French Embassy.

### **Unesco Book Coupons**

Unesco Book Coupons provide a partial solution to the currency problem. Coupons to the value of \$30 000 were obtained through the Ministry of Education, and were used to enable the Library to fill some gaps in the periodical holdings.

### **Staff**

#### *1. Senior Members*

The following joined the Balme Library during the year:—

- Mr. J. M. Walpole, as Librarian
- Mr. K. E. Avafia, as Sub-Librarian
- Mr. R. A. Cantey, as Junior Assistant Librarian
- Mr. I. K. Antwi, as Junior Assistant Librarian

There were no resignations.

#### *2. Senior and Junior Staff*

The following appointments were made:—

- Mr. B. Gonyuie, as Temporary Junior Library Assistant Grade II.
- Mr. Paul Asare, as Temporary Junior Library Assistant Grade III.
- Mr. H. M. Asare Adjei, as Temporary Junior Library Assistant Grade III.
- Mr. M. N. L. Blankson, as Temporary Junior Library Assistant Grade III.
- Mr. G. Klutse, as Temporary Junior Library Assistant Grade III.

Mr. G. F. Lutterodt, as Temporary Junior Library Assistant Grade III.  
Mr. F. K. Afrane, as Typist Grade II  
Mr. J. K. Asare, as Typist Grade II  
Miss M. A. Bakar as Temporary Typist  
Miss M. Quaye-Kuma, as Bindery Assistant Grade IV  
Miss Lydia B. Hayford, as Bindery Assistant Grade IV  
Mr. Samuel Agyei, as Messenger/Cleaner  
Mr. M. Y. Atokloh, as Messenger/Cleaner  
Mr. D. T. K. Awuah, as Messenger/Cleaner  
Mr. J. M. Afesi, as Messenger/Cleaner  
Mr. Kofi Boateng, as Messenger/Cleaner  
Mr. W. Sokpoli, as Messenger/Cleaner  
Mr. R. K. Tretu, as Messenger/Cleaner  
Mr. J. A. Yakubu, as Messenger/Cleaner.

Mrs. C. Graham de Heer, Senior Library Assistant, and Miss R. A. Quaidoo, Junior Library Assistant Grade II, whose appointments had been temporary since 1975-76 academic year, were made permanent.

3. The following promotions were made:—

Mr. S. W. K. Dikro (From Library Asst. to Senior Library Assistant).  
Mr. G. K. Afachao (From Junior Library Assistant Grade I to Library Assistant).  
Mr. A. O. Boamah (From Junior Library Assistant Grade II to Junior Library Assistant Grade I).  
Mr. K. K. Addae (From Junior Library Assistant Grade III to Junior Library Assistant Grade II).  
Mr. T. K. Braimah (From Junior Library Assistant Grade III to Junior Library Assistant Grade II).  
Mr. J. K. Bofo (From Senior Clerk to Administrative Assistant).  
Mr. B. A. Botchway (From Clerk Grade I to Senior Accounts Clerk).  
Mr. G. Bada (From Clerk Grade II to Clerk Grade I).  
Mr. F. Asirifi (From Messenger/Cleaner to Departmental Assistant Grade II).  
Mr. M. Y. Adzima (From Messenger/Cleaner to Departmental Assistant Grade III).

- Mr. R. A. Dokuh (From Messenger/Cleaner to Departmental Assistant Grade III).
- Mr. E. K. Boadu (From Messenger/Cleaner to Departmental Assistant Grade III).
- Mr. E. K. Agbo (From Messenger/Cleaner to Departmental Assistant Grade III).
- Mr. W. Y. Sena (From Messenger/Cleaner to Bindery Assistant Grade IV).

4. The following resignations were received:—

- Mr. Daniel Ashitey—Junior Library Assistant Grade III
- Miss Grace L. A. Kemevor—Junior Library Assistant Grade III.
- Mr. T. K. Braimah—Junior Library Assistant Grade II
- Mr. J. Awoolley-Ashong—Accounts Clerk Grade I
- Mr. F. B. Yentebisin—Clerk Grade I
- Mr. J. M. Tettey—Clerk Grade III
- Mrs. G. Acquaaah—Bindery Assistant Grade III
- Mr. Eric Dwommoh—Bindery Assistant Grade III
- Mr. Y. Senah—Bindery Assistant Grade IV
- Mr. Russell Aning—Messenger/Cleaner
- Mr. R. S. Nyanor—Messenger/Cleaner

### **Staff Training**

The following four members of the Library Staff received study leave for the 1976-77 academic year to attend the Certificate Course in the Department of Library and Archival Studies:—

- Mr. S. D. Amoah
- Mr. S. K. Attah
- Miss M. Vowotor
- Mrs. M. Twumasi

Owing to the late examinations, their results are not yet available.

During the Easter Vacation, a short in-service course of one week was held for those Junior Staff who had joined the Library during the current year.

From 24th July to 5th August, 1977 Mr. J. K. Bofo and Mr. G. Amartey attended residential course for administrative staff organised by the Central Administration.

## **Conferences**

- (i) Seminar on Management of Information Systems, GIMPA, July 1977. Mrs. H. M. Smit attended the whole of this Seminar, and Mr. J. K. T. Kafe and Mr. J. M. Walpole individual sessions.
- (ii) Biennial Conference of the Ghana Library Association, 17th-19th August, 1977. This was attended by all the Senior Members who were not on leave.
- (iii) Mr. J. K. T. Kafe was granted a travel award by the Association of African Universities to visit the Universite de Yaounde, Cameroun.

## **Liaison with Teaching Departments**

During the first two terms, a series of meetings between representatives of the Library and of the Teaching Departments was held, faculty by faculty. The purpose was to foster closer personal contact, and to discuss ways of co-operation to achieve a more effective service. The conversations proved to be useful in clearing up misunderstandings and finding ways to solve some of the Library's problems.

## **Co-operation with the Department of Library and Archival Studies**

Throughout the whole of the session, Mr. A. K. Martey lectured to the Diploma Students on 'Library Management', and during the Lent Term Mr. J. M. Walpole conducted practical classes in Cataloguing and Classification for a small group of students from the same course. In addition, Mr. Walpole gave occasional lectures.

## **Exhibition**

At the end of November, 1976, the Embassy of the German Democratic Republic organised an exhibition, which was displayed in the Current Periodicals Reading Area, in honour of A. W. Amo, the 18th Century Ghanaian who had a distinguished academic career in Germany. The opening of the exhibition was attended by the Chairman of the University Council, the Vice-Chancellor, the Pro-Vice-Chancellor and members of the Diplomatic Corps. The exhibition attracted considerable interest.

## Statistics and Notes on the Work of Library Departments

### A. READERS' SERVICES

#### 1. Registration

(a) No. of Senior Staff Registered .. .. .	505
(b) No. of Students Registered .. .. .	3,601
(c) No. of readers in other categories registered	59
	<hr/>
(d) Total .. .. .	4,165
	<hr/>

#### 2. No. of Books Borrowed During Session

(a) Michaelmas Term .. .. .	12,473
(b) Lent Term .. .. .	15,701
(c) Trinity Term .. .. .	8,140
	<hr/>
(d) Total .. .. .	36,314
	<hr/>

#### 3. Average Daily Attendance

(a) Michaelmas Term .. .. .	563
(b) Lent Term .. .. .	625
(c) Trinity Term .. .. .	321

#### 4. Photocopying Service

(a) No. of photocopies (pages) made for library users .. .. .	5,793
(b) No. of photocopies (pages) made to replace mutilated pages .. .. .	515
(c) No. of photocopies (pages) made for other libraries in Ghana .. .. .	1,657
(d) No. of photocopies (pages) made for libraries outside Ghana .. .. .	174
(e) No. of photocopies (pages) made for Reserve .. .. .	662

#### 5. Library Co-operation

(a) No. of books loaned to libraries in Ghana	14
(b) No. of Books loaned to libraries outside Ghana .. .. .	2
(c) No. of books borrowed from libraries in Ghana .. .. .	3

(d) No. of books borrowed from libraries outside Ghana .. .. .	7
(e) No. of photocopies (pages) ordered from other libraries in Ghana .. .. .	116
(f) No. of photocopies (pages) ordered from libraries outside Ghana .. .. .	1,026
<b>6. Mutilations and Losses</b>	
(a) No. of books reported mutilated .. .. .	23
(b) No. of periodical articles reported mutilated	12
(c) No. of books reported lost or stolen .. .. .	47
<b>7. Publications (subject lists, bibliographies, etc.)</b>	
The Balme Library, an introduction for students, 1976-77 (prepared September, 1976) 10 pages.	
8. No. of official visits made by individuals and groups to the Library .. .. .	15
9. Other notable services rendered .. .. .	NIL

### **Other Activities**

At the start of the academic year, the Department was responsible for organising the Library's contribution to the orientation programme for freshmen, and special additional more detailed introductions to the Library were organised at the request of teaching departments. Fifteen organized groups visited the Library, and were shown around by members of the Department.

### **B. CATALOGUING DEPARTMENT**

Four thousand, six hundred and forty-three (4,643) new items were catalogued in the Department during the year. The continued low influx of new material enabled time to be given to two outstanding projects, i.e. the continued re-classification of Class DE (The Graeco-Roman World); and the re-classification of bibliographies to bring them all together.

Four issues of the Library Bulletin were published.

Mr. S. N. Amanquah undertook the compilation of the 1973-1976 Supplement to; 'A bibliography of University of Ghana staff Publications'.

### C. PERIODICALS DEPARTMENT

Two hundred and eighty (280) titles were catalogued, and 3,386 volumes of periodicals prepared for binding.

A third list of periodical desiderata was compiled, i.e. French and German publications (supplementing the previous ones on American and British publications).

Considerable progress was made in the acquisition and processing of back numbers to complete our holdings of journals. A start has been made on re-organising and listing our duplicates with a view to disposing of them.

### D. STUDENTS' REFERENCE LIBRARY

Eight hundred and forty-three (843) volumes were added to this collection during the year. Week-end borrowings totalled 2,018, and 3,475 items were borrowed from the Reserve Collection.

Stock-revision, begun during the previous Long Vacation, was completed during this Long Vacation, and the records and catalogues corrected.

### **Africana Library**

The figure of 1,747 items from the Rare Book Room, compared with the previous year's of just under 500, indicates the growing appreciation and use of this valuable collection.

Work continues on the compilation of indexes to six local Journals.

### **Technical Services Unit**

In spite of continued difficulties over supplies of materials, most of which have to be obtained from overseas, output from the Unit rose this year. In order to concentrate on work for the Balme Library, it has been necessary to cut down

on services to other departments and institutes within the University.

		<i>No.</i>	<i>No.</i>
1. No. of books bound for:	(a) Balme Library .. ..	826	—
	(b) Departments, Institutes and Schools of the University of Ghana.	41	—
	Total .. ..		867
2. No. of periodicals bound for .. ..	(a) Balme Library .. ..	4,025	—
	(b) Departments, Institutes and Schools of the University of Ghana .. ..	Nil	4,025
	Total .. ..		
3. No. of pamphlets or photostats boarded (i.e. economy binding) for:	(a) Balme Library .. ..	196	
	(b) Departments, Institutes and Schools of the University of Ghana .. ..	1,215	
	Total .. ..		1,411
4. No. of theses bound ..			64
	Total number of items bound .. ..		1,475
5. Number of items mended			153
<b>Photographie Unit</b>			
6. No. of reels of microfilms pro- duced .. ..	(a) Ghanaian Newspapers		30
	(b) Theses—less than $\frac{1}{2}$ reel		—
	(c) Other .. ..		—
7. No. of xeroxcopies made			15,984



## CENTRAL CAFETERIA

### Staff

Mrs. R. O. Acquah	..	Senior Domestic Bursar
Mr. Michael K. Sunuh	..	Senior Accounting Assistant.
Mr. G. A. Bobieh-Ansah	..	Chief Baker
Mr. A. O. Aferi	..	Administrative Assistant

Mrs. Rosalie O. Acquah, Senior Domestic Bursar, continued to act as Cafeteria Manager.

During the year there were few changes in the administrative personnel at the Central Cafeteria.

Mr. Kwesi Aikins, Senior Accounting Assistant, was transferred to the Manciple's Organization in April, 1977 and his place was taken by Mr. Michael Kwami Sunuh from the Finance Office.

Mrs. Nancy C. Dampsey, Domestic Bursar, was transferred to the University Guest Centre on 21st February, 1977.

Mr. J. K. Tsiagbe, Technician who was on study leave during the previous academic year resumed duty on 6th October, 1976 and was transferred to the Estate Organisation, with effect from 9th November, 1976.

A few promotions were made during the year. Mr. A. O. Aferi, Head Porter, was promoted to the grade of Administrative Assistant. Eight domestic staff were given established posts and nine other established staff were upgraded.

### Feeding

With the introduction of the Pay-As-You-Eat system which made it possible for students to dine at any catering unit within the University, the Central Cafeteria continued to enjoy a fairly large patronage of its catering services from the Student population as well as Workers in the University.

### Functions

The following functions in the form of either luncheon, dinner or buffet parties were held at the Central Cafeteria for

the following Departments and Organisations within the University as well as other bodies outside the University community:—

<i>Name</i>	<i>No. of People</i>	<i>Date</i>
The West African Examinations Council .. .. .	33	18-10-76
The University Sports Coach ..	15	21-25/10-76
Nigerian High Commissioner, Accra .. .. .	25	8-11-76
Home Science Department, Legon	30	27-11-76
University Bookshop .. .. .	30	18-12-76
Amaigamated Clubs Legon ..	100	20-31/12-76
School of Administration, Legon	60	22-12-76
Nursing Department, Legon ..	10	24-2-77
School of Administration, Legon	55	10-3-77
The West African Examinations Council .. .. .	25	15-3-77
School of Administration, Legon..	30	1-4-77
Ghana Atomic Energy Commission .. .. .	40	4-6-77
Institute of Adult Education, Legon .. .. .	25	22-6-77
Sports Council of Ghana, Accra ..	1,200	8-11/7-77
do.	950	12-18/7-77
do.	20	9-17/7-77
do.	26	1-15/8-77

### Miscellaneous Services

Apart from the functions mentioned above, departmental orders for tea/coffee service, cocktail parties, and services rendered at the Snack/Drinks Bar to Students, Staff and Visitors were very encouraging.

### New Equipment

*Kitchen.*—During the year under review, the new kitchen equipment ordered by the University for its various catering units were installed and the Central Cafeteria kitchen had its fair share.

*Snack/Drinks Bar.*—Messrs. Accra Breweries Limited, Brewers of Club Beer, installed equipment for Draught Beer service in the Snack/Drinks Bar. The service was inaugurated on Friday, 29th July, 1977.

## UNIVERSITY PRIMARY SCHOOL

### Enrolment

With the exception of class 7, all classes were full. Enrolment figures at the end of the year were as follows:—

#### *Nursery Section*

N.	1A	..	..	..	..	..	..	40
	1B	..	..	..	..	..	..	41
	2C	..	..	..	..	..	..	49
	2D	..	..	..	..	..	..	50
								180

#### *Lower Primary Section*

Class	1A	..	..	..	..	..	..	35
	1B	..	..	..	..	..	..	36
	1X	..	..	..	..	..	..	36
	2C	..	..	..	..	..	..	36
	2D	..	..	..	..	..	..	34
	2X	..	..	..	..	..	..	36
	3E	..	..	..	..	..	..	36
	3F	..	..	..	..	..	..	36
	3X	..	..	..	..	..	..	35
								320

#### *Upper Primary Section*

Class	4G	..	..	..	..	..	..	36
	4H	..	..	..	..	..	..	36
	4X	..	..	..	..	..	..	36
	5J	..	..	..	..	..	..	35
	5K	..	..	..	..	..	..	36
	5X	..	..	..	..	..	..	35
	6L	..	..	..	..	..	..	36
	6M	..	..	..	..	..	..	36
	6X	..	..	..	..	..	..	36
	7R	..	..	..	..	..	..	31
	7S	..	..	..	..	..	..	31
	7X	..	..	..	..	..	..	32
								415
								915

## Staff

There were no changes on the teaching staff this year. However, Mr. James Ayivor was appointed as temporary teacher to teach French in all the nine streams of classes 5-7. This arrangement proved much more satisfactory than the previous arrangement when two or three part-time teachers were employed to teach French in the school.

## Sports

The schools annual Inter-sectional Athletics Competition took place on Saturday, 25th February, 1977. The competition was keenly contested by all the four sections. At the end of the competition, Green Section won the championship trophy. Mrs. Eugenia Date-Baah very kindly distributed the trophies to the winners of the various events of the competition.

At the beginning of the Trinity Term the Estate Organisation of the University organised a football competition between the school, Achimota Primary School, St. John's Preparatory School and Greenhill International School for the University of Ghana Jubilee Trophy. The School, unfortunately lost all its matches.

## Donations

In response to an appeal made two years before for sports and games equipment the following donations were received during the year:—

Mrs. Stella Dontoh	.. ..	₵50.00
Dr. (Mrs.) Florence Dolphyne	.. ..	₵25.00
Mrs. Eugenia Date-Baah	.. ..	a trophy

For the third year in succession Mr. and Mrs. E. S. Aidoo donated a book prize which was awarded to the child who, in the opinion of the staff, showed the greatest concern for others.

## Curriculum Development

In view of the Government's new policy on the structure and content of education changes were made in the school time-table to enable each child in classes 3-7, to learn one other Ghanaian language in addition to his own.

## Open Day

The Open Day activities for the year were spread over a period of three days from Wednesday, 22nd June to Friday, 24th June, 1977 inclusive. A fairly large number of parents

visited the school. But it was apparent from our records that by far the largest number of parents who visited the school were parents of children in the nursery and lower classes of the primary section.

### **Prize-Giving Day**

The Prize-Giving Ceremony was held in the Great Hall on Saturday, 9th July, 1977. The Chairman for the occasion was Mrs. Majorie Bulley of the Balme Library and the Guest Speaker was Mr. D. V. Owiredu, Director of Planning, Ghana Education Service.

### **Gardening**

With the onset of the rainy season gardening was taken up very seriously by all pupils from class 3 to class 7. Each class had its own garden. On the whole all classes worked hard and had a fairly good yield of maize and vegetables from their gardens. Class 4H was adjudged the class with the best garden for the year.

### **School Library**

The library was very well patronised by the pupils but the number of books lost by the pupils who borrowed them was alarming. At the same time it was not easy to replace the lost books as books are not easily available in the bookshops.

### **Vacation School**

The Long Vacation School for this year for pupils in classes 6 and 7 was run from Monday, 15th August to Friday, 9th September, 1977.

## **POPULATION DYNAMICS PROGRAMME (PDP)**

### **Administrative**

During the year, some major administrative changes took place. PDP was transferred to ISSER as a semi-autonomous unit. The Director of ISSER is therefore the administrative head, and also the Chairman of the PDP Working Committee. The former position of the Director of PDP now becomes the Programme Director. PDP, however, continues to carry out its functions as before in the field of interdisciplinary population studies. PDP works very closely with the population section of ISSER: discussions are under way as to the best arrangement for a merger of the two sections into an effective population studies wing of ISSER, and performing its international function throughout English-speaking West Africa.

## **Staff**

Mr. John S. Pobee, Senior Lecturer in the Department for the Study of Religions, was appointed Associate Director by the Vice-Chancellor in place of Professor J. O. de Graft-Hanson who proceeded on sabbatical leave in September, 1976.

Professor G. Bennet also proceeded on sabbatical leave in January, 1977.

## **Negotiations with USAID/Ghana for Extension of the Work of PDP**

During the year, the University of Ghana, in co-operation with the University of North Carolina entered into successful negotiations with USAID/Ghana for extension of the work of PDP for additional years. The University Committee was led by the Pro-Vice-Chancellor, Professor E. Laing, whilst the AID-Team was led by Dr. Julius Prince, who later on retirement left the country and was replaced by Dr. F. M. Zervay.

### Fellowships

(a) The following persons were awarded fellowships during the year:

Name	Country of Origin	Subject	Faculty/Department	Duration
B. Awusabo Asare	Ghana	Diploma in Population Studies	RIPS, Legon	1 year
E. Ofodile	Nigeria	do.	do.	1 year
A. C. Thiik	Sudan	do.	do.	1 year

(b) The following continued into their second year of study at Legon under PDP fellowship:

Name	Country of Origin	Subject	Faculty/Department	Course
V. Mawuenyegah (Miss)	Ghana	Public Administration	School of Administration	M.A.
T. A. Tekpetey (Miss)	Ghana	Population Geography	Geography	M.A.
Opia Mensah Kumah	Ghana	Communication/Social Change	School of Journalism	Diploma
R. F. Darpoh	Liberia	do.	do.	M.A.
B. F. Iyuu (Mrs.)	Nigeria	Medical Geography	Geography	Ph.D.
W. K. Woyome	Ghana	Demography	Sociology	M.A.
G. B. Fosu	Ghana	Medical Sociology	do.	M.A.

(c) The following completed their courses of study:

Name	Country of Origin	Subject	Faculty/Department	Degree Awarded
M. M. Mangony	Sudan	Population Studies	RIPS	Diploma in Population Studies.
S. R. Gyang (Miss)	Ghana	do.	do.	do.
Dr. R. B. Biritwum	Ghana	Statistics	Department of Mathematics.	Diploma in Statistics
E. K. Campbell	Sierra Leone	Population Studies	RIPS	M.A.
B. V. Sheku	do.	do.	do.	M.A.
J. N. K. Nyaadie	Ghana	Planning	Faculty of Architecture, U.S.T., Kumasi.	M.A.
G. K. Amankwah	Ghana	do.	do.	M.A.

(d) (i) Miss R. M. Ribeiro continued into her second year of study in the field of Health Education at the University of North Carolina, Chapel Hills.

(ii) Mr. S. Momolu Getaweh completed his fieldwork in Liberia and Sierra Leone and returned to Boston University to write up his Ph.D. thesis.

(iii) Dr. M. J. Azevedo completed his Ph.D. at the Duke University. He had received support from PDP for his field work in Chad.

(iv) Miss S. R. Gyang, who graduated at RIPS with Diploma in Population Studies was awarded U.N. Fellowship to do her M.A. degree in Population Studies in the same Institute.

(e) No fresh award was made for overseas due mainly to the fact that no suitable candidate could be found.

## Research

No major research grants were made during the year. The PDP in anticipation of holding its 2nd International Seminar during the year to review its 5-year activities, considered to consolidate its position in the research field by encouraging the on-going researchers to continue their current studies and to try and organize these studies into meaningful shape.

Two new research proposals were received and were under consideration during the year:

- (a) "Innovative Contraceptive Uses" by Meimei Dukuly, Dukols Inc., Monrovia, Liberia.
- (b) "Mortality in some urban and rural areas of Nigeria: A Socio-Demographic Comparative Study" C. Ucha, University of Zaria, Nigeria.

The amount involved in research (b) is quite considerable; the proposal was therefore sent to USAID/Ghana for their comments. The proposal is still under discussion.

## Seminars

The PDP decided to organize its 2nd International Seminar during the academic year on the theme "Integration of Theory and Policy in Population Studies". A Seminar Planning Committee was formed to plan local activities connected with the seminar. The planning committee comprised the following:

Professor F. R. L. Engmann, Ghana Medical School—*Chairman.*

Professor N. O. Addo, PDP, Legon—*Member*

Dr. A. F. Aryee, RIPS, Legon—*Secretary to the Seminar*  
(later resigned due to his other duties).

Mr. J. S. Pobee, Study of Religions, Legon—*Member*  
(later appointed Secretary to the Seminar).

The seminar which was originally scheduled to take place at Legon in July 1977 was later postponed to September 1977 due to funding reasons and also to allow time for adequate planning.

## Publications

PDP completed publication of the following monographs:

S. K. GAISIE, Estimating Ghanaian Fertility, Mortality and Age Structure, University of Ghana Population Studies No. 5.



S. K. GAISIE, and A. S. DAVID, Planned Fertility Reduction in Ghana, University of Ghana Population Studies No. 7.

N. O. ADDO, and J. R. GOODY, Siblings in Ghana, University of Ghana Population Studies No. 6.

### **Population and Social Sciences Library**

The Population and Social Sciences Library continued to make good progress in its work over the period under review. On the whole, the year was a successful one which saw much improvement in the services offered by the library both to members of the University and outside.

The library moved into new accommodation at the new ISSER extension thus offering temporary relief on space pressures.

### **Acquisitions**

The total accessions for the library increased to 839 books and reprints. Many materials were also received as gifts from outside bodies. However the library did not receive many items through its exchange programme since it has not been regularly sending materials to agencies/institutions with which it has exchange arrangements. It is hoped that as the publication programmes of ISSER, PDP and RIPS improve, there will be more materials available to exchange for free materials from other institutions.

The library's collection of primary source materials has improved considerably. More efforts will be made to even further augment this type of materials as they are essential to research.

### **Staffing and Personnel**

Early in the beginning of the year, the Library Assistant Grade I who had been on study leave pursuing a certificate course in Librarianship at the Department of Library and Archival Studies completed her course. She was later offered admission to Ahmadu Bello University in Nigeria where she is currently pursuing a degree course in Library Studies. She will be away for three years.

The Senior Library Assistant who is in charge of reference services in the Library was offered an award to participate in the Population Library Internship Programme at the Technical Information Service (TIS) of the Carolina Population Center at the University of North Carolina. He was away for six weeks and specialized in reference work.

Two new members of staff were hired to fill existing vacancies, namely a Principal Library Assistant and a Library Assistant Grade III. RIPS also hired an additional messenger to assist in operating the evening shift.

The Librarian was nominated by the UN Population Division to work as a member of a Technical Task Force which was to study the feasibility of the setting-up of a world-wide information system for the field of population (POPINS). As a member of the Task Force, she toured major demographic centres/institutions in Africa with a view to preparing a report for the UN on African population information problems. She also participated in the two major meetings of the Technical Task Force in Honolulu, Hawaii and in Princeton, New Jersey, USA in April and September 1976 respectively.

In April 1977, at the invitation of the Association for Population Libraries and Information Centers-International (APLICI) she addressed the Tenth Annual Meeting of that association on proposals and developments towards the setting-up of an African population information documentation system (PIDSIA).

## **Special Projects**

### *1. Training Internships*

Towards the end of 1976, the Ghana Family Planning Programme (G.N.F.P.P.) sought assistance from the P.S.S.L. in the setting-up of a library and documentation unit to service the Programme. After various consultations, the P.S.S.L. offered to train the library assistant in charge of the G.N.F.P.P.'s library. This training started in February 1977 and ended in April 1977 during which period the assistant was attached to the P.S.S.L. and was given some fundamental training in population librarianship. The P.S.S.L. is currently assisting in building up the stocks of the G.N.F.P.P. library. It is proposed to extend such assistance to similar libraries in the country so that a national network can be formed in the future.

Two other applications for assistance in population information work were received from Ethiopia and Kenya. The Family

Guidance Association of Ethiopia and the Centre for African Family Studies (CAFS) in Nairobi both sought assistance for training the persons in charge of their library/documentation units. Owing to the political unrest in Ethiopia, it has not been possible to finalize arrangements. With regard to the CAFS trainees more groundwork needs to be done before training can commence.

## *2. Population Information Documentation System for Africa (PIDSA)*

It became obvious during the course of the feasibility study on POPINS that there was an urgent need to organize the information and documentary resources of Africa in the field of population. Consequent upon this, several investigations and contacts were made. A project proposal has been drawn up and the International Development Research Centre (IDRC) in Ottawa has shown keen interest in the project and is keen to fund it. The Regional Institute for Population Studies (RIPS) is currently serving as co-ordinator and may eventually provide the institutional framework for the project, jointly with ISSER.

The PIDSA project will largely be a computerized, bibliographic service which will provide bibliographic citations and abstracts (backed by full-text service) to all available and identifiable documents being produced in or about Africa in the field of population since 1970. PIDSA will be a link network to pull together the documentary resources in the field and it is finally hoped that it will become the regional node for the world-wide system—POPINS. PIDSA will build on the resources of the PSSSL which will be strengthened in the process, to perform its regional roles in population information.

It is hoped the necessary moral support will be given to the project so that not only the PSSSL and the University of Ghana but also Ghana and the whole of the African continent will benefit.

## *3. Abstracting Service*

The Library has started an abstracting service. The first issue of the abstracts came out in July with the library's select index to periodicals. We are now providing informative abstracts to all our periodicals and we hope in due course to extend this to other types of documents in the library.

It is interesting to note that we are the only library on this campus offering such a service and to date, we are among few libraries in the country providing abstracts to social science literature.

#### *4. Inventory of Social Science Research in Ghana*

The Library continued its work on compiling a directory to social science research activities in Ghana. The data collected so far is being analysed and will be compiled and published in due course.

Following on this, the librarian was invited by the Ghana Manpower Board to serve as a member of the Population Sub-Committee. The Sub-committee (with a membership of three) is to advise the Ghana Population Committee on the scope of a periodic bulletin on all population activities in Ghana.

#### *Future Plans and Developments*

The Library's future plans and development will be closely linked with the development of PIDSA as already indicated. From all indications, the extra resources to be channelled to PIDSA will considerably assist in turning the PSSL into a first class research library dealing with population and the social sciences.

The PSSL also intends increasing and building up valuable stocks of primary source materials in the form of governmental documents, research questionnaires, and other materials which are essential to any meaningful research and teaching programmes at ISSER, RIPS and PDP.

As the library has endeavoured to grow and live up to the expectations of its sponsors, the problem of space has also become a critical one. The PSSL has almost outgrown its present accommodation and it is our fervent hope that our sponsors will continue to be generous and help us to find more spacious accommodation so that the PSSL can better fulfil its desired goals.

MEDICAL SCHOOL  
DEPARTMENT OF ANAESTHETICS

**Staff**

There has been no change in the staff of the Department either from the University section or the Ministry of Health section. The two categories of staff continue to work harmoniously.

**Courses**

Both undergraduate and postgraduate teaching were affected by the unexpected disturbances which were the result of student and professional unrest. But for the probable pilfering of the cassette player attached to the Pradovit Slide Projector, the dream of the Head of Department to establish a Departmental Audio-Visual Aids to Teaching was almost realised. It is hoped the Medical School Administration will purchase the appropriate cassette player (Philips model 229AV) for this Pradovit Colour 250 Slide Projector to replace the one lost in transit.

**Visitors**

Dr. A. A. Spence, M.B., FFARCS, Academic Head of the Department of Anaesthesia, Western Infirmary, Glasgow (one of the Teaching Hospitals of the University of Glasgow) and Editor of the British Journal of Anaesthesia, spent a week in the Department.

Professor S. A. Oduntan, M.B., FFARCS, FNMCI, of the Department of Anaesthesia of the University of Ibadan also spent a week in the Department.

**Publications**

K. A. ODURO: 'The Anaesthetist as a Member of the Health Team', an Inaugural Lecture submitted for publication.

**Benefactors**

1. An Electrical Thermometer with multiple probes for monitoring was donated to the Department by GLAXO Laboratories, U.K.

2. A Pradovit Slide Projector was donated by the Inter-University Council. Unfortunately the attached cassette player was lost in transit.

3. HOECHST Pharmaceuticals—Frankfurt, Germany have shipped to Ghana the following instruments as gifts to the Department:—

- (a) One Combi Analyser MT3 complete with all accessories for research and clinical monitoring.
- (b) One electrical Thermometer for research and clinical measurement.

4. Spinal Needles—donated by ASTRA Pharmaceuticals, Sodertalje, Sweden for clinical use and for training Residents in the technique of Spinal Analgesia.

5. Five Stethoscopes and a few Spinal Needles donated by Dr. Jacob Dodoo, a Ghanaian Resident in Anaesthesia in Bremen, Germany during a visit to the Department.

#### **Extension to the Department**

The temporary structure that was to become extensions to the Department (a lecture room, an office for two lecturers and workshop for clinical research) that took over 12 months to erect is now complete and is in use. It is hoped that these facilities and the donation of equipment will enable Anaesthetists to undertake more meaningful research.

## DEPARTMENT OF ANATOMY

### **Staff**

No further recruitment this year

### **Students**

65 medical students

7 dental students

### **Courses**

M.B. II

B.D.S. II

### **Publications**

Nil

### **External Examinations**

Nil

### **Visitors**

Mr. George Spowart, a Senior Research Officer from M.R.C. Clinical and Population Cytogenetics Unit, Western General Hospital, Edinburgh. He was here from February to April, 1977.

### **Benefactors**

Nil

### **Conferences**

- (i) Meeting of Teachers of Anatomy, Nairobi—2nd–5th December, 1976.
- (ii) Commonwealth Medical Association Council Meeting, New Delhi, 6th–11th December, 1976.
- (iii) International Symposium on Teaching of Morphological Sciences, Tel Aviv—20th–25th August, 1977.
- (iv) Fourth European Anatomical Congress, Basle—30th August to 2nd September, 1977.

## DEPARTMENT OF BIOCHEMISTRY

### Staff

There has been some improvement in the staff situation since the beginning of 1977. Dr. N. M. Woolhouse from the University of Surrey, United Kingdom was appointed a lecturer on our staff. Dr. A. G. B. Amoah, our own product, was released to the Department from the Ministry of Health on a post-graduate programme. He will eventually take a postgraduate degree leading to the M.S. and Ph.D. in Biochemistry, and will come back to teach in the Department.

### Students

The number of students taking Biochemistry for the MB. BDS II Course was about the same as the two previous years, namely seventy-five. This number was made up of sixty-five medical and ten dental students.

### Examinations

Sessional examinations were taken very seriously by students and this was reflected in their keen awareness to studies and punctuality at lectures.

### Research Activities

Research activities centred on purely applied research. There was little room or facility for Theoretical Research. On the applied research the following projects are running:

- (a) Examining Ghanaian medicinal plants for active principles.
- (b) Choline-iodide in thyroid diagnostics.
- (c) Synthesis of acetyldapsone and its possible uses in treatment of malaria.
- (d) Studies on Trypanosome parasite.



## DEPARTMENT OF CHEMICAL PATHOLOGY

### Staff

Professor T. D. Osafo left the Department on a two-year leave without pay. Dr. S. N. Assimeh who was appointed lecturer in August, 1976 vacated his post in March.

Two Japanese Scientists, Drs. S. Tanuma and S. Ishiyama who had worked in the Department for eighteen months under the Ghana/Japan research collaboration programme left for Japan. They have been replaced by two other Japanese Scientists—Dr. N. Kadoi and Dr. M. Kato.

Mr. T. K. Johnson, an Assistant Technician, spent 6 months in Japan from March to August under the Ghana/Japan collaboration training programme.

### Research

The research work with our Japanese colleagues and the Department of Paediatrics has progressed satisfactorily. The following were investigated:—

- (i) Anaemia in pregnancy.
- (ii) Change in Magnesium and Calcium concentrations in blood and C.S.F. in children with brain diseases.
- (iii) Protein and Amino Acid metabolism in malnourished children.

### Visitors

Dr. Colin Toothill of the Department of Chemical Pathology, University of Leeds Medical School, spent two weeks in November last year teaching our medical students under a programme sponsored by IUC.

Other visitors to the Department were Mr. Saville of IUC and Professor Ohara of the Department of Paediatrics, Fukushima Medical College, Japan.

### Conferences

Professor G. R. E. Swaniker attended the 1st International Meeting of Heads of Clinical Biochemistry Laboratories in Jerusalem and read a paper on 'Clinical Chemistry in a Developing Country'.

Professor Swaniker also attended the 10th International Congress of Biochemical Societies held in Hamburg from July 25-31, 1976 and read a paper on 'Amino Acids and Peptides in Normal and Cystinuric Subjects'.

## Publications

- FENUKU, R. I. A. and FOLI, A. K. (1976)  
'Serum alkaline phosphatase activity in infants and children in Ghana'. *J. Trop. Ped. Envir. Med.*, 22, 24-26.
- FENUKU, R. I. A. (1976)  
'Urine Specific Gravity: Its Determination and the range in healthy adult Ghanaians'. *Ghana Med. J.*, 15, 196-198.
- FENUKU, R. I. A. and D. A. TETE-DONKOR (1976)  
'Severe hyponatraemia associated with localised hyperhidrosis'. *Ghana Med. J.*, 15, 304-305.
- FENUKU, R. I. A. (1977)  
'Urine pH Values in Adult Ghanaians in Accra-- (Abstract)'. *Ghana Med. J.*, 16, 60.
- FENUKU, R. I. A. and FOLI, A. K. (1977)  
'Serum alkaline phosphatase activity of adolescent females during prolonged lactation'. *Ghana Med., J.* 16, 32-34.
- FENUKU, R. I. A. (1976)  
'Source of raised serum alkaline phosphatase activity during prolonged lactation'. *Clin. Chim. Acta.*, 79, 562.

## DEPARTMENT OF COMMUNITY HEALTH

### Staff

The following lecturers were appointed:—

Dr. L. Osei, Dr. P. R. Lamptey

Dr. K. Poku-Nimo and Mr. E. K. Quartey-Papafio

### Students

The department taught students from the 2nd to the 6th years.

<i>Year</i>	<i>Number</i>	<i>Course</i>
2nd	70	Community Health Survey
3rd	71	Introduction to Community Health, Ecology, Epidemiology, Environmental Health and Health Education.
4th	64	Maternal and Child Health, Nutrition, Health Administration.
5th	56	Occupational Health, Health Information, Community Health Practice.
6th	58	Revision Courses and Tutorials.

The final M.B., Ch.B. examination was rescheduled to take place in March, 1978.

### Courses

The major change was the presentation of the objectives of courses in the Department in behavioural terms, with an arrangement such that students will study the scientific principles, community diagnostic methods and health programmes that are carried out to solve problems identified.

The students in the final year spent a month in the Community Clerkship in Danfa District—weekly trips were made to Akosombo, Tema and other sites of public health activity. It is hoped that with the help of the Ministry of Health the accommodation in Danfa Health Centre will be enlarged.

The second month of the Community Health Clerkship was spent in a district hospital as had been done in the past 2 years. This year students have used Berekum Holy Hospital, Agogo Hospital, Bawku Hospital, and Adidome Hospital. The medical staff at these hospitals are enthusiastic about these student Clerkships and it is hoped that more medical school staff will be able to spend time at these district hospitals during the time students are in residence.

The Ministry of Health is helping to put up residential accommodation for students at Akosombo as part of the joint collaborative programme of service, research and teaching. The residence will be used by students from the medical school and other health training institutions.

The Department co-operates with the Department of Paediatrics in three major ways. These include the teaching of Nutrition by departmental staff of Paediatric students at the Princess Marie Louise Hospital; practical exercises in Health Education in Children's Block twice a week to 4th Year Students; and also the Social Paediatrics Seminar in the Department of Child Health.

The Co-ordinated Course for 3rd Year Students included contributions by staff from the Department. It is hoped that this course will develop to involve the Department more and more.

Members of the Department during the year gave lectures or assisted in teaching in other Departments of the University of Ghana, i.e. the Departments of Post-Basic Nursing and Sociology.

#### **Visitors**

Foreign medical students from the United Kingdom and U.S.A. Medical Schools joined Ghana Medical School students in the Community Health Clerkship at Danfa in District Medical Clerkships. Two Nurses from Sierra Leone on an orientation course on the health services in Ghana spent two weeks in the Department with various members of the Department.

Prof. A. O. Lucas from WHO, Director of Research and Training in Epidemiology and Prof. Hiat, Dean of the Harvard School of Public Health visited the Ministry of Health and the Department of Community Health on 31st January, 1977.

#### **Senior Staff Seminars**

Senior Staff Seminars have been instituted since March 1976 and have been most exciting and stimulating. Thirteen (13) have been held so far and have attracted experts both within the Medical School and outside in the field of Public Health to present their work and problems to a critical departmental audience. It is hoped to consolidate this as a regular seminar series so that all specialists in the Accra Region would participate in the excitement of academic exchange in the field of public health.

## **Research**

The major research programme in the Department remains the Danfa Comprehensive Rural and Family Planning Health Project. This project started in 1970 and will end in the middle of 1978. The UCLA Team are phasing out and by the end of 1977 none of the UCLA Staff will remain in the Department. The project also has advanced from strict testing of hypotheses about family planning to a more operational research mode. Ghanaian staff have taken over the field work.

A second project which commenced in January 1976 after much delay in the Population Dynamics Programme fund is the study of Maternal and Child Life in Mamprobi District. This is a five-year longitudinal survey which is studying the dynamics of family life as these affect child growth and survival.

The joint research programme on the control of Endemic Diseases on the Volta Lake at Akosombo continues with the Volta Authority Health and Safety Department and the Ministry of Health. The Department has started several community health programmes, e.g. Maternal and Child Health and School Health Services in Akosombo, and measures to improve village sanitation in the Akosombo District.

## **Extension and Other Activities**

- (1) Television Programmes in Health in local languages by members of Department.
- (2) Assistance of Planned Parenthood Association of Ghana to initiate a Traditional Birth Attendant Programme in Bortianor, West Accra and the Ministry of Health (Zonta Project) in Eastern Accra.
- (3) Training of Danfa Health Centre Staff in Family Planning, February-March, 1976. Dr. A. A. Armar, Executive Director, National Family Planning, presented certificates to the participants. Training is under way of staff at Obom Health Centre.
- (4) Co-operation was established with the Department of Community Health, University of Benin Medical School, Nigeria. A Senior Lecturer spent one month helping the young department at Benin.
- (5) Members of the Department gave lectures in training courses and workshops organised by the Ministry of Health, Department of Social Welfare; Institute of Statistical, Social and Economic Research, the Institute of African Studies.

- (6) The staff of the department helped with suggestions in changes that were incorporated in the Mamprobi Urban Health Centre for instance in the conversion of the ground floor of the administrative block into a maternity unit, the addition of a second work for emergencies and partial roofing of the courtyards for patient seating. Members of staff helped with the orientation of the staff of the Health Centre and it is hoped that it will soon be used as a Community Health Teaching Centre.

### **Papers Published**

- (a) PROF. S. OFOSU-AMAAH, ETAL.—Is Poliomyelitis a serious problem in developing countries?—Lameness in Ghanaian Schools. *British Medical Journal*, 1977, 1, 1012–1014.
- (b) DR. F. K. WURAPA
1. A Tuberculin Skin Test Survey in a Rural Ghanaian Population. *Tropical and Geographical Medicine*, Vol. 28, pp. 291–296, 1976.
  2. Gastro-Intestinal Infection in Pre-school children in the Danfa Project Area, *Ghana Medical Journal* Vol. 15, No. 3, pp. 158–162, Sept., 1976.
- (c) DR. G. A. ASHITEY
1. “Yaws Epidemic” *Ghana Medical Journal* 15, 223.
  2. “Water Development Projects and Health” Editorial, *Ghana Medical Journal*.
  3. “The New Kpong Project: Epidemiology Aspects” Report to V.R.A. (Mimeographed).

## DEPARTMENT OF PATHOLOGY

### 1. Staff

Dr. J. T. Anim joined the department as a lecturer in pathology.

### 2. Courses

Undergraduate Course in Pathology: No change.

Dr. Amuesi who has been a trainee pathologist in the department for the past year is proceeding to Leeds University to complete his postgraduate training in pathology.

### 3. Research

In addition to work on liver and sickle diseases, studies on renal pathology, breast cancers and childhood cancers are being carried out.

### 4. Activities outside Ghana

Professor E. C. Christian was appointed external examiner in pathology to University of Nigeria Medical School, Enugu in 1975 to 1979 and has visited Nigeria several times as an external examiner.

### 5. Visitors

Professor C. C. Bird of Leeds University paid a preliminary visit to the School in connection with an inter-university link between his Department and the Department of Pathology, Ghana Medical School. The link is now fully established.

Dr. Salmon, a neuropathologist from Birmingham, visited the School to give a series of lectures on neuropathology to undergraduate and postgraduate students.

Dr. M. Dixon visited the department as a lecturer in pathology and gave the course on inflammation. He also participated in research work on liver disease by introducing Immuno peroxidase techniques on tracing of hepatitis B antigen, Alpha fetoprotein or alpha antitrypsin.

Professor I. O. K. Udezo, external examiner, Pathology from University of Nigeria, Enugu.

### 6. Lecturers

Professor E. C. Christian's inaugural lecture to the Ghana Academy of Arts and Sciences had to be postponed to June 1978 because of the tragic death of Professor de Graft Johnson.

Lecture on "some aspects of cirrhosis, hepatoma" was given at University of Nigeria Medical School, Enugu by Professor E. C. Christian in June, 1977.

#### **7. Publications**

2 papers in press by J. T. Anim

(a) Breast Cancer

(b) Proper use of laboratory service.

Blankson and Christian, congenital heart disease in Ghana. *Cardiologic tropicale* II, 1975.



## DEPARTMENT OF MICROBIOLOGY

### Staff

Dr. W. A. Chinery left for the United States on Sabbatical leave.

Dr. P. A. K. Addy resumed duty in March 1977 after his two years' leave of absence. He was promoted to the grade of Senior Lecturer during the year.

Dr. R. K. Anteson left for Japan on Study leave.

### Students

(a) *Undergraduates*.—Sixty-four (64) 3rd year students were given tuition for the M.B. III course. Lectures and 7 practical/demonstrations were also given to Final Year Zoology students and to 1st Year Medical and Dental students in the Faculty of Science.

(b) *Postgraduates*.—In collaboration with the Department of Surgery, a revision course was organized for the medical graduates preparing for the F.R.C.S. (Part I) Examination.

### Publications

S. N. AFOAKWA: 'Enteroviruses from our Water and Sewage'—*Ghana Med. J.*, Vol. 15, No. 2, 1976.

'Gastrointestinal infection in pre-school children in the Danfa Project Area'—*Ghana Med. J.*, Vol. 15 No. 3, 1976.

'Sero-epidemiological Survey of Hepatitis B-virus Infection in school children in Senchi Area'—*Ghana Med. J.*, Vol. 15, No. 4, 1976.

'Endemic Pyoderma in Ghana'—*Transactions of the Royal Society of Tropical Medicine and Hygiene*, Vol. 17 No. 3, pp. 204–209, 1977.

P. A. K. ADDY: 'Rubella in Ghana: Sero-epidemiological studies of healthy urban teenage females (1976)' *Ghana Med. J.*, 15, 3: 168–172.

'Ecology of Enteroviruses in the Tropics: Enteroviruses isolated from Water and Sewage' 1976. *Ghana Med. J.*, 15, 2. 102–108.

'Poliovirus Serotypes 1 and 2: The major causes of Infantile Paralysis during 1972 through 1974 in Ghana', 1977 *Ghana Med. J.*, 16, 1. 61–62.

J. A. A. MINGLE: 'Gastrointestinal infection in pre-school children in the Danfa Project Area', *Ghana Med. J.*, 15, No. 3 September, 1976.

'Sero-epidemiological Survey of Hepatitis B-virus infection in School Children around Senchi Area. (Preliminary Report)', *Ghana Med. J.*, 15, No. 4, December, 1976.

'Application of Scanning Electron Microscope in observation of Red Blood Cells in Haemoglobinopathies', *Ghana Med. J.*, 16, No. 1 March, 1977.

### Conferences

1. Prof. S. N. Afoakwa attended the formal inauguration of the West African College of Physicians in Lagos in November, 1976. He was elected Hon. Secretary of the Faculty of Pathology.

He also attended a Faculty Committee meeting of the West African College of Physicians in Freetown, Sierra Leone in February this year and in May; he attended the Executive Committee meeting of the same College in Banjul, Gambia.

2. Dr. K. Twum-Danso took part as a panelist in a Symposium on 'Venereal Diseases' organised by the Ghana Medical Association in Accra in April, 1977.

### Visitors

Dr. S. Pacsa, Head of Virology Unit, Institute of Microbiology, University of Pecs, Hungary.

### Extension Activities

Members of the Department continued to serve on various Boards and Committees outside the University as indicated below:

PROF. S. N. AFOAKWA: Member of the Board of Management of the Institute of Aquatic Biology.

DR. R. K. ANTESON: 1. Member of the Board of Directors of O.I.C. (Opportunities Industrialisation Centre).

2. Member of WHO Scientific and Technical Advisory Committee for Onchocerciasis Control Programme in the Volta River Basin.

## DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

### Staff

Professor D. A. Ampofo was made a Fellow of the Royal College of Obstetricians/Gynaecologists in 1976 with Dr. E. K. Newman obtaining the Fellowship in 1977.

Dr. J. B. Dodoo, Senior Registrar in Obstetrics/Gynaecology has left the Department. Dr. A. B. Amoa is likely to take up an appointment in the Department following his success at the membership examination conducted in 1977.

### Students

The number of undergraduate students continues to rise. There has been a steady improvement in the general standard of the average student.

All of the five postgraduate students presented for the Part I of the M.R.C.O.G. examinations in 1977 were successful. The next batch of four are due to take the examination in September this year.

### Publications

AMPOFO, PROFESSOR D. A.—The Training of Traditional Birth Attendants in Ghana. *Trop. and Geog. Medicine*.

AMPOFO, PROFESSOR D. A.—Socio-cultural and Medical Perspectives of Infertility in Ghana—Family Welfare and Development in Africa: Proceedings of Regional Conference.

KLUFIO, DR. C. A.—An Approach to the Management of Vaginal Discharge. An Experience with a Combination of Metronidazole (Flagyl) and Mystatin (Vaginex). *Ghana Med. J.* 15: 204-207.

### Research Interests

- (a) Anaemia and Sickle Cell-Disease in Pregnant Ghanaian Women.
- (b) Village Health Training Programme in Ghana Rural Reconstruction. Research Laboratory—Yensi.
- (c) The Effect of "Tri Cardil" on Monilia Infection in the Female.
- (d) Anaemia and Sickle-Cell Disease in Pregnancy.

## DEPARTMENT OF PHARMACOLOGY

### Staff

Teaching was heavy during the last academic year because of staff shortage. Dr. Adjepon-Yamoah, Senior Lecturer, has been acting as the Head of Pharmacology.

One lecturer is on study leave, and one on two years' leave of absence.

### Student Numbers

Undergraduate Medical Students:

For the time being, the exact number of students will be known after the Supplementary M.B. II Examination in December, 1977.

Postgraduate Students: 3

Significant Developments in Teaching including Revisions in the Curricula, and their Relevance.

Nil

Other Developments possibly of an Extension Nature, and Projections on Relevant Developments.

Nil

## DEPARTMENT OF PHYSIOLOGY

### Staff

With the appointment of Prof. H. H. Phillips as Dean of the Medical School, Prof. S. Kojo Addae became the Head of the Department of Physiology.

The Department continues to face grave staff problems. Apart from Prof. H. H. Phillips (Dean) who could only participate in teaching if he could find the time to do so, only one senior member continues to teach medical students, post-graduate students and post-basic nursing students. Dr. S. K. Arthur who has just completed his housemanship has joined the Department temporarily *en route* to his postgraduate work in Physiology.

The technical staff problem is less sombre. Mr. D. E. Laryea, the most senior of the technicians is being sponsored by the Medical School (through WHO fellowship) to do a higher technical course in Surrey University. Meanwhile the Department now has 2 Research Assistants, both graduates. An attempt is being made to train other technical staff and also to recruit more graduates as research officers.

### Visitors

Dr. F. S. Nashat and Dr. Paul Sanford, both of the Department of Physiology, Middlesex Hospital Medical School, London, were visiting lecturers in the Department from October to December, 1976. This was arranged through the Inter-University Council. Unfortunately, it has not been possible yet to arrange similar visits this year.

### Research Project

The Department is actively involved in the Ghana/Japan Medical Co-operation Project.

### Projects Completed

Total body water, exchangeable sodium and related parameters in:

- A. Normal Ghanaians
- B. Sickle-Cell Patients

The effect of mild stress on circulating aldosterone and cortisol in:

- A. Normal Ghanaians
- B. Sickle Cell Patients.

### **Projects in Progress**

The effects of drugs on morphology and cation transport in the Hb AA and Hb SS erythrocyte membrane. I. Chloroquine and Chlormethiozole.

Effect of acute temperature changes on salivary and urinary electrolyte excretion, plasma volume, circulating aldosterone and cortisol and renal haemodynamics in the dog.

### **Publications**

S. KOJO ADDAE, S. Dakubu *et al.*: 'Total Body Water, Total Exchangeable Sodium and Related Parameters in the African'. *I.R.C.S.: Physiology* 5, 77 (1977).

'Total Body Water, Total Exchangeable Sodium and Related Parameters in the normal Ghanaian'. Accepted for publication in: *Clinical Sci. and Mol. Medicine*.

S. KOJO ADDAE: 'Functional Heterogeneity of the human Nephron Population and Functional Homogeneity in the Sickle-Cell Patient' *Ghana Med. J.*

### **Students and Courses**

The need for special B.Sc. and M.Sc. courses in Physiology is becoming quite evident. The key issue is the staff situation. The moment more staff arrive, such course would be begun.

### **Conferences**

Prof. S. Kojo Addae attended the International Congress of Physiological Sciences in Paris, July 1977.

## DEPARTMENT OF PSYCHIATRY

### Staff

Miss Zonke Majodina, Lecturer and Clinical Psychologist is on a six-month attachment to the Department of Psychiatry, from Charring Cross Hospital, London.

### Students

Fourth Year Medical . . . . . 56

### Courses

Ten weeks attachment in clinical psychiatry and clinical psychology at the psychiatric hospital, Accra. Senior members participated in the running of courses for the diploma in post-basic nursing, and for the M.R.C.P. examination.

### Publications

DR. C. C. ADOMAKOH

- (i) 'Alcoholism—the African Scene', (Annals of New York Academy of Sciences Vol. 273, 1976).
- (ii) Studies on the Clinical Evaluation of Psychotropic Drugs. (Symposium on Advances in the Drug Therapy of Mental Illness, WHO Geneva, 1976).

DR. J. J. LAMPTEY., 'Patterns of psychiatric consultation at the Accra Mental Hospital' (accepted for publication by the *African Journal of Psychiatry*).

DR. S. A. DANQUAH

- (i) 'Convulsions and Mental Retardation in Ghanaian Children', *Jr. Psychopathologie Africaine* No.3, Vol. XII, 1976.
- (ii) 'Mentally Retarded Children in Hospitals in Ghana' (*Jr. Psychopathologie Africaine* No.3, Vol. VII, 1976).
- (iii) 'A Preliminary Survey of beliefs about severely retarded children in Ghana', *Jr. Psychopathologie Africaine* No. 3, Vol. II, 1976.
- (iv) 'Mental Health in School Children', *Health Magazine* No. 7 series, 1976.
- (v) Level of Anxiety and Consumption of coffee among University students. *Proceedings of Pan African Psychiatric Conference on Psychoneurosis*, 1973.

### Conferences

PROFESSOR E. F. B. FORSTER

- (i) International College of Neuropsychopharmacology (CINP) meeting in Florence, Italy—April, 1977.
- (ii) Meeting of the WHO Mental Health Programme Committee in Manilla—August, 1977.

**DR. C. C. ADOMAKOH:** Seminar on Counselling, Midwifery Training School, Accra, May 1976. Paper: 'Some social, academic and professional problems of students'.

**DR. J. J. LAMPTEY:** Association of African Psychiatrists Workshop in Yaounde, on 'Traditional Medicine'—September 1977. Paper: 'Patterns of psychiatric consultation at the Accra Mental Hospital'.

**DR. S. A. DANQUAH**

(i) Seminar and Training Workshop in the Education of Handicapped Children. Organised by Department of Educational Foundations, Cape Coast University July 1977.

Paper: 'Beliefs About Severely Retarded Children in Ghana'

(ii) Seminar-Workshop held by Ghana Tourist Board on Tourism and Economic Development, Legon—February 1977.

Paper: 'Psychological Aspects of Tourism'.

(iii) Seminar-Workshop—Catholic Guild of Nurses and Midwives, organised by Dutch and Ghana Governments held at GIMPA, Legon, March 1977.

Paper: 'The Psychology of the Nurse'

### **Research**

**PROF. E. F. B. FORSTER:** The epidemiological study of the factors leading up to chronicity as seen in mentally disturbed in-patients in Ghana Mental Hospitals.

**DR. C. C. ADOMAKOH:** Suicide and Attempted Suicide, Alcoholism-Aetiology-Treatment, Psychiatric Morbidity in University students, Psychopharmacological practices in Ghana.

**DR. J. J. Lamptey:** (i) Survey of psychiatric morbidity of patients attending Accra Psychiatric Hospital, (ii) Anxiety State: A clinical study of the frequency of symptoms in patients referred to the Accra Psychiatric Hospital.

**DR. S. A. DANQUAH**

(i) Long-term psychiatric patients and social syndrome.

(ii) Epidemiological pilot study of some aspects of mental health of Ghanaian women.

(iii) Impact of Tourism on Ghanaian Social Life.



- (iv) The influence of culture on the content of delusion among Ghanaian psychiatric patients.
- (v) The relationship between depression and performance on progressive metrics among psychoneurotic patients in Ghana.
- (vi) Mental Retardation, Language development and modification.

MISS ZONKE MAJODINA

- (i) Behaviour modification in chronic mental patients.
- (ii) A study of perceptual development in children.

## DEPARTMENT OF SURGERY

### Staff

Mr. J. F. K. Tandoh joined the Department as Lecturer in Paediatric Surgery.

Mr. S. K. Appiah and Dr. H. A. Beecham, both Lecturers, resigned from 30th September, 1977.

### Publications

Prof. E. A. Badoe 'Fluid and Electrolyte Therapy' *G.M.J.* 16: 1 p. 50, 1977.

Prof. E. Q. Archampong 'Amoebic Liver Disease'. *Tropical Doctor*, 1977.

'Fibrosarcoma at Site of Cholera Inoculation'. *International Surgery*. (In Press).

'Diverticular Disease in an Indigenous African Community'. *Annls. of Roy. Coll. of Surg.*, England.

MR. E. D. YEBOAH: 'Surgical Management of Priapism'. *G.M.J.*

'Low Doses of Stilboestrol in Treatment of Carcinoma of Prostate'. *G.M.J.*

'Aortography and Selective Renal Angiography in the Diagnosis of Renal Tumours'. *G.M.J.*

MR. J. F. O. MUSTAFFAH: 'The Surgery of Subdural Haematoma'. *North African Journal of Medicine*, 1977.

'Post-Traumatic Neurons'. *North African Journal of Medicine*, 1977.

'Congenital Malformations of Central Nervous System'. *Proc. of P.A.A.N.S.*, Lagos, 1977.

'Varieties of Spinal Cord Compression'. *Proc. of P.A.A.N.S.*, Lagos, 1977.

DR. K. O. BENTSI-ENCHILL: 'Causes and Frequency of Excision of the Eye in Ghana'. *G.M.J.*, Vol. 15, 300, 1976.

'Chloroquine Ocular Toxicity in Ghana'. *G.M.J.*

## Conference

The Department of Surgery organised the 17th Annual Conference of the West African College of Surgeons in Accra in January, 1977. The Theme was 'Management of Cancer in Africa'. The Guest Lecturer was Prof. Edward J. Beattie, Jr. M.D., F.A.C.S., Professor of Surgery, Cornell University, New York and Chairman, Department of Surgery, Memorial Sloan-Kettering Cancer Centre, New York, U.S.A. The conference was opened by the Chief Justice, His Lordship Mr. Justice S. Azu-Crabbe and the Exhibition by Prof. H. H. Phillips, Dean, University of Ghana Medical School, Accra. The conference was very successful. The following papers were read by members of the Department:—

1. Experience with Oesophageal Carcinoma in Accra by Dr. S. Bekoe (Co-Author).
2. Gastric Malignancies in Korle Bu Hospital by Dr. H. A. Beecham (Co-Author).
3. Malignant Tumours of the Large Bowel, Korle Bu Hospital (1970-1975), by Prof. E. A. Badoe.
4. Pancreatic and Periapillary Carcinoma: Problems of Diagnosis and Management, by Prof. E. Q. Archampong and Dr. J. B. Quartey-Papafio.
5. Experience with Urea in the Management of Hepatic Malignancies, by Prof. E. Q. Archampong.
6. Breast Cancer in Accra, by Dr. J. B. Quartey-Papafio.
7. Diagnosis and Treatment of Early Carcinoma of the Breast, by Dr. J. B. Quartey-Papafio.
8. Aortography and Selective Renal Angiography in the Diagnosis of Renal and Retroperitoneal Tumours, by Mr. E. D. Yeboah and Prof. J. K. M. Quartey.
9. Low Doses of Stilboestrol in the Management of Carcinoma of Prostate, by Mr. E. D. Yeboah and Prof. J. K. M. Quartey.
10. Corpus Cavernous Shunt in the Management of Priapism, by Mr. E. D. Yeboah.
11. Wilm's Tumour: An Analysis of 15 Patients seen in Korle Bu Hospital, by Mr. J. K. F. Tandoh.