DEPARTMENT OF CHEMISTRY

Professor Ishenkumba A. Kahwa, BSc (Hons, MSc Dar es Salaam,
DPhil Louisiana State – Head of Department

WORK OF THE DEPARTMENT

For the 2006-2007 academic year the Department concentrated on bringing to fruition several initiatives which were on stream in the Department. What could be considered as the most significant of all the activities for the year was the launch and success of the new graduate programme of study in Occupational and Environmental Safety and Health (OESH). The programme attracted 34 students in its founding cohort (28 MSc (OESH), 2 MPhil (OESH) and 4 PhD (OESH)). This OESH programme attracted lecturers from overseas and local universities, government, private sector and international agencies in Europe and USA, including the NIOSH (USA), ILO and UNITAR. Besides the programme's profitability, the Department benefited immensely from the several scholarly public lectures and seminars that were conducted by most of the overseas visiting lecturers. The programme was reviewed in July 2007 by a team comprising of external examiners, some lecturers, students and stakeholders in the government and private sector. The programme was considered a huge success; commencement of the undergraduate component and expansion into the rest of the Caribbean were recommended.

There were several successful income generating activities this year which included traditional ones such as the Tanaud and JRC projects, the Better Process Control School managed by Dr. Donna Minott-Kates, Chemistry Summer School coordinated by Mr. Gerald Lindo, the BEd Distance Education Programme and outreach activities coordinated by Dr. Novlette Sadler-McKnight, the sale of liquid nitrogen, commercial synthetic chemistry and the rental of lecture theatres, laboratories and other facilities, which were managed by office staff. These activities, along with grants secured by staff for both

scholarly and public service purposes contributed to improved earnings of over J$89M (US$1.27 Million), thus allowing the Department for the second consecutive year to exceed its goal of US$1M per year (or about J$70M) in extra-budgetary income.

The Department continued its thrust of investing in its human resources by accessing advanced training opportunities for its staff; those working with critical equipment such as the NMR spectrometer and X-Ray diffractometer accessed advanced training overseas. Also, a new professor (Prof. Willem Mulder) was appointed.

Other notable positive developments include the completion of the upgraded JRC laboratory, the improvements in safety in the department such as installation of eight eye wash stations and the generous assistance of the bursary in providing the necessary funds to carry out major repairs to our leaking laboratory gas lines and water taps.

On the curriculum development front, the Department succeeded in reaching a consensus on the curriculum package, which will be fine-tuned for University approval in 2007/8. Laboratory curriculum delivery benefited from additional teaching equipment purchased using a grant from the Bursary to eliminate long agonizing queues of students waiting to use limited pieces of equipment. The modernization of the technical services continued this year; about 50% of technical staff are at BSc level. This provided the Department with the opportunity to efficiently and competently transform and deliver its laboratory curriculum in a teaching and learning environment that is becoming more sophisticated and technology driven.

There were disappointments; crucially the number of publications in journals and books of international repute has continued to fall (from 30 in 2004/5 and 22 in 2005/6 to just 19 in 2006/7), this at a time when the number of senior academics in the professorial ranks is at an all time high. Serious efforts will continue in 2007/8 to free up opportunities for staff to devote more time and energy to the principal academic activity - the scholarship of researching and publishing. The Department's intake of first year students fell by about 33%; but the early admission mechanisms put in place by the Faculty should reverse this drop in the coming year.

HIGHLIGHTS OF MAJOR ACTIVITIES

First Year OESH Programme

Among the initiatives undertaken by the Department was the commencement of the Occupational and Environmental Safety and Health (OESH) taught MSc Programme of study. Following the formal launch of the programme by the Minister of Labour, the Hon. Derrick Kellier, in September 2006, this programme engaged 34 students and had a cadre of local and overseas guest lecturers drawn from a variety of academic, private sector, government and multilateral agencies. At a net profit of over $8 Million, the financial return on the programme was quite good and so was the scholastic enrichment that came with interactions between guest lecturers and UWI staff and students.

Official Renaming of Applied Chemistry Teaching Laboratory

The ceremony to rename the Applied Chemistry Teaching Laboratory was held on April 11, 2007. The Applied Chemistry Teaching and Research Laboratory was renamed 'The Kenneth E. Magnus Applied Chemistry Teaching and Research Laboratory' in honour of Dr. Kenneth E. Magnus, Professor Emeritus, a former Head of the Chemistry Department as well as a former Dean of the Faculty of Natural Sciences now Faculty of Pure and Applied Sciences. The laboratory was so named in recognition of Professor Magnus' contribution to the development and implementation of the Applied Chemistry programme in the Department. Among those who attended the ceremony were Professor Elsa Leo-Rhynie, Principal, Professor Ronald Young, Dean of the Faculty, Dr. Conrad Douglas an alumnus of the Chemistry Department and Mr. George Morgan of Jamalco whose company, through the Alcoa Foundation, made a significant donation towards construction of the laboratory.

Faculty Exchange Programme

A Faculty Exchange Programme was initiated between Gothenburg University, Sweden, and the University of the West Indies, Mona. The programme seeks to: (1) develop cultural exchange and linkages between the two universities; (2) explore the impact of culture, language, experiences and methodologies on teaching and learning outcomes of Chemistry courses at both universities; (3) encourage interaction regarding the best practices in teaching Chemistry at both universities; (4) explore the possibility of undergraduates doing

common courses at either university; (5) develop a broader understanding of teacher education in relation to preparing teachers of Chemistry; (6) explore and develop collaborations in various areas of research; (7) develop collaboration with respect to external examiners for undergraduate courses.

Two members of staff from Gothenburg University, Professors Ake Nilsson and Lennart Sjolin visited the Department from February 19 to May 4, 2007. During their visit they gave lectures in Organic and Bioinorganic Chemistry to undergraduate and graduate students. Professor Nilsson attended lectures in English and Jamaican culture as well.

In return, Drs. Winklet Gallimore and Novelette Sadler-McKnight from the Department and Marcia Rainford from the Department of Educational Studies visited Gothenburg University from May 5-June 7, 2007 where they gave seminars and lectures, attended a conference and interacted with faculty and students. The exchange was sponsored by the Linnaeus Palme programme.

Technical Staff Received Overseas NMR Training

Miss Toni Johnson, Senior Scientific Officer in the Department was sponsored by the Department to attend a training course in Billerica, Massachusetts from February 12-18, 2007. The course, AVANCE I - SOLIDS was offered by Bruker Biospin Corporation for specialized training in NMR. Ms. Johnson received a certificate of participation at the end of the course and she reported that she benefited greatly from the training as she is now able to effectively offer Carbon-13 CPMAS especially to the Inorganic Chemistry section of the Department and to extend the services of the NMR to other areas.

Miss Toni Johnson was again selected to visit the University of Toronto from May 16-June 15, 2007. This visit was under the auspices of the agreement for academic exchange between the University of Toronto and the University of the West Indies. During her stay there she worked under the supervision of Professor William Reynolds and received advanced training in modern methods of chemical structure determination using NMR spectroscopy. Ms. Johnson had high praise for Professor Reynolds's wealth of knowledge and experience in the field of NMR and assured the Department that its investment will render mutual dividends.

Graduate Student Attendance at International Food and Nutrition Conference

The Department was instrumental in assisting Miss Sharon Hooper one of our graduate students, who was selected as one of 16 Global Fellows to participate in the International Food and Nutrition Conference (IFNC) held at Tuskegee Institute, Tuskegee, Alabama from October 7-11, 2006. At the conference she made an oral presentation describing her research work on the antioxidant components and properties of cowpeas.

OESH Public Lectures

Dr. Benjamin Ali, Coordinator, Technical Cooperation and Advisory Service of ILO Programme on HIV/AIDS and the World of Work delivered a Public Lecture on 'The International Labour Organization/ World Health Organization's Initiatives on the Impact of HIV/AIDS on Human Resources of Health'. The lecture was delivered on March 30, 2007 at the Chem/Phys Lecture Theatre.

As part of its effort to create increased national awareness in Occupational and Environmental Safety and Health issues, the OESH programme held three Public Lectures on Monday July 2, 2007 at the Chemistry Lecture Theatre (C2). The presenters were:

Professor Harri Vainio, Director General of the Finnish Institute of Occupational Health and he presented on the topic 'External Causes of Cancer - A Global Perspective'.

Dr Martin Harper is an Adjunct Professor in the Industrial Hygiene Programme of West Virginia University and Chief of the Exposure Assessment Branch of the Health Effects Laboratory Division of the National Institute of Occupational Safety and Health (NIOSH), USA. He spoke on the topic 'Beryllium Exposures: Health and Safety Issues'.

Professor Michael Morgan of the Department of Environmental and Occupational Health Sciences, School of Public Health and Community Medicine, University of Washington, presented the topic 'Biomarkers of Health Risks in the Workplace: New Developments and New Challenges'.

Science and Technology in South Africa Lecture

Under the leadership of the Head of the Department, a consortium of CARISCIENCE which consisted of the Scientific Research Council, the Jamaican Society for Scientists and Technologists, the National Commission for Science and Technology, the University of Technology and the University of the West Indies, presented a Public Lecture on December 15, 2006 in the Chemistry Lecture Theatre (C5). The presenter was Dr. Khotso Mokhele, President and Chief Executive Officer of the National Research Foundation of the Republic of South Africa and he spoke on the topic 'Science and Technology in South Africa Today'. Dr. Mokhele was a UNESCO consultant visiting the region to assess its readiness to take advantage of science, technology and innovation for development.

Research Day Awardees

The Department received awards in two categories at the Annual Research Day activities.

Dr. Anthony Greenaway and Debbie-Ann Gordon-Smith were selected for The Best Research Publication in the Faculty for their article "The Effects of Rainfall on the Distribution of Inorganic Nitrogen and Phosphorus in Discovery Bay, Jamaica."

Professor Ishenkumba Kahwa's project "Asbestos Removal from Succaba Pen, Old Harbour" won him the award for The Research Project with the Greatest Business/Economic/Development Impact.

Research Fellowships

Four members of staff received UWI Research Fellowships: (1) Winklet Gallimore – "The mariculture of sponges with bioactive metabolites"; (2) Dr. Novelette Sadler-McKnight in collaboration with Dr. Marcia Rainford of the Educational Studies Department – "Innovative approaches to science delivery at the primary, secondary and tertiary levels". (3) Dr. Paul Maragh – "Synthesis characterization and reactivity studies on novel oxo-centered trinuclear transition metal complexes to be used as biological models"; and (4) Professor Yvette Jackson – "Benzothiazoles and analogues of shermilamine B: mechanistic studies and synthesis".

Better Process Control School

The Department of Chemistry hosted its 6th Better Process Control School (BPCS) during the week January 8 to 12, 2007. Thirty persons representing the local food industry and regulatory agencies, and food processors from other Caribbean countries were in attendance. Of these, twenty eight candidates satisfactorily completed the certification course. This course is of particular significance to manufacturers in the region since exports to the USA of canned low acid food or of acidified foods may only be permitted if the products were manufactured under the supervision of a worker with BPCS certification (other conditions may apply). The BPCS, which is self-funded, was administered by Dr Donna Minott-Kates, BPCS Course Director.

Chemistry Work Study Programme

Under the supervision of Dr. Michael Coley thirty-five students were placed in 23 industrial companies and research facilities for a minimum of 8-weeks work experience. They received hands-on training and earned in excess of J$2M during the period.

CATEGORIES OF STUDENTS

TOTAL STUDENT ENROLMENT IN CHEMISTRY COURSES

LEVEL	2004/2005	2005/2006	2006/2007
Preliminary	420	412	406
Introductory	557	613	413
Advanced	883	976	1124
Postgraduate (Research students)	61	70	Full-time 32 Part-time 28

First Class Honours in Chemistry

Congratulations to Miss Andrea Thomas, Mr Keddon Powell and Mr. Haile Dennis who received First Class Honours degrees in Chemistry.

Departmental Awards and Prizes

Seven undergraduate students, Mark Lawrence, Daynea Wallock, Chanoya Kidd, Haile Dennis, Stephen Brown, Michelle-Ann Angus

and Kerry-Ann Green received awards ranging from $10,000 to $60,000 for their academic performance in Chemistry.

Postgraduate Students

There were five graduate students who upgraded their registration from MPhil to PhD, namely Mr. Richard Taylor, Miss Kenisha Wilson, Miss Tanneika Dawkins, Miss Grace-Anne Bent and Mr. Andrew Morris.

Students who have submitted their theses for the Master of Philosophy degrees are Mr. Ross Brown, Miss Fiona Ho Shing and Miss Kathryn Murray.

Those who completed the requirements for the Doctor of Philosophy degrees were:

- Ms Nicole White, supervised by Dr. Henry Anthony Ellis
- Mr. Gabriel Harewood supervised by Professor Tara Dasgupta
- Mrs. Nadale Downer-Riley supervised by Professor Yvette Jackson

PAPERS PRESENTED

Tara Dasgupta

- "Promoting Access to and Use of Digital Knowledge Resources in Countries with Developing and Transitional Economy." IAP Meeting organized by CRIA, Brazil and NAS, U.S.A. May, 2007, Atibaia, Brazil.

Yvette Jackson

- (with J. A. Grant, M. Gossell-Williams, T. Clayton and J. M. Cook), "Synthesis, Pharmacological Studies and Molecular Modelling of Some Novel 1,3-Diazepinium Chloride", St. Catherines, Canada, August 2006.

Ishenkumba Kahwa

- "Hazardous Materials in Jamaica". National Commission on Science and Technology, June 2007.

- "Small Lanthanide Nanoclusters: Luminescence and Electronic Interactions Within and Between Them". Howard University, USA, Department of Chemistry February 2007

Robert Lancashire

- "JSpecView - A Java-Based Spectroscopy Viewer". Biennial Conference on Chemical Education August 2006, Purdue University.
- "Experiences Implementing AnIML Viewers and Converters". March 2007; Pittcon, Chicago.

Donna Minott-Kates

- (with Camille S Bowen) "Analysis of the Toxic Components of the Ackee Fruit (Blighia sapida)". International Food and Nutrition Conference (IFNC 2006), Alabama, USA, October 8-10, 2006.

Paul Maragh

- (with Alvin A. Holder, Gabriel R. Harewood, Kerry-Ann Green, and Tara P. Dasgupta), "Synthesis and Characterization of Some Schiff Base Complexes of Vanadium(V). A Search for an Effective Insulin-Enhancing Compound". 232nd National Meeting of the American Chemical Society, San Francisco, CA, U.S.A. (September 2006).
- R. R. Reid, T. P. Dasgupta, P. B. Reese and P. T. Maragh, "Microbial and Photolytic Degradation of Selected Pesticides in a Tropical Environment". 90th Canadian Chemistry Conference and Exhibition, Manitoba, Canada. May 2007.

Willard Pinnock

- (with Richards M, Khan R) "Air Pollution Studies of the Kingston Atmosphere Using Passive Monitors". Institute of Safety Professionals' Conference in May 2007
- (with Wilson K) "Jamaican Red Mud as an Additive to Portland Cement Mortar". Institute of Engineers Conference on Modern Concrete Solutions, June 2007.

PUBLICATIONS

* Bakir M, Gyles C. Molecular sensing behavior of di-2-pyridylketone-2-thenoylhydrazone (dpktah) in non-aqueous media. Journal of Molecular Structure 833 (1-3): 161-168 (2007)

* Bakir M, Hassan I, Green O. Synthesis and structure of the first molybdenum compound of N,O,N-hydroxybis(2-pyridyl)methanolato (eta(3)-dpkO, OH). The structure of [Mo(O)(2)(mu-O)(eta(3)-dpkO,OH)](2)center dot 2dmso. Journal of Coordination Chemistry 59 (17): 1953-1962 Nov 20 2006

* Lui-Lym J, Dasgupta TP, Maragh PT, Beckford F, Stedman G. Kinetics and mechanism of the reaction between the di-cyanobis[tetracyanoferrate(III)] complex ion and sulfite in aqueous solution. Inorganica Chimica Acta 360 (7): 2284-2290 (2007)

* Payne VCR, Headley OS, Stibrany RT, Maragh PT, Dasgupta TP, Newton AM, Holder AA. The crystal structure of a bis(2,6-pyridinedicarboxylato)chromate(III) anion with an elaborate network of hydrogen bonding and pi stacking. Journal of Chemical Crystallography 37 (4): 309-314 APR 2007

* Taylor RA and Ellis HA. Room temperature molecular and lattice structures of a homologous series of anhydrous zinc (II) n-alkanoates. Spectrochimica Acta, Part A, 68, 99-107 (2007)

* Antao SM , Jackson I , Li BS , Kung J , Chen JH, Hassan I, Liebermann RC, Parise JB. High-temperature elasticity of magnesioferrite spinel. Physics and Chemistry of Minerals 34 (5): 345-350 (2007)

* Christian KR, Nair MG, Jackson JC. Antioxidant and cyclooyxgenase inhibitory activity of sorrel (Hibiscus sabdariffa). Journal of Food Composition and Analysis 19: 778-783 (2006)

* Townsend NO, Jackson YA. Synthesis of a 9-aza analogue of eleutherol. Heterocycles 71 (3): 669-675 (2007)

* Jacobs H, Simpson DS, Reynolds WF. Quassinoids and a coumarin from Castela macrophylla (Simaroubaceae). Biochemical Systematics and Ecology 35 (1): 42-44 January 2007

* Henry GE, Adams LS, Rosales JC, Jacobs H, Heber D, Seeram NP. Kaurene diterpenes from Laetia thamnia inhibit the growth of human cancer cells in vitro . Cancer Letters 244 (2): 190-194 (2006)

* Kahwa, IA. Contemporary ethical dynamics in the physical sciences, Ethical Perspectives for Caribbean Business, Arawak Publications 2007, Kingston, Jamaica; PP196-2009. Editors: Cowell, NM; Campbell, A; Chen, G; Moore, S.

* Minott DA , Brown HA. Differentiation of fruiting and non-fruiting Pimenta dioica (L.) Merr. trees based on composition of leaf volatiles. Journal of Essential Oil Research 19 (4): 354-357 (2007)

* Mulder WH. Thermodynamic analysis of some electrochemical properties of transition metal complexes in electronically excited states. Journal of Photochemistry and Photobiology A-Chemistry 187 (2-3): 247-254 (2007)

* Williams LAD, Conrad J, Vogler B, Rosner H, Porter RBR, Setzer W, Barton EN, Levy HG, Mika S, Klaiber I, Nkurunziza JP, Kraus W. In vitro anti-proliferation/cytotoxic activity of epingaione and its derivatives on the human SH-SY5Y neuroblastoma and TE-671 sarcoma cells. WIMJ 56 (1): (2007)

* Junor GO, Porter RBR, Facey PC, Yee TH. Investigation of essential oil extracts from four native Jamaican species of Bursera for antibacterial activity. WIMJ 56 (1): 22-25 (2007)

* Lamm AS, Chen ARM, Reynolds WF, Reese PB. Steroid hydroxylation by Whetzelinia sclerotiorum, Phanerochaete chrysosporium and Mucor plumbeus. Steroids 72 (9-10): 713-722 (2007)

* Jacob A, Simon O, Reese P, Singh P. Demonstration of antihistamine properties with AST-1: A bioactive extract from garden slugs (Diplosolenodes occidentalis). WIMJ 56 (1): (2007)

* Reese PB. Biotransformation of terpenes and steroids by fungi, Natural Products: Essential for human survival, ed. Y.-Z. Zhu, B.K.-H. Tan, B.-H. Bay and C.-H. Liu, World Scientific Publishing Co., Singapore, 2007, pp 71-76.

* Singh-Wilmot MA, Richards-Johnson RU, Dawkins TN, Lough AJ. Lanthanide(III) coordination polymers from the exo-coordination of Na^+: Synthesis, structure, luminescence and decay dynamics. Inorganica Chimica Acta 2007, 360: 3727-3732

Technical Reports

Anthony M. Greenaway

* Caustic soluble phosphorus in Jamalco bauxites: Fourth Quarterly Report. Khadeen E. Henry, Kamille K. Gyles, Michael D. Coley, Anthony M. Greenaway. Submitted to Jamalco and Alcoa World, August, 2006. 26 pages.

* Caustic soluble phosphorus in Jamalco bauxites: Fifth Quarterly Report. Khadeen E. Henry, Kamille K. Gyles, Michael D. Coley, Anthony M. Greenaway. Submitted to Jamalco and Alcoa World, April, 2007.

* Caustic soluble chromium, manganese, copper, zinc and cadmium in Jamalco bauxites. Fourth Quarterly Report. Alicia N. Bucknor, Michael D. Coley, Anthony M. Greenaway. Submitted to Jamalco and Alcoa World, August, 2006.

* Caustic soluble chromium, manganese, copper, zinc and cadmium in Jamalco bauxites. Fifth Quarterly Report. Alicia N. Bucknor, Michael D. Coley, Anthony M. Greenaway. Submitted to Jamalco and Alcoa World, April, 2007.

INCOME GENERATION/GRANTS

Dr. Michael Coley - received US$2,000 from the Board for Graduate Studies, Mona to purchase sieve shaker equipment and US$4,000 from the Board for Graduate Studies for student travel to Australia.

Dr. Anthony Greenaway - Water Analytical Services $1,132,000

Winklet Gallimore - received US$2,500 from Campus Research and Publications Grant

Ishenkumba Kahwa - received J$6,429,385 from the Environmental foundation of Jamaica for removal, packaging and disposal of asbestos from Succaba Pen, Old Harbour; US$16,000 from UNESCO – Sustainable Development issues in the Caribbean; US$5,000 from IANAS - for a conference on primary school science, technology and innovation education in CARICOM; J$250,000 from UWI Special New Initiative for the NMR effects of coupled lanthanide ions; US$1,517 from Research and Publications for student travel to a conference; and J$300,000 for asbestos related consultancies.

Donna Minott-Kates - received J$1, 090,000.00 from Better Process Control School; and J$106,000.00 for Hypoglycin production.

Willard Pinnock - received J$869,590 from air pollution monitoring at JAMALCO.

Paul Reese received: J$13.0M (equivalent US$196,860) from Finance & General Purpose Committee, Mona (September 2006) to cover costs associated with obtaining worldwide patents for two inventions; J$326,000 (equivalent US$4,820) from the Strategic Transformation Team, Mona (February 2007) to cover the costs involved in carrying out a survey of issues facing research students on the Mona Campus; US$2,020 from the Board for Graduate Studies, Mona (March 2007) to purchase glassware and media ingredients for project "Bioconversion of stemodane natural products by Mucor plumbeus"; and J$250,000 (equivalent US$3,660) from the Research Fellowship Committee (Special New Initiative Grant), Mona to fund project entitled "Investigation of natural products from two marine-derived fungi".

Novelette Sadler-McKnight - received J$1,813,400 from Outreach activities.

Commercial Chemical Synthesis Project which started last year attracted business worth US$13,000.

Summer School - Led by Mr. Gerald Lindo (Laboratory Technician)

The Department restarted its Summer School Programme from which it earned J$3,296,782.50.

Sale of Liquid Nitrogen totalled J$55,850.00.

Various Income Generation Activities - Led by Mrs Miriam Lindo

J$550,850.00 to the consultation fund the income of which totalled J$6,060,232.46

PUBLIC SERVICE

Professor Tara Dasgupta

- President, Caribbean Academy of Sciences
- Member, ICSU - Regional Committee of Latin America and Caribbean
- Member, IUPAC - National Adhering Organization Jamaica
- Reviewer, Inorganic Chemistry; Inorganica Chemica Acta; Dalton Transaction; Bioinorganic Chemistry; J. Agricultural and Food Chemistry; Journal of Sulfur Chemistry; West Indian Journal of Engineering; Mechanism of Inorganic Reactions.
- Chief Editor, Jamaican Journal of Science and Technology
- Editorial Board Member, Inorganic Reaction Mechanisms
- Member, National Agricultural Health & Food Safety Coordination Committee

Dr. A. Greenaway

- Member, National Ozone Commission
- Member of BSJ/NEPA Phosphate Technical Committee
- Chairman, of the Laboratory Association of Jamaica's Proficiency sub-committee

Professor Y. Jackson

- Member, UWI Strategic Transformation Team
- Scientific Consultant, Tanaud International
- Regional Editor, MOLECULES
- Board Member, Hampton School for Girls

Professor I. A. Kahwa

- Chair, Science, Technology and Innovation Task Force - PIOJ
- Referee, J. Chemical Education, Inorganica Chimica Acta, New J. of Chemistry, Thermochima Acta, Inorganic Chemistry, Photochemistry and Photobiology and West Indian J. Engineering and J. Coordination Chemistry.
- Board Member, International Centre for Environmental and Nuclear Sciences.
- CARISCIENCE Representative, Science Education Focal Points InterAmerican Network of Academies of Science (IANAS).
- Member, UWI Strategic Transformation Team

Professor R. Lancashire

- Secretary, Caribbean Academy of Sciences
- Titular Member, IUPAC Committee on Printed and Electronic Publications (CPEP)
- Member, IUPAC Sub-committee on Electronic Data Standards (SEDS)
- IUPAC Representative, CODATA
- Member, Advisory Group, ChemSpider.com
- Member, Editorial Advisory Board, ChemistryCentral.com

Dr. D. Minott-Kates

- Administrator, Better Process Control School (BPCS)
- Member, Ackee Technical Committee, Minister of Industry, Technology, Energy & Commerce
- Member, National Codex Sub-committee, Food Hygiene, Food Additives and Contaminants
- Member, Interim Governing Body/Food Advisory Council

Dr. W. Pinnock

- Member, National Radiation Safety Council
- Member, Steering Committee for Food Irradiation, National Commission of Science and Technology

Dr. R. Porter

- Member, Bureau of Standards Propane-Butane Technical Committee

Professor P. Reese

- Member, Equine Drug Testing Committee
- Member, Product Research & Development Committee, Scientific Research Council.

Dr. N. Sadler-McKnight

- Member, Technical and Finance Committee, Scientific Research Council
- Council Member, Jamaica Society for Scientists and Technologists (JSST).