DEPARTMENT OF CHEMISTRY

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

WORK OF THE DEPARTMENT

This academic year started with a Quality Assurance Review exercise of the Department's academic programmes and resources as well as UWI Mona's mechanisms and processes supporting delivery of chemistry education and training. The exercise produced twenty-three (23) recommendations some of which are being implemented. Student ratings for teaching performance continue to be high: averages 3.5 -

4.65 for lecturers (18) and 3.36 -4.2 for courses (28).

The Office of the Board for Undergraduate Studies (OBUS) and the Board for Graduate Studies and Research have approved the establishment of a new BSc, MSc and PhD programmes in Occupational and Environmental Safety and Health (OESH), which will be delivered through the Department. These OESH programmes were developed with EFJ funding to a collaboration between the Departments of Chemistry, Community Health & Psychiatry and the Labour Studies Programme of the Mona School of Business.

Through MITS's ICT modernization programme, the Department brought into service its state of the art laboratory multimedia facility with projection, audio, electronic board, and video playing and recording capabilities. Use of these facilities has improved student learning comfort and effectiveness and is playing a key role in implementing our curriculum and its delivery processes.

The Department realised a total of US$802,131.00 in its fund raising efforts. Dr. A. Greenaway's work must be singled out for special commendation for attracting over 50% (US$447,749) of the income generated by the Department.

The high quality and productivity (refereed papers: total 26 per capita = 1.4) of the Department's research thrust continues to attract international attention. The Royal Society of Chemistry (UK), graced the cover of its prestigious journal (Organic and Biomolecular Chemistry, 20th issue, 2004) with the work of Prof. Yvette Jackson and her graduate student Nadale Downer.

For the upcoming academic year the Department will seek to:

- complete the joint curriculum reform which we are engaged in with the St. Augustine and Cave Hill Campuses
- introduce research experience for every student doing Chemistry BSc major
- modernize, streamline and consolidate laboratory sessions into enriched stand-alone courses that are more manageable and exciting for students
- commence the Occupational and Environmental Safety and Health (OESH) programme
- keep our research output above thirty (30) publications

increase our income to US$1M.

HIGHLIGHTS OF MAJOR ACTIVITIES IN THE DEPARTMENT

1. Department's Quality Assurance Review

The Quality Assurance Review exercise was carried out from September 27-October 4, 2004. The team comprised Professor George Newkome, Vice President for Research & Dean Graduate School, Oelschlager Professor of Science and Technology, University of Akron, USA; Dr. Austin Greaves, Consultant, Rotoflex (Jamaica) Limited, Kingston, Jamaica; and Professor Dyer Narinesingh, Dean, Faculty of Science and Agriculture, University of the West Indies, St. Augustine Campus, Trinidad and Tobago. The twenty-three (23) recommendations from the review process covered the chemistry curriculum, teaching and learning processes, resources for learning and teaching, assessment mechanisms and learning outcomes, student profiles and quality enhancement/assurance processes. Implementation has already begun for critical recommendations such as reform of curriculum delivery/assessment and technical services as well as development of a departmental quality system.

2. Chemistry Curriculum Reform

Joint curriculum reform efforts with the St. Augustine and Cave Hill campuses, which commenced last year, were continued. Besides desirable periodic review, the main reasons for the curriculum reform effort arise from the Quality Assurance Review process at the three campuses. It was concluded that among other considerations there is the need for (a) a common chemistry core curriculum for all UWI campuses (b) a research project requirement designed to promote higher order learning outcomes for all chemistry majors (c) separating laboratory learning from lectures and subsequent consolidation (d) streamlining and enrichment of laboratory sessions so as to effectively provide for quality practical skills training and chemical education (e) and to respond to well documented student concerns with the '*large weekly volume of laboratory report write-ups that frequently leaves them without enough time or energy to learn'*. This process will continue this year so that we can start 2006/7 with a new cross-campus curriculum.

3. UWI Chemistry work made cover page for RSC Journal

The work of Professor Yvette Jackson and her graduate student Ms. Nadale Downer made the cover page of the prestigious Royal Society of Chemistry Journal – Organic and Biomolecular Chemistry in their 20th issue for 2004. The Editors of the prestigious journal made the selection from a field of several finalists based on the quality of work published in the issue and its creative presentation.

4. Emergency First Aid Course

The Department hosted the holding of an Emergency First Aid Course conducted by the Jamaica Red Cross Society. The Course was Co-ordinated by Dr. Roy Porter and seven Administrative and Technical Staff, fifteen graduate students and two Service Staff completed the course and were awarded Certificates of Participation.

5. Better Process Control School

Dr. Donna Minott-Kates spearheaded the Better Process Control School (BPCS) which had forty (40) participants including one representative from a food processing establishment in Trinidad and Tobago. Participants included processors and members of the regulatory agencies which govern the operations of food processing plants. The course was jointly monitored by representatives from the Bureau of Standards Jamaica and the United States Food and Drug Administration.

6. Departmental Retreat

The Departmental Retreat was held on January8&9, 2005 at the Medallion Hall Hotel. The main areas of focus were:

. • The report and recommendations of the Quality Assurance Review and an action plan for the implementation

. • The cross-campus Chemistry Curriculum Reform proposal

7. Cape Workshop

A two-day CAPE Workshop was conducted in the Department to assist high school students who were preparing for the Caribbean Advanced Proficiency exams. The Workshop covered the Fundamentals of Spectroscopy for Unit I Chemistry and was coordinated by Dr. Novelette Sadler-McKnight.

8. Special Seminar

A special seminar was held in the Department to commemorate Professor Tara Dasgupta's thirty years of research at Mona. His presentation which was well received was entitled 'Reaction Mechanisms–thirty years at Mona'

9. Generating Genius Boys Programme

Ten high-achievers, boys between the ages of 11 and 12 years, who participated in the Generating Genius Boys were assisted by Dr. Novelette Sadler-McKnight, who acted on behalf of the Dean, organized laboratory experiments for the students as well as arranged a field trip for them to WINDALCO, one of our Bauxite Companies.

STAFF MATTERS

CATEGORIES	REGULAR	TEMPORARY	CONTRACT SERVICE	PART TIME	TOTAL
WIGUT	18	2	8	9	37
MONATS	19	3	–	–	22
UAWU	12	3	–	–	15
TOTAL	**49**	**8**	**8**	**9**	**74**

Appointments of Sub-Deans

Three (3) faculty members from the Department were appointed as Sub-Deans:

Dr. Novelette Sadler-McKnight – Distance Education and Outreach

Professor Yvette Jackson – Student Affairs

Professor Paul Reese – Graduate Studies

Strategic Transformation Team (STT)

Professors Ishenkumba Kahwa and Yvette Jackson were appointed members of the Strategic Transformation Team.

Interim Head Electronics Unit

Professor Tara Dasgupta was asked to act as the Interim Head of the Electronics Unit.

Miss Allison Hall, Laboratory Technician completed her MBA programme.

Research Day Awardees

- .– **Dr. Willem Mulder** for Best Publication
- .– **Dr. Danielle Aquart** and **Prof. Tara Dasgupta** for Best Publication
- .– **Prof. Yvette Jackson** for Outstanding Research Activity

PAPERS PRESENTED

- **Mohammed Bakir** (with Colin Gyles) "Development of Chemical Sensor For Biomolecules and Metal Ions" Science Symposium 2005, Northern Caribbean University, Mandeville, Jamaica, April 19, 2005 and Seventh Conference of Faculty of Pure & Applied Sciences, UWI-Mona, Jamaica, May 16 -19, 2005.
- (with C. Gyles & O. Green) "Synthesis, spectroscopic and structural properties of metal compounds of polypyridyllike hydrazones" at the 230th National ACS-meeting, Washington, DC, USA, August 28, 2005.

Dasgupta, Tara

- "Inorganic Reaction Mechanism – Thirty Years of Research at Mona". Chemistry Department, UWI, Mona, 2004.
- "Equine Drugs – Recent Trends and Future, Jamaican Perspective" Jamaica Racing Commission, Kingston.
- "Analysis of PCBs" at the National Environmental Planning Agency.

Gallimore, Winklet

- "Marine Biodiversity of Jamaica: Potential Pharmaceutical and Industrial Applications" 18th Annual National Conference on Science and Technology, Scientific Research Council, November 2004.

Greenaway, Anthony

- "A different perspective on the status of Jamaica's north shore reefs – is there a silver lining?" Association of Marine Laboratories of the Caribbean Conference, Curacao, June 13 -17, 2005.

Kahwa, Ishenkumba

- "New opportunities for training and education in Occupational and Environmental Safety and Health:" Biennial conference of the Jamaica Institute of Environmental professionals, Kingston, Jamaica, June 16, 2005.
- "From Discrete Dinuclear Molecules to Nanoclusters: Electronic cooperativity in Lanthanide(III) Aggregates:" Department of Chemistry, University of California, Los Angeles, March 18, 2005.
- (with S. McKenzie) "Novel Double Helical Tetranuclear Lanthanide (III) Nanoclusters" American Chemical Society National Meeting, March 13, 2005.
- (with R.U. Richards-Johnson) "Novel hexanuclear lanthanide (III) complexes: syntheses, structures and luminescence." American Chemical Society National Meeting, March 13, 2005.
- "Electronic interactions in lanthanide nanoclusters:" American Chemical Society

National Meeting March 13, 2005

. • (with T. Dawkins) "Luminescence Behaviour of Novel Dinuclear Complexes", Seventh Biennial Conference of the Faculty of Pure & Applied Sciences, UWI-Mona, Jamaica, May 16 -19, 2005.

Jackson, Yvette

- (and N. K. Downer) "Cyclisation of 2-Methoxythio-benzamides and Synthesis of 4,7-Dioxo-6-Methoxy-2-Phenylbenzothiazole" at the Royal Society of Chemistry Symposium on Heterocyclic Synthesis, Grasmere, UK, May 2005. Poster

Lancashire, Robert

. • "Proposed International Standard for EMR spectroscopic data", Pittcon Conference, Orlando, USA, March 2005

. • "Web Development and Science, Technology and Curriculum". Quality Enhancement Conference, St Augustine Campus, June, 2005

Pinnock, Willard

- "Towards a Sustainable Air Pollution Monitoring Nework for Kingston" National Conference on Environment and Sustainable Development, Jamaica Institute of Environmental Professionals, June 2005.

Porter, Roy

18• (and Petrea Facey) "Natural pesticide from Jamaican plant", th Annual SRC conference on The Development of a Nutraceutical Industry, Jamaica, November 2004.

- "Chemical composition and biological activity of the essential oil from Jamaican *Hyptis verticillata* Jacq.**,"** P.C. Facey,
  R.B. Porter, P.B. Reese and L. Williams, American Chemical Society Annual Meeting, Philadelphia, Pennsylvania, U.S.A. (August 22 -26, 2004).

Reese, Paul

- "Biotransformation of Terpenes and Steroids by Fungi," P.B. Reese, 3rd International Conference on Natural Products, Nanjing, China (October 23 -25, 2004). Invited Speaker.

PUBLICATIONS

Monograph

* **Roy B. R. Porter,** "Introductory to Chromatography, Analytical Chemistry", Part 11, UWIDEC (2005).

Refereed Journal Articles

.* **M. Bakir**, Hassan, I., Johnson, T., Gyles. **C., Coley**,M. *et al* , "X-ray crystallographic, electrochemical and spectroscopic properties of 2-pyridinio 2-pyridyl ketone phenyl hydrazone chloride hydrate", *Journal of Molecular Structure,* 688, (2004), 213.

.* **M. Bakir** and I. Hassan, "cis-dicarbonyltriphenylphosphine[hydroxybis(2-pyridyl)methanolato-k3-N,O,N']rhenium(I) dimer dimethyl sulfoxide solvate, [cis-$Re(CO)_2(PPh_3)$(dpkO,OH)].dmso", *Acta Crystallographica 2004, E60, m1966 -m1969.*

.* **M. Bakir,** O. Green and C. Gyles, "Molecular Sensing Behavior of the first Mn(I)-

compound of di-2-pyridyl-ketone-*p*-nitrophenylhydrazone (dpknph), *fac*-[Mn(CO)$_3$-(dpknph)Br] " *Inorganza Chimica Acta,* 2005, 358, 1835-1840.

□.* **T. Dasgupta,** D. McGrowder and D. Ragoobirsingh. "The effect of nitric oxide on glucose metabolism" *Molecular and Cellular Biochemistry,* 2004, 263, 29

□.* R. Reid and **T. Dasgupta**. "The Determination of the Levels of Polychlorinated Biphenyls (PCBs) In some Urban and Rural Areas of Jamaica" *Jamaican Journal of Science & Technology,* 2004, 15, 2

□.* R. Reid and **T. Dasgupta** "The Catalytic Degradation of Polychlorinated Biphenyls (PCBs)". *Jamaican Journal of Science & Technology,* 2004, 15, 11.

□.* K. Abdur-Rashid, N. J. Blundell, **T. Dasgupta;** J. Burgess and D. Drasdo. "Solvation of Inorganic Complexes*:* Transfer Chemical Potentials for Mono-and Bi-nuclear Cobalt(III) Complexes to Methanol + Water Mixtures". *Transition Metal Chemistry,* 2005, 30, 176

□.* D. Ramdon and **T. Dasgupta**. "Mechanistic Studies of the Reaction between Thioglycolic Acid and Chromium(VI): Substitution, Isomerisation, and Electron Transfer". *Inorganic Reaction Mechanism,* 5, 211(2005).

□.* D. Aquart and **T. Dasgupta** "The reaction of S-nitroso-N-acetyl-D,L-penicillamine (SNAP) with the angiotensin converting enzyme inhibitor, captopril-mechanism of transnitrosation". *Organic and Biomolecular Chemistry,* 2005, 3, 1640 -1646.

□.* M. Bakir, G. Harewood, **T. Dasgupta,** A. Holder, I. Hassan, P. Maragh and M. Singh-Wilmot "5-[(4-methyl-phenyl)diazenyl]salicylaldehyde". *Acta Crystallographica* 2005, E-61, O1611

□.* D. Aquart and **T. Dasgupta** "Metal-NO Complexes: Structures, Syntheses, Properties and NO-releasing Mechanisms." *Nitric Oxide Donor;* ed. Peng Wang, Tingwei Cai, Naoyuki Taniguchi; WILEY-VCH Verlag GmbH & Co., Weinheim, Germany, 2005, 109

□.* M. Bakir*,* **T. Dasgupta***,* S. K. Dutta, N. Ngah and B.Yamin. "Porous Solvent-free 1,2-bis(salicylidene)propane-1,3-dia-

minato-bis{[bis-(salicylidene)propane-1,3 diaminato]iron-(III)}". *Acta Crystallographia,* 2005, E61, m1464

□.* S. Simpson and **H. Jacobs**. "Alkaloids and Coumarins from *Esenbeckia pentaphylla* (Rutaceae) D." *Biochemical Systematics and Ecology* 2005, 33 (8), 841 -844.

□.* M. A. McAnuff, W. W. Harding, F. O. Omoruyi, **H. Jacobs**, E. Y. Morrison and H. N. Asemota". Hypoglycemic effects of steroidal sapogenins isolated from Jamaican bitter yam, *Dioscorea polygonoides*". *Food and Chemical Toxicology* 2005, 43 (11), 1667 -1672.

□.* Nadale K. Downer and **Yvette A. Jackson**, "Synthesis of Benzothiazoles *via Ipso*-Substitution of *ortho*-Methoxy-thiobenzamides" *Organic and Biomolecular Chemistry,* 2004, 2, 3039 -3043, cover article.

□.* **M. Bakir,** P.C. Facey, I. Hassan, **W.H. Mulder**, **R.B. Porter**. "Mikanolide from Jamaican *Mikania micrantha*". *Acta Crystallographica,* C60, 2004, o798 -o800.

* Henry A. Ellis, Nicole A. S. White, Richard A. Taylor and **Paul T. Maragh**. "Infrared, X-ray and Microscopic Studies on the Room Temperature Structure of Anhydrous Lead (II) n-Alkanoates" *Journal of Molecular Structure,* 738, 2005, 205 -210.

□.* Mohammed Bakir, Gabriel Harewood, Alvin Holder, Ishmael Hassan, Tara Dasgupta, **Paul Maragh***,* Marvadeen Singh-Wilmot. "Structure Report: 5-[(4-Methylphenyl) diazenyl]salicylaldehyde" *Acta Crystallographia* Section E, *Organic Papers,* 2005, E61, 1611 -1613.

□.* **Paul T. Maragh***,* Sonia E. Thomas and Tara P. Dasgupta. "Kinetics and Mechanism of the Hydrolysis of the Trinuclear Cation, [μ_3-oxo-triaqua-hexakis(acetato) trisiron(III)]$^+$ [$Fe^{III}_3O(OOCCH_3)_6(OH_2)_3]^+$, in Aqueous Perchloric Acid Media". *Inorganica Chimica Acta,* 2005, 358/13, 3610 -3616.

□.* **W.H. Mulder,** R. Andreu, M. Molero, W.R. Fawcett. "Calculation of ionic surface excess concentrations in the diffuse double layer at low field strengths for a restricted

primitive model electrolyte". *Journal of Electroanalytical Chemistry,* 2005: 575**,** 211 -219.

* J. J. Calvente, G. López-Pérez, P. Ramírez, H. Fernández, M.A. Zón, **W.H. Mulder**, R. Andreu. "Experimental study of the interplay between long-range electron transfer and redox probe permeation at self-assembled monolayers: Evidence for potential-induced ion gating". *Journal of the American Chemical Society,* 2005, 127, 6476 -6486.

 .* **Petrea C. Facey, Roy B. R. Porter, Paul B. Reese** and Lawrence A. D. Williams. "Biological activity and Chemical composition of the Essential Oil from Jamaican *Hyptis verticillata* Jacq."; *Journal of Agricultural and Food Chemistry,* 2005, 53, 4774 -4777

 .* G. D .A. Martin, W.F. Reynolds and **P.B. Reese** "Investigation of the importance of the C-2 and C-13 oxygen functions in the transformation of stemodin analogues by *Rhizopus oryzae* ATCC 11145". *Phytochemistry*, 2004, 65, 2211 -2217.

 .* G. D. A. Martin, W. F. Reynolds and **P. B. Reese**, "Stemodane skeletal rearrangement: chemistry and microbial transformation". *Phytochemistry*, 2005, 66, 901 909.

 .* **M. A. Singh-Wilmot**, I. A. Kahwa, A. J. Lough, "Bis(**�** -2,6-diformyl-4-methylphenolato)bis[bis(2,6-diformyl-4-methyl phenolato)neodymium(III)]", *Acta Crystallographia,* 2005, E61, m1009 -m1011.

 .* **M. A. Singh-Wilmot**, I.A. Kahwa and A. J. Lough *Acta Crystallographia,* 2005, E61, m970-m972 "Octaaquatetrakis (2-2,6-diformyl-4-methylphenolato)tetra-3-hydroxo-etraneody-mium(III) trifluoromethanesulfonate butanol disolvate tetrahydrate"

Technical Reports

 .* K.H. Henry, M.D. Coley and **A.M. Greenaway**. "Caustic Soluble Phosphorus in Jamalco Bauxites: A Review of the Literature". Presented to Jamalco, May 19, 2005. 33 pages.

 .* A.N. Bucknor, M.D. Coley and **A.M. Greenaway**. "Caustic Soluble Trace Metals in Jamalco Bauxites: A Review of the Literature". Presented to Jamalco, May 19, 2005. 48 pages.

INCOME GENERATION

Research Grants

Professor Yvette Jackson received a grant from the Royal Society of Chemistry (2005)–£1,200.00, Synthesis of Aza-and Diazarotenoids.

UWI, Office of Planning & Institutional Research (2004) – US$37,500.00, Synthesis of Azarotenoids – Novel Nitrogen Analogues of Insecticidal, Antiviral and Anticancer Agents

Dr. Anthony Greenaway

Caustic Soluble Impurities in Jamalco Bauxites: Funded by Jamalco and Alcoa World.

Caustic Soluble Phosphorus in Jamalco bauxites – **US$110,641**

Caustic Soluble Trace metals in Jamalco bauxites – **US$152,533**

Laboratory development Fund – **US$100,725**

Duration of Project – February 2005 – July 2007

Assessment of the Capacity of the Black River upper Morass to Assimilate Nutrients inputs from Agriculture, Domestic and Industrial Activities. Funded by the Environmental Foundation of Jamaica. **J$4,975,500**.

Duration of project November 2004 – November 30, 2006.

Community Environmental Management Project: Black River Watchers sub-project. Funded by Inter-American Development Bank. **US$3,600.00**

Duration of Project January 2005 – August 2005.

Dr. Winklet Gallimore

Obtained a grant from the Organization for the Prohibition of Chemical Weapons (OPCW) to support research. [2005 – 2006, Euro 33,850.00].

Prof. Ishenkumba Kahwa

Received US$5,929 from the Research and Publications Fund for 2004-5 to support student research and conference presentations on Nanoclusters.

Commercial Projects

The Pesticide Research Project under the supervision of **Professor Tara Dasgupta** realised close to **$1.5M** from analytical services and the money was spent to maintain and develop instrumental facility of the laboratory. Two important accessories for GC/MS and LC/MS were procured – Purge and Trap accessory and Post-derivitization system-at a cost of US$30,000.00 to expand our capability to analyse volatile organic compounds and various herbicides.

The Chemistry Department's Analytical Facility at the Discovery Bay Marine Laboratory (now cited in the Department) under the supervision of **Dr. A.M. Greenaway,** generated approximately **J$300,000** from analyses of marine waters, funds used to support graduate student research.

Prof. I. Kahwa's Project -The Asbestos Project generated **J$266,975** from analyses of asbestos samples and associated outreach.

Dr. Donna Minott-Kates' self-financing programme: Better Process Control School realized an income of **$1,283,628.77**.

Dr. Novelette Sadler-McKnight raised **$2,143,593.00** from outreach activities such as CAPE workshops, sale of chromatography kits, laboratories for high schools.

The Department received **US$135,000** from **Tanaud International** as per agreement and through **Prof. R. Lancashire US$20,000** from **MDL Information Inc**. in support of his team's project on spectroscopic software.

The Department restarted its **Summer School Programme** from which it earned **J$1,143,670** and it sold Liquid Nitrogen worth J$55,850.00**. Mrs. Miriam Lindo's** various fund raising activities earned **J$550,850.00.**

PUBLIC SERVICE Professor T. Dasgupta:

- .– Chief Editor, Jamaican Journal of Science and Technology
- .– Director, Mona Institute of Applied Sciences
- .– Executive Member, Natural Product Institute
- .– Member, BSJ Committee for designing Metrology Building
- .– Member, National Agricultural Health and Food Safety Coordinating Committee
- .– Member, Board of Editors, Inorganic Reaction Mechanisms.
- .– External Examiner, University of Guyana.
- .– Referee for Inorganic Chemistry, Dalton Transaction, International Journal for Chemical

Kinetics, West Indian Journal of Engineering

Dr. W. Gallimore

18– Member, Technical Committee, Review of abstracts-SRC th Conference on Science and Technology.

 .– Member, National Authority, Organization for the Prohibition of Chemical Weapons (OPCW).
 .– Chairperson, Nutraceutical Symposium–"Supporting the Development of A Nutraceutical Industry in Jamaica" [Natural Products Unit, Scientific Research Council].

Dr. A. Greenaway:

– Member, National Ozone Commission

Professor Y. Jackson

 .– Consultant, Tanaud International
 .– Regional Editor, MOLECULES
 .– Foreign Research Mentor, Minority International Research Training Programme, Barry University, Florida
 .– Member, Board of Governors, Hampton High School, St. Elizabeth

Professor H. Jacobs:

– Member, Project Steering Committee for Enabling Activities for Jamaica to Develop and implement the National Implementation Plan for the Persistent Organic Pollutants (POPs) Convention

Professor I. A. Kahwa:

 .– Referee for: 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 of Directors, International Centre for Environmental and Nuclear Sciences
 .– Asbestos abatement and management for several agencies
 .– CARISCIENCE representative, Science Education Focal Points Inter-American Network of Academies of Science (IANAS)

Professor R. Lancashire:

 .– University Representative, Board of the Jamaica Computer Society Education Foundation
 .– Executive Member, Jamaica Society of Scientists and Technologists
 .– Leader, IUPAC Task Group on EMR data structures

Dr. P. Maragh:

 .– Faculty Representative, FPAS on WIGUT Executive
 .– Member, National Industrial Safety Committee – Bureau of Standards
 .– Member, Museums Advisory Board – Institute of Jamaica

Dr. D. Minott-Kates:

 .– Member, Jamaica Bureau of Standards-Coconut Water Technical Committee

 .– Member, Agro-Processing Resource Network (APRN)
 .– Member, Scientific Research Council Board's Sub-Committee for the Food Technology Institute
 .– Member, National Agricultural Health and Food Safety Coordinating Committee
 .– Director, Better Process Control School (certification for the food industry)

Dr. W. Pinnock:

 .– Member, National Radiation Safety Council, Ministry of Health, Government of Jamaica.
 .– Member, Steering Committee for Food Irradiation, National Commission of Science and Technology, Office of the Prime Minister (Jamaica).

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 of the Scientific Research Council
 .– Council member, Jamaica Society for Scientists and Technologists (JSST).
 .– Executive Secretary, Alumni and Friends of the Department of Chemistry, UWI, Mona (CHEMSAF).

Dr. M. Singh-Wilmot

– Member, Organizing Committee for Caribbean Advanced Proficiency (CAPE) Workshop 2004-2005.

CATEGORIES OF STUDENTS TOTAL STUDENT ENROLMENT IN CHEMISTRY COURSES

LEVEL	2002/2003	2003/2004	2004/2005
Preliminary	332	397	420
Introductory	496	533	557
Advanced	725	845	883
Postgraduate (Research students)			Full-time 44 Part-time 17

Undergraduate Awards

Congratulations to **Miss Safiyyah Dundee** who obtained a First Class Honours degree in Chemistry while three other students received First Class in Chemistry and another major.

A total of seven undergraduate students from the Department received awards ranging from $10,000 to $60,000 for their academic achievements in Chemistry.

Postgraduates

Four graduate students completed their Doctor of Philosophy degrees.

Ms. Ordel Brown

Mr. Colin Gyles
Ms. Jane Lue
Ms. Denise Simpson

Another six students have been upgraded to Ph.D status, namely: Roxan Richards-Johnson, Shelly McKenzie, Nicole White, Nadale Downer, Patrice Peart and Duanne Biggs.