

DEPARTMENT OF CHEMISTRY

Professor Helen Jacobs, BSc, PhD, UWI
– **Head of Department (acting)**

OVERVIEW

The department continues to work towards strengthening and advancing core teaching and research functions and keeping pace with changing pedagogical styles. In this past year the framework of a reformed curriculum was formulated and approved and the peer-led team learning programme for introductory level students and the textbook rental scheme were continued. There were seventy-two BSc graduates in Chemistry, three of whom received first class honours, and thirteen received upper second class honours. Research output was a respectable 20 publications and 18 conference presentations, while eleven students completed the requirements for higher degrees.



Activities within the department included a vibrant seminar programme, continuation of the CAPE workshops for secondary school students and exchange visits from overseas faculty and students. The department also houses the well-subscribed Occupational and Environmental Safety and Health (OESH) programme. Our faculty members continue to perform important roles in the local and wider scientific community: judging science competitions, leadership and membership of technical committees, journal editorship and refereeing functions.

HIGHLIGHTS OF MAJOR ACTIVITIES

Better Process Control School

The ninth biennial Better Process Control School (BPCS) was delivered in the Department January 3-7, 2011. The BPCS is an FDA-approved

certification course offered to members of the food industry and regulatory agencies locally and in the wider Caribbean. It is a requirement for processors of low acid and acidified canned foods, especially if these products are to be exported to the USA. The UWI BPCS is coordinated by Dr. Donna Minott-Kates and is the only BPCS operated by a non-US institution.

The Occupational and Environmental, Safety and Health (OESH) Programme

There were twenty-three students in the MSc OESH in Sept. 2010 and, of these, nineteen were new students. Fifteen students graduated from the programme in November 2010. At the BSc level seven students were registered in advanced OESH courses. The following five short courses were run.

- Essential of Occupational Safety and Health (EOSH), 30 hours, four cohorts
- Hazardous Material Management
- Job Safety Analysis
- Hazardous Waste Operations and Emergency Management (HAZWOPER)

International Year of Chemistry (IYC) 2011

The year 2011 has been declared the International year of Chemistry by the UNESCO and the International Union of Pure and Applied Chemistry (IUPAC). Research Day, January 27-28 was used as a soft launch of IYC 2011. The Department will, solely and in partnership with private and public sector entities, mount and participate in a series of events and activities.

Book Launch

A book launch was held on December 1, 2010 for the book entitled The Department of Chemistry, UWI, Mona with Emphasis on the Early Years,

authored by Emeritus Professor Kenneth Magnus and Professor Robert Lancashire.

NEPA Visible Emissions Training

The Department hosted a Visible Emissions training course (Smoke School) put on by NEPA January 25th to 27th, 2011. Approximately sixty (60) persons participated in the course. A second such course was also run in July with about the same number of participants.

OUTREACH ACTIVITIES

CAPE Workshop

The annual workshop on spectroscopy and chromatography for students sitting the Caribbean Advanced Proficiency Examinations (CAPE) in Chemistry was held between January 17 and 21. There was a 23% increase in the number of participants compared to last year. A total of 939 students and 43 teachers from 41 secondary institutions across the island participated. As in previous years, this workshop was coordinated by Dr. Novelette Sadler-McKnight.

BEd (Distance) Project and BEd/Open Campus Programme

The Department accommodated four students from the Open Campus programmes for laboratory sessions during the summer. This is the final cohort of students in the BEd online programme

THE CHEMICAL SOCIETY

The Executive Body of the UWI, Mona Chemical Society, which is comprised of graduate students, spearheaded the publication of a magazine “*The Chemist*” which was launched on the 31st March 2011. The magazine contains news, profiles, articles, commentary, jokes, photographs and quizzes, arranged in an attractive format.

STUDENT ENROLMENT

Intake to the introductory level courses remained at the elevated levels of the previous two years, while the numbers of students reading the preliminary and advanced courses in Chemistry were essentially unchanged. Four new graduate students joined the Department.

Table 1: Numbers of students reading courses in chemistry, 2007-2010

Level	2007-2008 Sem 1/Sem 2	2008-2009 Sem 1/Sem 2	2009-2010 Sem 1/Sem 2	2010-2011 Sem 1/Sem 2
Preliminary	189	205/180	129/128	134/116
Introductory	377/363	491/440	532/465	537/458
Advanced	241/240	230/204	271/249	288/268
Postgraduates	64 (32 F/T; 32 P/T)	59 (31 F/T; 28 P/T)	45 24 F/T; 21 P/T)	50 (32 F/T; 18 P/T)

Book Loan Scheme

The Department continues to operate its book loan scheme for undergraduate students. Demand for textbooks for the introductory courses is still highest, followed by those for the preliminary courses.

Faculty Awards

Drs. Marvadeen Singh-Wilmot and **Camille Bowen-Forbes** were recognized for outstanding achievements at the Faculty Awards Ceremony.

Departmental Awards and Prizes

Seven undergraduate students received awards, ranging from \$10,000 to \$60,000, for their academic performance in Chemistry. They are **Mario Christie** (Cedric Hassall), **Ruel Campbell** (Garfield Sadler), **Assanie Benjamin** (Wilfred Chan), **Keisean Stevenson** (Leonard J. Haynes),

Leaford Henderson (Chemistry Department), **Junior Samuel** (Pavelich/Honkan) and **Sherdon Sterling** (Bertram Fraser-Reid).

Postgraduates

Five postgraduate students successfully defended their theses and were awarded the PhD degree. Another six students completed and were awarded their MPhil degrees. Names of the students who completed higher degrees in Chemistry in 2010-2011, and those of their supervisors are listed in the following table.

Table 2: Higher degrees in Chemistry awarded in 2011

Degree completed	Name	Supervisor
PhD	Ainka Brown	Dr. S. Jarrett
	Tanneika Dawkins	Prof. I Kahwa
	Mark Lawrence	Dr. P. Maragh/ Prof. T. Dasgupta
	Raymond Reid	Prof. T. Dasgupta
	Mark Richards	Dr. W. Pinnock
MPhil	Dwyte Bremmer	Dr. D. Minott-Kates
	Alicia Bucknor	Dr. M. Coley / Dr. A Greenaway
	Khadeen Henry	Dr. M. Coley / Dr. A. Greenaway
	Roxanne Higgins	Prof. Y. Jackson
	Rashidah Khan	Dr. W. Pinnock
	Nadya-Kaye Phillips	Prof. P. Reese

Staff-Student Exchange programme

Dr. Anthony Greenaway and **Prof. Robert Lancashire** visited the University of Gothenburg in Sweden as part of the programme of staff-student exchange funded by the Linnaeus-Palme Foundation. Two of Dr. Greenaway's graduate students, Jheanell James and Nijole Young, spent semester 2 at the University of Gothenburg under the aegis of this exchange programme. Visiting our department from Gothenburg were

Prof. Leif Anderson, Prof. Per-Ola Norrby and three undergraduates, Jens Andersson, Carl-Johan Nolmark and Ivana Uzelac. Prof. Anderson, a marine chemist, participated in field trips (including DMBL) and explored possibilities for research collaboration and support for instrumentation in undergraduate analytical chemistry labs. Prof. Norrby, whose areas of interest are organic, inorganic and computational chemistry, delivered an intensive short course “Molecular Modeling for Experimental Chemists” and nine lectures on catalysis in the graduate course, CHEM6101 – Advanced Inorganic Chemistry. This programme is coordinated by **Prof. Ake Nilsson** (Gothenburg) and **Dr. Novelette Sadler-McKnight** (UWI).

SEMINARS

Under the leadership of the new Seminar Coordinator, Dr. Marvadeen Singh-Wilmot, members of the department enjoyed an active seminar programme. Twenty-three seminars spanning a wide range of topics were delivered by visitors, faculty and postgraduates; these are listed below.

Table 3: Seminars delivered in the Department of Chemistry, 2010-2011

Seminars delivered by Visitors to the Department and Faculty		
Date	Name, Title, Affiliation	Title of Seminar
9/9/10	Mr. Keith Gardner, Director of Campus Security, UWI, Mona	“Security at UWI”
16/9/10	Prof. Ishenkumba Kahwa, Dean FPAS, UWI, Mona	“Translational Research: A UWI Chemist’s Perspective”
23/9/10	Mr. James Moss-Solomon, Retired Grace Kennedy Executive	“Transformation”
7/10/10	Dr. Dwight Collins, Cofounder/ Director of Jamaica Scientific Research Institute (JSRI)	“An Approach to Drug Discovery in Jamaica – Potential High Rewards with Mitigated Costs and Risks. The Journey has Begun ...”
14/10/10	Dr. Julie-Ann Grant, Resource Mobilization Coordinator, FPAS, UWI	“Funding Opportunities for Research, Capacity Building and Training”
21/10/10	Mr. Mark Hoffman, Director of Sales, MeasureNet Inc.	“MeasureNet: The New Element for your Lab”
25/11/10	Dr. Petrea Facey, Alexander von Humboldt Fellow, Research Fellow, Department of Chemistry	“Scholarships and Research Opportunities – Warum nicht Deutschland?”

2/12/10	Dr Peter Ruddock, Branch Manager, Tanaud International BV, UWI, Mona	“Chemistry at the Speed of Light: The Use of Microwaves in Chemical Syntheses”
20/1/11	Dr. Stacey-Ann Morgan, University of Toronto	“Design and Characterization of Genetically Encoded Photoswitchable DNA Binding Proteins”
24/2/11	Prof. Leif Anderson, Visiting Professor, University of Gothenburg, Sweden	“Biogeochemical Processes Impacting the Marine C-system”
3/3/11	Prof. Per-Ola Norrby, Visiting Professor, University of Gothenburg, Sweden	“18e R.I.P”
24/3/11	Dr. Andre Jones, Chemist and Research Scientist, Founder and CEO of Yono Corporation	“Chemistry - Our Lives, Our Future: Yono Corporation in Jamaica”
7/4/11	Dr. Paul Aiken, Senior Engineer and Head, Electronics Unit, UWI, Mona	“Navigating Through Your Chosen Career”
21/4/11	Dr. Kelling Donald, Associate Professor of Chemistry, University of Richmond, Richmond, VA	“Halogen Bonding - A Case where Inorganic Outperforms Organic and other Stories”
28/4/11	Dr. Martin Moncrieffe, Department of Biochemistry, University of Cambridge, UK	“Engineering Antibiotic Resistance: The Structure of a Glycosyltransferase Involved in Erythromycin Biosynthesis”
1/7/11	Dr. Tashni-Ann Dubroy, Assistant Professor of Chemistry, Shaw University, Raleigh, NC	“Substituent Effects on Exchange Coupling: Controlling the Interactions between Unpaired Electrons”
20/7/11	Prof. Isaiah Warner, Vice Chancellor, Strategic Initiatives, Louisiana State University, Baton Rouge, LA	“Nano GUMBOS - A New Breed of Nano Materials”
Seminars delivered by Graduate Students		
28/10/10	Mr. Raymond Reid, PhD candidate	“The Fate of Five Selected Pesticides in a Tropical Environment”
11/11/10	Mr. Paul Clare, MPhil candidate	“Chemical and Biological Transformation of Stenodane Terpenes”
18/11/10	Ms Nadya-Kaye Phillips, MPhil candidate	“Microbial Transformation Reactions of Steroids and Sesquiterpenes”
10/2/11	Mrs. Francine Taylor-Campbell, PhD candidate	“Nutrient Assimilation Capacity of the Black River Upper Morass: PREWET Model Application”
17/2/11	Ms. Safiyyah Dundee, MPhil candidate	“Hypoglycin: Partitioning in Canned Ackee and Relationship with Seed Size”
12/5/11	Mr. Dwyte Bremmer, MPhil candidate	“Polycyclic Aromatic Hydrocarbons in Jamaican Jerked Meats”

PAPERS PRESENTED

- **R. Lancashire**, “Data Standards within IUPAC and the role of CPEP”. 22nd CODATA CONFERENCE, Cape Town, South Africa, October 24-27 2010.
- C. Samuels, **R. Lancashire**, “The role of C@ribNET in the preservation of and access to scientific and technical data in developing countries”. 22nd CODATA CONFERENCE, Cape Town, South Africa, October 24-27 2010
- **R. Lancashire**, “2011 – The International Year of Chemistry (IYC 2011) and some early “Jamaica” Chemists”. The Caribbean Academy of Sciences, 17th General Meeting and Conference, St. John’s, Antigua, November 12-14, 2010
- **M. A. Bakir**, O. Green, C. Gyles and O. Brown, “Rhenium and manganese compounds of di-2-pyridyl ketone hydrazones”. (Poster) 242nd American Chemical Society National Meeting & Exposition, Denver, CO, USA, August 28 – September 1, 2011.
- P. C. Peart, A. C. Chen and **P. B. Reese**, “Use of immobilized filamentous fungi in the generation of steroid libraries”. (Oral presentation) 241st American Chemical Society National Meeting & Exposition, Anaheim, CA, USA, March 27-31, 2011.
- D. K. Fearon and **P. B. Reese**, “Natural product isolation from some marine-derived fungi”. (Poster) 240th American Chemical Society National Meeting, Boston, MA, USA, August 22-26, 2010.
- D. N. Haase, S-A. Parker, **H. Jacobs**, S. Badal, S. Francis, R. Delgoda, G. Huang and T-R. J. Tzeng, “Potential chemopreventive xanthenes and a new polyisoprenylated benzophenone derivative from *Garcinia humilis*”. (Poster) 242nd American Chemical Society National Meeting & Exposition, Denver, CO, USA, August 28 – September 1, 2011.
- **K. P. McCook-Russell**, P. C. Facey, M. G. Nair, and **C. S. Bowen-Forbes**, The exotic strawberry guavas - A great potential

for commercialization (Poster). Denbigh Agricultural Show, Clarendon, Jamaica, July 30 – Aug. 1, 2011.

- **C. S. Bowen-Forbes**, “Nutraceutical and Nutritional Studies on Exotic Jamaican Foods”. Inventors, Researchers and Entrepreneurs (IRAE) Exhibition and Convention Manchester, Jamaica (April 2011).
- O. Barrett, N. Downer-Riley and **Y. Jackson**, “Cyclization of *o*-Methoxythiobenzanilides: Synthesis of benzobisthiazoles, benzobisoxazoles and thiazolobenzoxazoles”, Florida Heterocyclic and Synthetic Conference, University of Florida, Gainesville, March 2011.
- N. Stephenson, **N. Sadler-McKnight**, “Implementation of the Science Writing Heuristic: The Challenges, Successes, and Lessons Learned”, 21st Biennial Conference on Chemical Education (BCCE), University of North Texas, Denton, Texas, August 1-5, 2010.
- J. Samuels, **N. Sadler-McKnight**, S. Olsson, G. Göransson, “Synthesis and Redox Properties of Molybdenum complexes and their use as potential models for molybdoenzymes”. University of Technology Inaugural Scientific Conference, June 8-9, 2011, Kingston, Jamaica.
- N. Lee-Platt, **N. Sadler-McKnight** and M. Rainford. “Identifying Socio-cultural Barriers and Borders to Primary Science Teaching in Jamaica: Implications for Cultural Perspective in Science Education”. Biennial Conference on Education, June 15-17, Sunset Jamaica Grande, Ocho Rios Jamaica
- J. Samuels, **N. Sadler-McKnight**, S. Olsson and G. Göransson, “An Insight into the Molecular Mechanisms of Molybdoenzymes using Molybdenum (V) Complexes and different Substrates as Model Systems”, 43rd IUPAC World Chemistry Congress, July 31 – August 5, 2011, Puerto Rico

- **M. A. Singh-Wilmot**, “Novel Materials from Lanthanide(III) Nanoclusters” TWAS 21st Annual General Meeting, Hyderabad, India, October 2010.
- R. Sinclair, **M. A. Singh-Wilmot**, C. Rowland and C. Cahill, “Nonanuclear Ln(II) Nanoclusters: Synthesis, Structures and Luminescence” Poster, 5th IUPAC-Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-10), Ocho Rios, Jamaica, August 16-21, 2010.
- S. Gilbert, **M. A. Singh-Wilmot**, C. Rowland and C. Cahill, “Lanthanide (III) Polymers and Framework Materials of 1,3,5-Tris(4-carboxyphenylbenzene)” Poster, 5th IUPAC-Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-10), Ocho Rios, Jamaica, August 16-21, 2010.
- Z. Min, **M. A. Singh-Wilmot**, C. Cahill and I. Kavalero, “Novel Transition Metal and Lanthanide (III) Materials Derived from Dicarboxylic Acids” Poster, 5th IUPAC-Sponsored International Symposium on Macro- and Supramolecular Architectures and Materials (MAM-10), Ocho Rios, Jamaica, August 16-21, 2010.
- **M. A. Singh-Wilmot** “Better Application of Science Diplomacy”, Workshop on US and International Perspectives on Global Science Policy and Science Diplomacy, February 25-26, 2011, Washington D. C.

PUBLICATIONS

Refereed Journal Articles

- * **M. Bakir** and O. Green, “Rhenium tricarbonyl chloro of di-2-pyridylketone 4-aminobenzoyl hydrazone (dpk4abh), fac-[Re(CO)₃(k²-N,N-dpk4abh)Cl]: synthesis, spectroscopic and electrochemical properties”. *J. Mol. Struct.* 2011, 996(1-3), 24.

- * **M. Bakir** and C. Gyles, "Synthesis and physicochemical properties of fac-[Re(CO)₃(k²-N,N-dpkfah)Cl], dpkfah = di-2-pyridyl ketone 2-furoic acid hydrazone: the molecular structure of fac-[Re(CO)₃(k²-N,N-dpkfah)Cl]·acetone". *J. Coord. Chem.* 2011, 64(10), 1743-1757.
- * **C. S. Bowen-Forbes**, Y. Zhang and M. G. Nair, "Anthocyanin content, antioxidant, anti-inflammatory and anticancer properties of blackberry and raspberry fruits". *J. Food Compos. Anal.* 2010, 23(6), 554-560.
- * N. A. S. White, **H. A. Ellis**, P. N. Nelson and **P. T. Maragh**, "Thermal and odd-even behavior in a homologous series of lithium *n*-alkanoates". *J. Chem. Thermodyn.* 2011, 43(4), 584-590.
- * P. N. Nelson, **H. A. Ellis** and R. A. Taylor, "Odd-even alternation in a homologous series of Zn(II) *n*-alkanoates". *J. Mol. Struct.* 2011, 986(1-3), 10-15.
- * B. Vouffo, E. Dongo, **P. Facey**, A. Thorn, G. Sheldrick, A. Maier, H. H. Fiebig and H. Laatsch, "Antiarol cinnamate and africanoside, a cinnamoyl triterpene and a hydroperoxy-cardenolide from the stem bark of *Antiaris africana*". *Planta Med.* 2010, 76(15), 1717-1723.
- * M. N. Thompson, **W. A. Gallimore**, M. M. Townsend, N. A. Chambers and L. A. D. Williams, "Bioactivity of amphitoxin, the major constituent of the Jamaican sponge *Amphimedon compressa*". *Chem. Biodivers.* 2010, 7(8), 1904-1910.
- * **N. K. Downer-Riley** and **Y. A. Jackson**, Highlight Syntheses. *Annu. Rep. Prog. Chem., Sect. B: Org. Chem.* 2011, 107, 157-181.
- * A. L. C. Morris and **Y. A. Jackson**, "Synthesis of chromeno [3,4-b]quinolines: electrophilic aromatic substitution under Heck conditions" *Synthesis* 2011, (2) 229-234.
- * S. Badal , S.A. Williams, G. Huang , S. Francis , P. Vendantam , O. Dunbar , **H. Jacobs** , T.J. Tzeng, J. Gangemi and R.

- Delgoda, "Cytochrome P450 1 enzyme inhibition and anticancer potential of chromene amides from *Amyris plumieri*". *Fitoterapia* 2011, 82, 230-236.
- * **I. A. Kahwa**, "Self-assembling nanoclusters based on tetrahalometallate anions: electronic and mechanical behavior" *Advanced Nanomaterials* 2010, 1, 365-378.
 - * **P. T. Maragh**, "*Mechanisms in Solution*," Annu. Rep. Prog. Chem., Sect. A: Inorganic Chemistry, 2011, 107, 379-398.
 - * **M. A. W. Lawrence**, S. E. Thomas, **P. T. Maragh** and **T. P. Dasgupta**, "Mechanistic studies on the intramolecular electron transfer in an adduct species of the oxo-centred trinuclear iron(III) cation and L-ascorbic acid in aqueous solution". *Transition Met. Chem.* 2011, 36(5), 553-563.
 - * **C. S. Bowen-Forbes** and **D. A. Minott**, "Tracking hypoglycins A and B over different maturity stages: implications for detoxification of ackee (*Blighia sapida* K. D. Koenig) fruits". *J. Agric. Food Chem.* 2011, 58(8), 3869-3875.
 - * P. F. Tennant, S. E. Pinnock, M. Powell, A. O. Wheatley and **D. A. Minott**. "An overview of the safety assessment of transgenic papaya for the management of *Papaya Ringspot Virus* in Jamaica. *Transgenic Plant Journal* 2010, 4(SI1), 29-36.
 - * **W. Mulder**, "Reply to comment on on the theory of electrostatic interactions in suspensions of charged colloids". *Soil Sci. Soc. Am. J.* 2010, 74(5), 1846.
 - * **W. H. Mulder**, "Probability distributions of ancestries and genealogical distances on stochastically generated rooted binary trees". *J. Theor. Biol.* 2011, 280, 139-145.
 - * G-A. O. Junor, **R. B. R. Porter** and T. H. Yee, "Chemical composition of essential oils from the aerial parts of Jamaican *Bursera lunanii* Spreng". *J. Essent. Oil Res.* 2010, 22(6), 602-605.

- * M. J. McNeil, **R. B. R. Porter**, L. A. D. Williams and L. Rainford, “Chemical composition and antimicrobial activity of the essential oils from *Cleome spinosa*”. *Natural Product Communications* 2010, 5(8), 1301-1306.
- * P. C. Peart, K. P. McCook, F. A. Russell, W. F. Reynolds and **P. B. Reese**, “Hydroxylation of steroids by *Fusarium oxysporum*, *Exophiala jeanselmei* and *Ceratocystis paradoxa*” *Steroids* 2011, 76(12), 1317-1330.

Book

- * A. A. Holder, L. C. Lewis-Alleyne, D. Van Derveer and M. Singh-Wilmot. *Dipicolinic Acid, its Analogues and Derivatives: Aspects of their Coordination Chemistry*; Nova Publishers: 2011.

INCOME GENERATION & RESEARCH GRANTS

Dr. C. S. Bowen-Forbes - Renewal of UWI Research Fellowship for period September 2010 – August 2011. Project Title “*Study on the Phytochemical and Nutraceutical Potential of Rubus ellipticus Fruits (Cheeseberry)*”. Researcher: Dr. Kayanne McCook-Russell.

Dr. R. Porter - Renewal of UWI Research Fellowship for period September 2010 – August 2011. Project Title “*Investigations of Endophytic Marine Fungi Associated with Jamaican Mangroves for Novel and Bioactive Compounds*” Researcher: Dr. Petrea Facey.

Dr. N. Sadler-McKnight – SEK 160,000 (J\$1.6 M) from the Linnaeus-Palme Foundation to support staff/student exchange programme.

Dr. M. Singh-Wilmot – US\$7,000 from the Third World Academy of Science (TWAS).

Summer School – J\$8.9 M

Consultation Fees and rental of facilities – J\$5.4 M

PUBLIC SERVICE

Prof. M. Bakir

- Referee to the Journals: *Coordination Chemistry, Inorganic Chemical Communications, Talanta and Polyhedron.*

Dr. C. Bowen-Forbes

- First Year Experience (FYE) Facilitator

Prof. T. Dasgupta

- President, Caribbean Academy of Sciences
- Executive Committee Member, Regional Office of International Council of Science
- Member, Organizing Committee of UNITAR Project (Office of Prime Minister)
- Chairman, National Adhering Organization for IUPAC
- Member, POPs National Implementation Programme in Jamaica
- Member, Third World Academy of Sciences
- Editor, *Jamaica Journal of Science and Technology*

Dr. H. Ellis

- Member, Bureau of Standards Jamaica Paints and Surfaces Committee.

Dr. W. Gallimore

- Member, 23rd Mona Symposium Organising Committee
- First Year Experience (FYE) Facilitator

Dr. A. Greenaway

- Member, National Ozone Commission.
- Member, Bureau of Standards Jamaica Water System Components Technical Committee.
- Member, Jamaica National Agency for Accreditation Technical Advisory Committee.

Prof. Y. Jackson

- Member, Steering Committee for UCJ Accreditation of Mona Campus and Chair of Students Working Group
- Chair, Appointments Committee of Senior Administrative and Technical Staff
- Campus Coordinator – Graduate Studies & Research
- Member, Board for Graduate Studies
- Regional Editor, MOLECULES.
- Member, Board of Governors, Hampton School for Girls.

Prof. H. Jacobs

- Member, Chemicals Review Committee, Ministry of Health and Environment
- Referee for papers submitted to *Natural Product Communications, Biochemical Systematics and Ecology*
- Member, Organic Chemistry Division of the International Union of Pure and Applied Chemistry (IUPAC)

Prof. R. Lancashire

- Secretary, Caribbean Academy of Sciences.
- Secretary, IUPAC Committee on Printed and Electronic Publications (CPEP).
- IUPAC representative to ICSU Committee on Data for Science and Technology (CODATA).

Dr. P. Maragh

- Assistant Chief Examiner CXC CSEC Chemistry.
- External Examiner for Chemistry, University of Technology
- External Examiner for Chemistry, Joint Board for Teacher Education
- External Examiner for Chemistry, MICO University
- External Examiner for Chemistry, College of Agriculture, Science & Education

Dr. D. Minott-Kates

- Vice Chairman, CARICOM Regional Organization for Standards and Quality (CROSS-Q)

- Member, Scientific Research Council Board Sub-Committee for Food Technology
- Member, WIGUT Management Committee
- Board Member, Grove Primary School, Gordon Town
- Executive Member, Mona Preparatory School Parents Teachers Association

Dr. W. Pinnock

- Faculty of Pure and Applied Sciences Rep., University Hospital of the West Indies Research Ethics Committee
- Board Member, National Water Resources Authority
- Chairman, Technical Advisory Sub-Committee, National Water Resource Authority

Dr. R. Porter

- Member, Technical Committee for Propane-Butane Liquefied Petroleum Gas standards, Bureau of Standards Jamaica.
- Member, Technical Committee (TC 93) for all standards relating to starch and its by-products, Bureau of Standards, Jamaica.
- First Year Experience (FYE) Facilitator

Dr. R. Ratray

- Secretary, Laboratories Association of Jamaica
- Director, Lions Club of Mona

Prof. P. Reese

- WIGUT Representative on Loans Committee
- West Indies Group of University Teachers Executive Committee; Negotiating Committee
- Member, Equine Drug Testing Committee, Jamaica Racing Commission.
- Member, Product Research & Development Committee, Scientific Research Council.
- Board Member, Jamaica National Agency for Accreditation, Ministry of Industry, Technology, Energy & Commerce.

- Chair, ISO/IEC 17025 Technical Advisory Committee;
Member, ISO/IEC 15189 Technical Advisory Committee

Dr. N. Sadler-McKnight

- Coordinator, CAPE Chemistry Workshop
- Executive Secretary, Chemistry Alumni and Friends (CHEMSAF)
- Member, Technical and Finance Committee of the Scientific Research Council (SRC)
- Faculty Advisor, UWI Circle K Club
- External Examiner, Chemistry, College of Agriculture, Science and Education (CASE)

Dr. M. Singh-Wilmot

- Coordinator, Departmental Seminar series
- Member, Curriculum Reform Committee.
- Selected Member, World Economic Forum's Annual Meeting of the New Champions (ANMC), Tianjin, China, September 2010.
- Co-chair, Young Scientist Ambassador Program (YSAP)
- Young Affiliate Fellow, TWAS.