# DEPARTMENT OF CHEMISTRY



Dr Roy Porter, BSc, PhD, UWI Head of Department

### **OVERVIEW**

The 2015/2016 academic year was eventful and saw members of staff and students participating in a number of conferences and workshops, which included the Mona Symposium and the Better Process Control School. The Pesticide Research Laboratory received international accreditation; a milestone which gave the Department reason to celebrate this academic year. At the end of the academic year, we graduated fifty two (52) B.Sc. Chemistry students, ten (10) of which received first class honours. Eight (8) M.Sc. Occupational Environmental Safety and Health (OESH) degrees were awarded; two (2) of which received distinctions. One (1) M.Sc. Food and Agro-Processing Technologies (FAPT), two (2) PhD Chemistry, and one (1) MPhil Chemistry degrees were awarded.

### HIGHLIGHTS OF MAJOR ACTIVITIES

### **Staff Movements**

- Dr. Camille Bowen-Forbes proceeded on sabbatical leave for the 2015–2016 academic year; she was replaced by Dr. Patrice Peart. Mr. Ian Johnson and Dr. Nykieta James tendered resignations from the positions of Departmental Storekeeper and Scientific Officer respectively.
- The Department hosted a Christmas Luncheon/Retirement Function at the Terra Nova All Suite Hotel in honour of the contributions made by Mr. Englis Davy, Dr. Anthony Greenaway and Professors Henry Ellis and Robert Lancashire who had arrived at the age of retirement. Through the years, their combined contribution of over 136 years has been priceless and the Department is truly grateful for their efforts.

## **Department Seminars**

The 2015/2016 academic year was not exempt from the usual informative and engaging seminar sessions conducted on a weekly basis. This programme which was coordinated by Drs. Nadale Downer-Riley and Marvadeen Singh-Wilmot, consisted of seventeen (17) seminars spanning a wide range of topics.

### Student Enrolment:

Numbers of students reading courses in chemistry, 2012–2016

Level	2012–2013 Sem 1/Sem 2	2013–2014 Sem 1/Sem 2	2014–2015 Sem 1/Sem 2	2015–2016 Sem 1/Sem 2
Preliminary	239/218	226/209	200/175	233/198
Introductory	546/506	544/488	553/501	600/532
Advanced	256/227	255/218	239/198	218/188
Postgraduates	42	65*	128	109/87

<sup>\*</sup>does not include students registered in the M.Sc. OESH programme

### **HIGHER DEGREES AWARDED**

Table 2: Higher degrees in Chemistry awarded in 2015/2016 AY

Degree Completed	Name	Supervisor(s)
PhD	Theresa Campbell	Dr. Camille Bowen-Forbes
PhD	Stacy-Ann Parker	Professor Helen Jacobs
MPhil	Ruth Williams	Dr. Camille Bowen-Forbes

### **Book Loan Scheme**

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

### **Chemistry Honours Society**

On 24th September 2015, the Department hosted an Induction Service for the Chemistry Honours Society. The Guest Speaker was Dr. Paul Aiken. Seven (7) students received the Bronze Award, while eight (8) received the Silver Award. On 15th April 2016, another Induction Service was hosted where eleven (11) bronze and three (3) gold awards were received by awardees. Prof Michael Taylor served as Guest Speaker.

#### Accreditation

The Pesticide Research Laboratory was awarded international accreditation ISO 17025 certification effective 6th October, 2015. The Jamaica National Agency for Accreditation (JANAAC) hosted the Accreditation Award Ceremony on Thursday, 22nd October, 2015 at 9:00 a.m. at the Ministry of Industry, Investment and Commerce.

## **NEPA Visible Emissions Training**

The Department of Chemistry hosted a Visible Emissions training course (Smoke School) which was run by The National Environment and Planning Agency (NEPA) on 19th January 2016. This training is administered by Eastern Technical Associates (ETA) from the US; ETA is a United States Environmental Protection Agency (US-EPA) certified training institution. One (1) member of the Department of Chemistry participated in the course.

## **CAPE Workshop**

During the period 11th–15th January, 2016, the Department held another successful series of workshops on Spectroscopy and Chromatography for the Caribbean Advanced Proficiency Examinations (CAPE) in Chemistry. Over 1,100 students and teachers from 44 high schools and community colleges across the island participated. Dr. Novelette Sadler-McKnight and Mrs. Mitzie Samuels continue to coordinate this venture and their efforts are appreciated.

#### The Better Process Control School

The Department conducted The Better Process Control School (BPCS), 11th–15th January, 2016. The BPCS is a certification programme approved by the United States Food and Drug Administration and the Bureau of Standards Jamaica. The course is offered to members of the food industry and regulators on processing of low-acid & acidified canned foods. Participating entities this year included Jamaica Broilers, Dairy Industries, Seprod Limited, National Canners (Trinidad), Grace Foods, Southern Foods and Fruits and the Scientific Research Council. Three graduate students (2 MPhil Chemistry and 1 M.Sc. FAPT) also participated in this programme.

### Research Days & Awards

The Department of Chemistry participated in Research Days 2016

activities through mounted displays, an ice cream demonstration in the Food Teaching Laboratory and a display in the Main Exhibition Village with a pirate-themed display on Marine Natural Products Chemistry.

Dr. Paul Maragh and Prof. Tara Dasgupta received the Principal's Awards for the Best Research Publication for the article "Kinetic and Density Functional Theory (DFT) Studies of in Vitro Reactions of Acrylamide with the Thiols: Captopril, L-cysteine, and Glutathione".

## **Workshops and Conferences Attended**

A team of postgraduate students (Mario Christie, Shorna Smith, Nadine Whyte and Rajeve Brooks) attended the American Chemical Society Conference. The students entered and won the ACS International UWI Student Chapter's Communicating Chemistry: Caribbean Cuisine (C4) Competition held in San Diego, California, 13th–17th March. Dr Andrea Goldson-Barnaby gave oversight to this initiative.

### VISITORS TO THE DEPARTMENT

During the academic year, the following individuals visited the Department:

- Miss Yvonne Hall, Executive Director, Bureau of Standards Jamaica
- Mrs. Beverley Miller, FSMA Coordinator, Bureau of Standards Jamaica
- Professor Mathew Nindi, Head, Department of Chemistry, University of South Africa
- Dr. Bryne Ngwenya, University of Edinburgh, United Kingdom

### **NEW PROJECTS**

- Professor Bakir has undertaken a project involving nano-alloy synergistic catalysts for the conversion of carbon dioxide to methane.
- Drs. Debbie-Ann Gordon-Smith and Vaughn Rattray's project entitled "Impact of Submarine Groundwater Discharge on the Nutrient and Trace Metal Budgets of Discovery Bay, Jamaica" began

- August 2015 and will be completed 2017. Collaborators are Prof. William Burnett, Florida State University and Dr. Richard Peterson, Coastal Carolina University, USA.
- Dr. Michael Coley began a project entitled "Ambient and in-vehicle air pollution studies within the Kingston Metropolitan Area". The project's aim is to build air quality monitoring units for simultaneously measuring the concentrations of several pollutant gases in both ambient and in-vehicle environments and is expected to culminate in July 2017.

## CONFERENCES/SYMPOSIUM

- The Chemistry Department hosted the 26th Mona Symposium on Natural Products and Medicinal Chemistry from 4th–7th January, 2016. The year 2016 represents the 50th year of the biennial Mona Symposium which commenced in 1966. There were approximately eighty (80) registered participants, eleven (11) plenary speakers and twelve (12) short papers with the presenters hailing from the United States, Australia, South Africa and the Caribbean. There were twenty-five (25) presentations at the poster session by graduate students and staff from the Faculties of Science and Technology, Department of Basic Medical Sciences, the Scientific Research Council and the UWI Biotechnology Centre. The Symposium also played host to ten (10) undergraduate students and two (2) lecturers from St. Olaf University who are visiting the UWI as part of the course "Medicinal Chemistry in Jamaica".
- As part of its 50th anniversary celebrations for its 26th staging the Mona Symposium held a public forum entitled "Natural Products for National Development". There were 5 panellists from the regulatory, research, commercial and academic sectors. The forum was sponsored in part by the Tourism Enhancement Fund (TEF). The forum was very well attended and facilitated robust interaction between the panellists and the audience.

## STAFF/STUDENT EXCHANGE PROGRAMME

Professor Willem Mulder visited the Chemistry Department of the University of Gothenburg, Sweden, as part of an exchange programme with the Chemistry Department of the University of the West Indies, Mona Campus, which for the past eight (8) years has been sustained through financial support from the Linnaeus-Palme Foundation. During his stay (23rd March–25th April 2016), he made two seminar presentations on his research work.

### **OUTREACH**

- Members of the Chemistry Department participated in the CB UWI 5K run/walk event, as well as assisted with manning the Faculty's booth. This event was held on Sunday, 15th November, 2015.
- Dr. Singh-Wilmot participated in a science presentation/demonstration at the Hopefield Preparatory School on 17th November, 2015. The students and teachers benefitted significantly from food tests done in preparation for the upcoming GSAT examinations. On 3rd December, 2015, Dr. Singh-Wilmot carried out the function of Guest Speaker in a UWI Mona Campus event geared at stimulating interest among Kingston College students. Dr. Singh-Wilmot's speech was entitled "The Importance of Science in our Daily Lives".
- The Department was represented at the UWI Mona Western Jamaica Campus Open House held 11th–12th January 2016. The Chemistry booth was manned by Sanjay Campbell (graduate student) and a group of undergraduate students from the Chemical Society (ChemSoc). Some of the experiments used were coordinated by the ChemSoc President, Mario Christie.

### PAPERS PRESENTED

Modupeola Abayomi and Roy Porter, "Isolation and characterisation
of potential bioactive metabolites from different parts of Bixa
Orellanna L. (Annatto) plant", the 26th Mona Symposium: Natural
Products & Medicinal Chemistry, Kingston, Jamaica, January 4--7,

### 2016. Poster Presentation

- Annaleise Aiken and Ian Thompson, "The Amino Acid Profile of the leaves of Jamaican varieties of Cassava (Manihot Esculenta)" the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Sanjay Campbell. "Brown Algae Stypopodium zonale as a Source of Bioactive Natural Products", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Oral Presentation
- Oniero Cherrington, Garen Nelson, Denton Fearon and Paul Reese, "Modiolide A and other secondary metabolites produced by paraconiothryrium cyclothyriodes, a potential source of antibacterial and antifungal agents", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- M.A. Collins and P.B. Reese. "Study of fungal biotransformations on terpenoid substrates using alginate-immobilized filamentous fungi", International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, Hawaii, USA, December 15–20, 2015. Poster Presentation
- Marc Collins and Paul Reese, "Immobilized fungal cells as agents for the generation of terpenoid analogues", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4-7, 2016. Poster Presentation
- Sharna-kay Daley, Nadale K. Downer-Riley and Yvette A. Jackson. "A novel synthetic approach to balsaminone A", The International Symposium on Methods for Studying Drug Metabolism and Transport, and African Traditional Medicines (METHODS-2015): Pretoria, South Africa, November 23–25, 2015. Poster Presentation
- Sharna-kay Daley, Nadale K. Downer-Riley and Yvette A. Jackson.
   "Oxidative dimerization of benzene and naphthalene derivatives: a concise and effective route to bioactive natural products", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Oral Presentation

- Doleasha Davis and Winklet Gallimore, "Isolation, Characterization and investigation of the bioactivity and insecticidal properties of compounds and extracts from marine organisms", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Tamika Drummond, Paul Maragh and Tara Dasgupta, "Mechanistic investigation of hydrolytic decompositions of Rousin's black and Roussin's red salts in aqueous acidic and basic solutions", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Raylee Dunkley and Ian Thompson, "An Evaluation of the functional properties of acetylated cassava (Manhiot Esculenta) starch", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- W. Gallimore. "Port Royal Sponges: Medicinal Treasure Troves of the Future?", Society for Scientific Advancement (SoSA) Conference, Mona Visitor's Lodge, The UWI, Mona Campus, November 20, 2015.
- Sonal Gupte and Ian Thompson, "Evaluating the quality of raw cow's milk in Jamaica", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Dwight Messam and Novelette Sadler-McKnight, "Investigation of sources of atmospheric aerosol at select urban and sub-urban areas in Jamaica", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- W. Mulder, "Solvatochromism and Thermodynamics of Molecules in Electronically Excited States". University of Gothenburg, Sweden, April 5, 2016. Oral Presentation
- W. Mulder, "Equilibrium Size Distributions of Circular Domains in Amphiphilic Monolayers at the Air/Water Interface". University of Gothenburg, Sweden, April 12, 2016. Oral Presentation
- P.C. Peart, A.R.M. Chen and P.B. Reese. "Fungal fragments

immobilised in calcium alginate: Transformation of substrates to new analogues", International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, Hawaii, USA, December 15–20, 2015. Oral Presentation

- Mark Rambaran and Willem Mulder, "Ion specific effects in surface charging and electrokinetics of silica nanoparticles", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Alexa O. Redway, Nadale K. Downer-Riley and Yvette A. Jackson, "Synthesis of an analogue of violatinctamine", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Coniel Roye and Winklet Gallimore, "Characterisation of the bioactivie compounds found in Jamaican plant Mallontonia Gnphalodes", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Littlelet Scarlet, Paul Maragh, Tara Dasgupta, Kamaluddin Abdur-Rashid, "Chiral Ruthenium (II) Aminophosphine complexes: synthesis, characterization and applications to asymmetric hydrogenation and transfer hydrogenation reactions", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Jermaine Smith, Marvadeen Singh-Wilmot, Christopher Cahill, Korey Carter and Alan Lough, "Rare earth metal organic frameworks from 2-nitroterephthalate: potential applications in gas storage and sensing", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Ian Thompson and Chevanese Morgan, "The anti-nutrient components of the Jamaican breadfruit (Artocarpus Altis)", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- N. Stephenson, N. Sadler-McKnight. "Pushing students over the edge with explicit critical thinking engagement". 24th Biennial

- Conference on Chemical Education, Greeley, CO, July 31–August 4, 2016. Oral Presentation
- G. G. Williams and P.B. Reese. "Investigation of the products of transformation of Stemodin analogs by Beauveria bassiana ATCC 7159 to generate an active site model of its cytochrome P450 enzyme", International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, Hawaii, USA, December 15–20, 2015. Poster Presentation
- Garfield G. Williams and Paul B. Reese, "Biotransformation studies of Beauveria Basania with diterpene substrates", the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation
- Cressana Williams-Massey and Roy Porter, "The Variations of essential oils obtained from the pimento dioica" the 26th Mona Symposium: Natural Products & Medicinal Chemistry, Kingston, Jamaica, January 4–7, 2016. Poster Presentation

### **PUBLICATIONS**

### **Referred Journal Articles**

- M. Bakir, M. A.W. Lawrence, S. McBean, "Spectroscopic and electrochemical properties of group 12 acetates of di-2-pyridylketone thiophene-2-carboxylic acid hydrazone (dpktch-H) complexes. The structure of [Cd(g<sup>3</sup>-N,N,O-dpktch-H)<sub>2</sub>]" Spectrochimica Acta Part A: *Molecular and Biomolecular Spectroscopy* 146 (2015): 323–330
- S. Zhang · P. Kang · M. Bakir, A. M. Lapides, C. J. Dares, T. J. Meyer, "Polymer-supported CuPd nanoalloy as a synergistic catalyst for electrocatalytic reduction of carbon dioxide to methane", Proceedings of the National Academy of Sciences (Impact Factor: 9.67). 12/2015; 112(52). DOI: 10.1073/pnas.1522496112.
- M. Bakir, Rebecca Conry "Synthesis, spectroscopic and X-ray crystallographic properties of manganese compounds of keto- and enol-coordinated di-2-pyridyl ketone benzoyl hydrazone (dpkbh). Reactions of [Mn(CO)5 Br] with dpkbh" J. COORDINATION

- CHEMISTRY. MARCH 2016 with 5 READS Impact Factor: 2.01 DOI: 10.1080/00958972.2016.1162789.
- M. Bakir, Mark A.W. Lawrence, Peter N. Nelson, Rebecca R. Conry, "Spectroscopic and electrochemical properties of di-2-thienyl ketone thiosemicarbazone (dtktsc): electrochemical reactions with electrophiles (H+ and CO2)" Electrochimica Acta 212 (2016) 1010–1020. Impact Factor: 4.803
- K. Simon-Brown, K. Mis Solval, A. Chotiko, L. Alfaro, V.Reyes, C. Liu, B. Dzandu, E.Kyereh, A. Goldson Barnaby, I. Thompson, Z. Xu, S. Sathivel. "Microencapsulation of ginger (Zingiber officinale) extract by spray drying technology". LWT Food Science and Technology". Volume 70, (2016): 119–125.
- V. Ranger, A. Goldson Barnaby, R. Williams., C. Bowen-Forbes, V. Rattray, N. James, I. Thompson, "Evaluation of the antioxidant properties, fatty acid profile, ash, zinc, crude fiber and pectin content of Jamaican sorrel (Hibiscus sabdariffa) and citrus (Citrus sinensis) by-products from a local beverage manufacturer". West Indian Medical Journal. DOI: 10.7727/wimj.2016.227
- A. Goldson Barnaby, R. Reid, V. Rattray, R. Williams & M. Denny. "Characterization of Jamaican Delonix regia and Cassia fistula Seed Extracts". *Biochemistry Research International*, Article ID 3850102, (2016).
- A. Goldson Barnaby, R. Williams. "Saponin, Antioxidant and Free Radical Scavenging Properties of Blighia sapida Pods", West Indian Medical Journal, (2016), DOI: 10.7727/wimj.2016.045
- S. Zhang, P. Kang, M. Bakir, A. M. Lapides, C. J. Dares, T. J. Meyer. "Polymer-supported CuPd nanoalloy as a synergistic catalyst for electrocatalytic reduction of carbon dioxide to methane". *Proceedings National Academy of Sciences*. (PNAS) 112, 52 (2015): 15809-15814
- P.C. Peart, W.F. Reynolds, P.B. Reese "The generation of a steroid library using filamentous fungi immobilized in calcium alginate". *Journal of Molecular Catalysis B: Enzymatic*, 125, (2016): 16–24.
- Jermaine A. Smith, Marvadeen A. Singh-Wilmot, Korey P. Carter,

- Christopher L. Cahill, Alan J. Lough and Christopher S. Knee "Eight Rare Earth Metal Organic Frameworks and Coordination Polymers from 2-Nitroterephthlate: Syntheses, Structures, Solid State Luminescence and an Unprecedented Topology". *New J. Chem.* 00 (2016): 1–3
- Marvadeen A. Singh-Wilmot, Rochette A. Sinclair, Ishenkumba A. Kahwa and Alan J. Lough "Eu3+ Substitutional Defects and Their Effect on the Luminescence Spectral and Decay Dynamics of One Dimensional Rare Earth Coordination Polymers and Trinuclear Complexes". *Journal of luminescence*, doi:10.1016/j.jlumin.2016.08.006
- N. Stephenson, N. Sadler-McKnight "Developing critical thinking skills using the Science Writing Heuristic in the chemistry laboratory". *Chemistry Education Research and Practice*, 17 (2016): 72–79.
- T. Collier, M.Normandin, N. Stephenson, E. Livni, S. Liang, P. Richardson, K. Maresca, R. Waterhouse, G. E. Fakhri and N. Vasdev, "Synthesis and preliminary pet imaging of 11C- and 18F-isotopologues of the ROS1/ALK inhibitor PF-06463922 in nonhuman primates", J Nucl Med, 57 (2016): 445

### **Non-Referred Journal Articles**

- Marvadeen Singh-Wilmot "Transforming Science Education", *Jamaica Gleaner*, Guest Columnist, August 17, 2015.
- Marvadeen A. Singh-Wilmot "A Creative Way to Offset Brain Drain", TWAS Newsletter, vol. 27, no. 1, 2015

### **INCOME GENERATION**

- On 9th December 2015, Dr. Nadale Downer Riley received The World Academy of Sciences (TWAS) research grant amounting to US\$10,000 for a project entitled "Novel approaches to benzothiazoles: synthesis of UK-1 analogues. There was also an additional US\$4,357 received for participation in conferences and journal publications.
- Dr. Andrea Goldson Barnaby shared the Commonwealth Science Follow – On Grant with Dr Baljit Singh (Canada), for a project

entitled "Investigation of the medicinal properties of isolates from tropical flora". The grant amounted to £3000 and was used to support eligible costs associated with the award including travel, subsistence and some research expenses of the project which began January 2016 and should end May 2017.

- Drs. Debbie-Ann Gordon-Smith and Vaughn Rattray received a
  New Initiative Grant amounting to \$1,500,000.00 for the ongoing
  project in Discovery Bay. Dr. Michael Coley was also awarded a
  New Initiative Grant amounting to \$1,500,000.00 for his project on
  air quality monitoring.
- Dr. Nickeisha Stephenson also received a New Initiative Grant of \$1,500,000.00 for the project "Postsynthetic Fluorination of Proteolytically Stable, Bio-active Peptides".

Consultation fees, summer school and rental of facilities: J\$10.2 million

### **PUBLIC SERVICE**

# Professor Helen Jacobs

Selected to serve a four-year term (2016–2019) as one of the five representatives for Latin America and the Caribbean on the Persistent Organic Pollutants Review Committee (POPRC). The POPRC is the subsidiary technical body to the Stockholm Convention on Persistent Organic Pollutants (POPs) which reviews data on chemicals that have been proposed for elimination or restricted use under the Convention.

### Dr. Donna Minott Kates

 Member, inaugural Advisory Board of Directors for the National Compliance and Regulatory Authority

### Professor Paul Reese

 Member, Assessment Evaluation Committee, Jamaica National Accreditation: October 2012 to Present

### **STUDENTS**

At the Faculty of Science and Technology Awards Ceremony held on the 19th March, 2016 the prizes and scholarships for undergraduate students in Chemistry were awarded to:

Desiree Brown The Food Chemistry Prize

Shaunte Cotterell The Bertram Frazer – Reid Prize

Nakeda Dennison The Leonard J. Haynes Award

Marcel Denny The Wilfred Chan Prize

Roxanne Francis The Chemistry Department Prize

Lauren Gordon The Cedric Hassall Scholarship

Ricaldo Pryce The Garfield Sadler Award

Romario Smith The Willard Pinnock Prize

Yanique Williamson The Kenneth Magnus Prize for Applied Chemistry

Romane Woodburn The Pavelich/Honkan Prize

A Gleaner article published on 21st January, 2016 captured the awarding of the Alexander 'Barclay' Ewart Scholarship for Chemistry to its first recipient Shanice Hinds, a second year B.Sc. Chemistry student. She received a cheque valuing three hundred thousand dollars (\$300,000.00); it is expected that she should receive the same sum next year seeing that the scholarship's tenure is two years. Nakeda Dennison was also a recipient of this scholarship; she was awarded \$70,000.00.