



**CAS celebrates 30 years with its 21st General Meeting and Conference
A report by Robert J Lancashire, Foreign Secretary of CAS**

In November 2018, the Caribbean Academy of Sciences, Jamaica (CASJ: the NAO for IUPAC in Jamaica since 2005) hosted the 21st Conference and Biennial General Meeting of the Caribbean Academy of Sciences (CAS) in conjunction with The University of the West Indies, Mona Campus, Jamaica. 2018 corresponded to the 30th anniversary of CAS and the 70th anniversary of The UWI. The theme of the conference was: *“Science, Technology and Innovation - Vehicles for a Knowledge based Economy”*.

Over 130 contributions (including Plenary and Invited presentations) were submitted to the Conference of which about 20 opted for Poster presentation and the others for Oral presentation. The standard of the submissions was excellent as befits a Conference celebrating its 21st occurrence. The papers encompassed the work from a wide range of institutions, government and non-government organisations from within Jamaica, the Caribbean region, North and South America, Africa, etc. Topics covered by the ten Plenary speakers included modern scientific and technological developments that could be transferred to the Caribbean region for economic development.



(photo courtesy of Mr Aston Spaulding)



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- CAS 2018 Conference!

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2016-2018**

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Specially invited were Professor Richard Catlow, FRS, Foreign Secretary of the Royal Society, London, England and Professor John Hildebrand, FNAS, Foreign Secretary of the National Academy of Sciences, USA. During his brief visit to Jamaica, Professor Catlow requested that we arrange an opportunity for him to give a talk to High School students.

In addition, a Forum entitled: *“Cracking the Code to Gender Disparities in Creating a Knowledge Based Economy: Increasing Female Participation in STEM”* was arranged with sponsorship from UNESCO.



From left: Dr Elizabeth Santana, Dr Novelette Sadler-McKnight, Dr Lilliam Alvarez-Diaz, Ms Elaine Brouers, Ms Elena Trim, and Ms Petal Jetoo

The CAS executive appointed at the meeting is shown below



(left to right) Prof. Robert Lancashire, Dr. Jo-Anne Sewlal, Prof. Emeritus Winston Mellowes, Prof. Reynold Stone and Dr. Mark Wuddivira

Further information on the Conference is available at the CAS website (<http://www.caswi.org>).

History of CAS

The idea of establishing a Caribbean Academy of Sciences (CAS) was informally proposed at the 21st General Assembly Meeting of the International Council of Scientific Unions [ICSU] in Bern, Switzerland 14-19 September 1986. Among the ICSU members supporting the suggestion were: Nobel Laureate Sir John Kendrew, President of ICSU; Professor Mambillikalathil G K Menon, President-Elect of ICSU; Professor Raimundo Villegas, later Chancellor of the Latin American Academy of Sciences; The Swiss Academy of Science; the Third World Academy of Science; the International Foundation for Science; the US National Academy of Science; the Royal Swedish Academy; the African Academy of Sciences; the Israel Academy of Science and the Royal Nepal Academy of Science and Technology.

This idea was followed up by staff of The University of the West Indies, St. Augustine, Trinidad and Tobago and the Inauguration of CAS took place on 16th and 17th May 1988 at an international seminar on "Science, Development and Society" at the Central Bank Auditorium in Port of Spain, Trinidad. The keynote address was given by Professor William J Whelan of ICSU who represented Professor M G K Menon. Feature addresses were given by Professor Gerald C Lalor who spoke on behalf of the disciplines of Natural Sciences; Professor Harry O Phelps who spoke on behalf of the Engineering Sciences; Professor Rolf Richards who spoke on behalf of the Medical Sciences; Mr. Frank Barsotti, a leading regional economist who spoke on behalf of the Social Sciences; Dr Hayden Blades of CARICOM who spoke on behalf of the Agricultural Sciences and Dr C H D Madagza, the representative of President Thomas R Odhiambo of the African Academy of Sciences who spoke on "Some Experiences of the African Academy of Sciences".

CAS covers the natural, agricultural, medical, engineering and social sciences. Current membership is around 200 members, including scientists from the English-speaking Caribbean, Guadeloupe, Cuba, Guyana and Suriname.

It is an independent, non-governmental body aiming to: provide a forum for interchange among scientists on important issues related to the application of science and technology to development; serve as a source of advice to regional, governmental and non-governmental organizations in scientific and technology matters; facilitate cooperation among scientists and promote the coordination and execution of scientific research in all its aspects; liaise with relevant research organizations and assist in facilitating their mutual interaction; recognize and reward outstanding performance and achievement within the region in the fields of science and technology; raise the level of scientific consciousness in the region and increase the public understanding and appreciation of the importance and potential of science and technology in human progress; establish and maintain high standards and ethics in all scientific endeavour.

WORLD WATER DAY 2019

Summary Report

In commemoration of World Water Day, 2019, the Department of Food Production (DFP), Faculty of Food and Agriculture (FFA), The University of the West Indies, St. Augustine in collaboration with Caribbean WaterNet, CapNet UNDP and the Caribbean Academy of Sciences, hosted a panel discussion on March 29, 2019 on Water Resource Management in Trinidad and Tobago, with special focus on the Agricultural Sector. The panel discussion was chaired by Dr. Ronald Roopnarine with welcome remarks from Dr. Mark Wuddivira (Head of DFP) and Dr. Gaius Eudoxie (Deputy Dean FFA) on behalf of Dean Wayne Ganpat of the FFA. Panelists included, Dr. Sharda Mahabir (Project Manager of the Adopt a River Programme, WASA), Mr. Hayden Romano (Managing

Director of the Environmental Management Authority-EMA), Retired Captain Neville Wint (Operations Manager of the Office of Disaster Preparedness and Management-ODPM),

Senator Avinash Singh (Parliamentary Secretary, Ministry of Agriculture, Land and Fisheries), Ms. Wendy Nelson (Analytical Chemist, Institute of Marine Affairs-IMA) and Professor Jacob Opadeyi (Professor of Geoinformatics, UWI). The feature address was given by the Minister of Agriculture Land and Fisheries, Senator The Honorable Clarence Rambharat, which ignited calls for further research efforts and dialogue towards improved management of our water resources. The minister also praised the initiative, stating that it is a key step towards addressing the long-standing issue of fragmented governance that has plagued our system and undermined the sustainable use and management of our natural

resources.

Panelists gave presentations on the strategies of their respective institutions aimed at improving water quality and distribution. Dr. Mahabir emphasized the importance of a community-based approach and presented some examples of how her Adopt a River Programme has improved water quality in various watersheds in the country. Mr Romano explained the challenges faced by the EMA in enforcing existing water pollution rules as well as the limitations of the rules themselves. Captain Wint, highlighted the challenges faced by his institutions and the public misconceptions attached to the roles and responsibilities of the ODPM. Senator Singh focused on initiatives sanctioned by the government that hope to

address improved water quality and management. Ms. Nelson touched on the importance of an integrated approach to water resource management and the

influence of fresh water systems on marine ecosystems. Prof. Opadeyi completed the panelist presentations with a call for improved policies and laws, particularly those pertaining to land tenure that limits access at various points of river basins. In addition, Mrs. Ria Murray-Payne (Guardian Group), shared information with regard to insurance and its benefits in the event of unforeseen circumstances and disasters.

Overall each panelist provided a unique and thought provoking perspective that enlightened the audience and set the tone for the discussion in the open forum segment. In spite of the time constraint, there was an impactful discussion that ensued in the open forum. One



of the topics raised by the audience that stirred an interesting discussion focused on the enforcement of laws to achieve sustainable water resource solutions and management. Ultimately, panelist agreed that this was a major challenge and an area that urgently requires attention. Therefore, follow up sessions were requested so as to allow for greater participation from stakeholders. In this light all collaborating institutions assured attendees that this request would be actively pursued.

The event closed with the launch of a book titled "Water Quality in the Americas: Risks and Opportunities" which was published by InterAmerican Network of Academies of Sciences (IANAS) and Inter Academy Partnership (IAP) in digital form in Spanish and English on March 22, 2019 for International World Water Day. The book, focuses on the problems and management of Water Quality, and was developed in close collaboration with the Regional Bureau for Sciences in Latin America and the Caribbean of UNESCO in Montevideo, specifically with the International Hydrological Program for Latin America and the Caribbean (IHP-LAC). During the launch emphasis was placed on two

chapters, one special chapter on "Gender, Women and the Quality of Water" co-authored by Professor Neela Badrie of the DFP, UWI. The chapter focuses on an important, but often overlooked, component of water quality and its relationship to gender, specifically women who are most often charged with the responsibilities of water usage in the home as well as in agricultural production. The other chapter entitled "Water Quality in the Americas: Caribbean-Grenada" was co-authored and coordinated by Dr. Martin Forde, St. George's University, Grenada. Attendees were provided with a brief overview of the book and the weblink to access a soft copy of the publication

(<https://www.ianas.org/images/books/wb10.pdf>).

Overall the venture was extremely successful, it served to provide the impetus necessary towards alleviating the challenges which we currently face in effectively managing our water resources, while simultaneously highlighting current initiatives. All collaborating agencies were pleased with the outcome and expressed their support for future ventures of this nature.

COMMONWEALTH CHEMISTRY

Prof. Ishenkumba Kahwa

Deputy Principal and Professor of Supramolecular Chemistry

The UWI, Mona, Jamaica

This article reports on the discussions at the Commonwealth Chemistry high-level discussion meeting which took place on 11-12 June 2018 at Burlington House, London, July 2018.

Background

Inspired by the success of the Royal Society's Commonwealth Science Conferences in Bangalore (2014) and Singapore (2017), the Royal Society of Chemistry initiated a dialogue with senior chemists in different countries across the Commonwealth aimed at discussing ways to develop closer links between Commonwealth chemistry societies and the opportunities that this could bring to our discipline.

Throughout 2017, the Royal Society of Chemistry held a series of informal meetings including in Brazil during the IUPAC Congress. RSC also hosted two roundtable discussions, the first chaired by Richard Catlow (RS Foreign Secretary), following the Royal Society Commonwealth Science Conference in Singapore and the

second at the Royal Australian Chemical Institute Congress in Australia chaired by Andrew Holmes (at that time the President of the Australian National Academy).

The discussions clearly indicated that there was value in bringing the chemistry societies together and focussing on areas of commonality and collaboration, so as to champion chemistry and highlight the major role that it plays in solving global challenges. RSC agreed to host another high-level roundtable event early in 2018 to finalise and agree next steps.

High-level discussion meeting 11-12 June 2018

Participants from 24 countries representing more than 20 chemistry societies, scientific academies and Federations across the Commonwealth met in Burlington House, London hosted by the RSC. The Caribbean was represented by Dr Marvadeen Singh Wilmot (Lecturer, The UWI, Mona, Jamaica), Dr Michael M Forde (Lecturer, UWI St Augustine, Trinidad & Tobago) and Prof. Ishenkumba Kahwa.

The unique opportunities for collaboration offered by the Commonwealth were clearly emphasised at the meeting, including the sharing of common values by bringing together the developed and developing regions. The appeal of inclusive meetings at which no one country or group of countries dominate the proceedings was central to the discussion.

Topics considered included: recruitment and retention of talent; knowledge dissemination; influencing policy makers; public engagement; diversity; role of chemistry in global challenges.

Participants concluded that there are distinctive and significant opportunities to create a Federation of Commonwealth Chemistry Societies in which all countries are included and to organise a series of Commonwealth Chemistry Conferences featuring the contribution of chemistry to the sustainable development goals, policy debates and role models. A Task Group, whose

recommendations are awaited, has been formed with the following representatives:

- Australia—represented by the Royal Australian Chemical Institute
- Africa—represented by the African Academy of Sciences
- Canada—represented by the Canadian Institute of Chemistry
- India—represented by the Chemical Research Society of India
- Trinidad and Tobago—represented by The University of West Indies in Trinidad and Tobago
- UK—represented by the Royal Society of Chemistry

NEWS ON OUR MEMBERS

Recent Highlights from Dr. Kiron Neale (Rhodes Scholar)

- Representing Trinidad and Tobago as an UNLEASH Global Top Talent in 2018 in Singapore (They select 1,000 Talents from around to world to work on solutions to the Sustainable Development Goals in a selected country for that year)
- Being appointed as the EiE Environmental Officer at Oxford Brookes University (My current job)
- Completing my doctorate at the University of Oxford (I looked at the mainstreaming of household solar energy in small, tropical islands [Oahu, Barbados and Trinidad])
- Having several of my art pieces on display at an exhibition at Linacre College, Oxford
- Did a self-designed pilgrimage to Jerusalem, and it led to a new freestyle hip-hop dance project
- Being appointed an UNLEASH 2019 Ambassador of Diversity for Trinidad and Tobago (To encourage Trinidad and Tobago nationals and potential Talents to

apply for this year's edition being held in Shenzhen, China; *This may be of interest to the CAS membership who are particularly students (though not necessarily limited to students)*

- Offered a contract with Routledge (Taylor and Francis Group) to publish a book based on the work in my doctoral thesis.



Dr. Kiron Neale

MARK YOUR CALENDAR!



Faculty of Food and Agriculture
Department of Food Production in collaboration with
The Ministry of Agriculture, Land and Fisheries

invites you to attend a

PUBLIC FORUM

in commemoration of

WORLD FOOD SAFETY DAY



Friday 7 June, 2019

SIR FRANK STOCKDALE BUILDING, LECTURE ROOM B

SPEAKERS INCLUDE:

Senator the Honourable Clarence Rambharat

MINISTER OF AGRICULTURE, LANDS AND FISHERIES, MINISTRY OF AGRICULTURE, LAND AND FISHERIES

Dr. Lisa Harrynanan

NATIONAL AGRICULTURAL HEALTH AND FOOD SAFETY SPECIALIST, INTER-AMERICAN INSTITUTE FOR COOPERATION ON AGRICULTURE

Mr. Norris Herbert

PERMANENT SECRETARY, MINISTRY OF TRADE AND INDUSTRY

Professor Neela Badrie

PROFESSOR, MICROBIOLOGY, UWI ST. AUGUSTINE, DEPARTMENT OF FOOD PRODUCTION

For more information, please contact Arlette Antoine or Dr. Mark Wuddivira at 662-2002 exts. 82267 or 82089
Parking available at TGR North, Dudley Huggins and CARDI

NEWS ON OUR MEMBERS

For the love of bees! Hayden Sinanan

I attended the 9th Caribbean Beekeeping Congress 19th to 23rd Nov. 2018 which was held at the Guyana School of Agriculture and hosted by the Guyana Apicultural Society. The theme of this Congress was "Natural Beekeeping for a Green Caribbean".

The presentations at this 5-day Congress provided important information in several areas that can provide great help in building the Caribbean beekeeping community inclusive of Trinidad & Tobago, such as:

- session on honey standards, fake honey etc.
- matters relating to honey trade and CARICOM
- social media marketing
- issues relating to climate change and how it

affects the apiculture initiative and hence agricultural sustainability

- apiculture and its position to enhance the farm family income thereby assisting with poverty alleviation and agricultural sustainability by incorporating the use of mangrove and other available forests.

I stayed on for a couple extra days with the hospitality of the largest commercial beekeeper in Guyana and had the opportunity to see his operation in the field (apiaries) and his processing facility (honeyhouse). Information on commercial operations such as this will be helpful to our industry's further development.

More details on www.caswi.org

Dear Readers,

We want to hear from YOU!
Comments may be edited for length and clarity.

Send your comments to:
joanneseowl@gmail.com

GUIDELINES TO CONTRIBUTORS

Articles on the natural history and environment are welcome especially those on Trinidad and Tobago.

Articles should not exceed 1,000 words (1 1/2 pages) and the editors reserve the right to edit the length. Images should be submitted as separate files.

Submit material to any of the following:

- 1) joanneseowl@gmail.com
- 2) secretariat@caswi.org

Deadline for submission of material for the 3rd Quarter 2019 issue of the Bulletin is August 10th, 2019.