



70 years of Service,
70 years of Leadership



SECOND ANNOUNCEMENT

**The Caribbean Academy of Sciences (CAS)
in collaboration with the
Caribbean Academy of Sciences, Jamaica (CASJ) and
The University of the West Indies, Mona
presents
the 21st General Meeting and Conference of CAS
at the
*Mona Visitors' Lodge and Conference Centre,
Kingston, Jamaica***

**Conference theme:
“Science, Technology and Innovation:
Vehicles for a Knowledge Based Economy”.**

**November 27-30, 2018
as part of the celebrations of the
70th Anniversary of The UWI and 30th Anniversary of CAS**



List of confirmed Plenary Lecturers:

1. Professor Richard Catlow, FRS, Foreign Secretary Royal Society, (UK),
Confirmed, Title pending
2. Professor John Hildebrand FNAS, Foreign Secretary of the National Academy of Sciences, (USA) -
Rethinking STEM Higher Education in the 21st Century
3. Dr Douglas MacMartin (Cornell University, USA) - *Geoengineering and Climate Change*
4. Professor Paras Prasad (University at Buffalo, USA) – "*Convergence of Science: Linking Nanotechnology and Photonics with Chemistry and Biology, to Impact on Energy, health care and Economic Development*"
5. Dr Daniel Burgos (Universidad Internacional de La Rioja, Mexico) - *Is Transgenic Learning a Radical Boost for Innovative Education?*
6. Professor Kamal Abdur-Rashid (President and Chief Technology Officer, Kamal Pharmachem Inc., Canada) – *Manufacture of Active Pharmaceutical Ingredients using Organometallic Catalysts.*
7. Professor Anthony Clayton, CD (UWI, Jamaica) – *Energy, Environment and Work in the Knowledge based Economy.*
8. Dr. Parris Lyew-Ayee Jr (Mona Geoinformatics Institute Director) Confirmed, Title pending.
9. Professor Jamboor K. Vishwantha, (University of North Texas Health Science Center, USA) *Mentorship and Networking for Scientific Advancement and a Diverse Research Workforce.*
10. Dr. David McBean, Executive Director of MSBM, Confirmed, Title pending.

ABSTRACTS FOR ORAL AND POSTER PRESENTATIONS ARE INVITED

Information

The 21st General Meeting of The Caribbean Academy of Sciences (CAS) will be held at the Mona Campus of The UWI. The now Biennial Conference will commence on the morning of November 27, 2018, with the Opening Ceremony.

The theme of this year's conference is "**Science, Technology and Innovation – Vehicles for a Knowledge Based Economy**". The conference will attract academics and professionals from tertiary institutions, public and private sectors of Jamaica and the wider Caribbean region. We are planning to make this Conference really remarkable by involving oral and poster presentations from not only graduate students but also undergraduate research students as well and to showcase it as a part of the celebrations of the 70th anniversary of The UWI.

A second major objective of the conference is to provide an opportunity, **via parallel scientific sessions**, for experts from the region's Universities, Research Centres and Industry to come together to present their research, industrial and developmental findings for critical analysis. The scientific programme will consist of plenary lectures by invited experts, short papers of 20 minutes total duration and poster presentations by participants. Presentations may be in any area of medical, natural or social science, including: Agriculture, Medicine, Veterinary Medicine, Anatomy, Physiology, Chemistry, Biochemistry, Biology, Biotechnology, Energy, Food Science, Geography, Computing, Physics, Engineering, Education, Sociology, Psychology, Political Science and Management Science, Economics and Health Economics.

Note that The Academy's General Meeting, for financial members, takes place on 27 November 2018 from 1.30 – 4.30 p.m.

Preparation of Abstracts

Each oral and poster presentation to be made during the conference requires an Abstract to be submitted. The deadline for all Abstracts is 30 June 2018. These should be sent to KitFai.Pun@sta.uwi.edu (Attn.: Professor Kit Fai Pun) for review, a copy should also be sent to conference@caswi.org. One author should preferably be a member of the Academy.*

**Note that CAS members pay a reduced Registration fee as an additional encouragement to join.*

Abstracts must be typed to fit on a single sheet of A4 or letter size paper using Calibri or Times New Roman in Microsoft Word 2007 as a minimum. The title should be in 12-point font and everything else in 11-point font.

Typing should be fully justified, with 2.5 cm or one-inch margins at the top and at each side; a minimum of 2.5 cm or one inch must be left at the bottom of the page. The entire abstract, including title, name of the author(s), affiliation(s), text and acknowledgements should be typed within these limits.

The Abstract title should be centred and typed in **bold**, 'title style' in Calibri or Times New Roman (12_point font). On the next line the Author(s) name(s), (lower case, 11-point font, in **BOLD**) should be written as First name, middle initial(s) followed by family name(s). Author(s) name(s) must be

centred and separated by semicolons, underlining the name of the person who will present the paper. On the next line (i.e. no extra line spaces) the Institution(s) of the author(s) must be typed in *italics* (NOT IN BOLD) and centred. When authors originate from different institutions the authors and the institutions should be numbered using superscripts to the top right of the names and the top left of the institutions.

Following this, the email address of at least the presenter should be included.

The body of the Abstract (without any sub-headings) should start two line spaces below the institutional identification. The text should be typed using one and a half line spacing with an extra space separating paragraphs. Paragraphs should NOT be indented.

It is suggested that Abstracts include: A definition of the problem, a working hypothesis, main methods or techniques employed, results, discussions and conclusions.

This should be followed by **Keywords**

**A SIMPLE MATHEMATICAL MODEL FOR SLAKING SENSITIVITY
ASSESSMENT IN TRINIDADIAN SOILS UNDER INTENSE RAINFALL**

Mark N. Wuddivira¹; Reynold J. Stone²; and Edwin I. Ekwue³

^{1,2}Faculty of Science and Agriculture and ³Faculty of Engineering, The University of the West Indies, St. Augustine, Trinidad and Tobago, West Indies.

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Abstract: *A knowledge of soil slaking sensitivity (SS) as measured by aggregate stability, seal formation and erodibility is necessary for the selection of appropriate soil management practices to avoid soil structure deterioration with resultant runoff, seal formation and erosion. This is especially important in areas with high intense rainfall and intermittent dry spells like the humid tropical Caribbean region. Unfortunately, field and laboratory assessments of SS are tedious, time consuming and expensive. Therefore, a simple mathematical model that provides a rapid assessment of SS was developed using readily available soil data of fourteen Trinidadian soils, namely, clay content, organic matter content, exchangeable sodium percentage and cation exchange capacity. The model was subsequently tested on nine other agriculturally important Trinidadian soils and performed with a high degree of accuracy as the predicted values were in close agreement with measured values ($r = 0.93$). The model is therefore recommended for use in Trinidad. However, more comprehensive testing is required on a broader range of Caribbean soils prior to its more widespread application in the Caribbean region.*

Keywords: *Soil slaking sensitivity, mathematical model, rainfall, Water stable aggregates, rapid wetting*

Preparation of Posters

Posters should be a maximum of 112 cm x 112 cm (44" x 44").

A maximum of two posters per person will be allowed.

The following information should appear on each poster:

- | | |
|--|---|
| a. Title | b. Poster number (As assigned) |
| c. Name(s) of Author(s) | d. Name of each Author's Institution |
| e. Email address of presenter | f. Abstract |
| f. Introduction | g. Methods |
| h. Results (including Tables and Figures) | i. Discussion |
| j. Conclusions | k. References |

DRAFT Conference Time Table (November 2018)

Day 1	27 November	9.00 am – 9.30 am	Registration
Day 1	27 November	10.00 am – 10.30 am	Opening Ceremony
Day 1	27 November	11.00 am – 4.00 pm 1.30 pm – 4.30 pm	Main Conference CAS General Meeting
Day 1	27 November	6.30 pm– 9.30 pm	Cocktail Reception (Free to all Conference and Pre-conference Participants)
Day 2	28 November	8.30 am– 6.00 pm	Main Conference: Oral and Poster Presentations
Day 3	29 November	7.30 pm	Conference Banquet: (Free to all Conference and Pre-conference Participants)
Day 3	29 November	8.30 am– 4.30 pm	Main Conference: Oral and Poster Presentations
Day 4	30 November**	8.30 am– 4.30 pm	Main Conference Shopping, Sight Seeing Tours (subject to demand)

Plenary lectures will be allocated 60 minutes including time for Q/A.

Sessional lectures will be allocated 30 minutes including time for Q/A.

General Lectures will be allocate 20 minutes including time for Q/A.

Registration

Registration for the Conference can be done by EMAIL or FAX. Note that Registration will only be considered to have been completed on receipt of the appropriate fee.

Registration Fees

(Payable in US Dollars)	Before 31 July 2018 US\$	After 31 July 2018 US\$
Members	\$250.00	\$275.00
Non-Members *	\$300.00	\$325.00
Students	\$100.00	\$125.00
Daily	\$100.00	\$100.00
Guest (accompanying person)	\$50.00	\$50.00

*Note: Current Membership Fee for CASJ is US \$ 25

Accommodation

A selection of hotels for the conference are listed below: Special rates apply to registered participants. **Please indicate that you will be attending the CAS conference at The UWI when booking.**

On campus

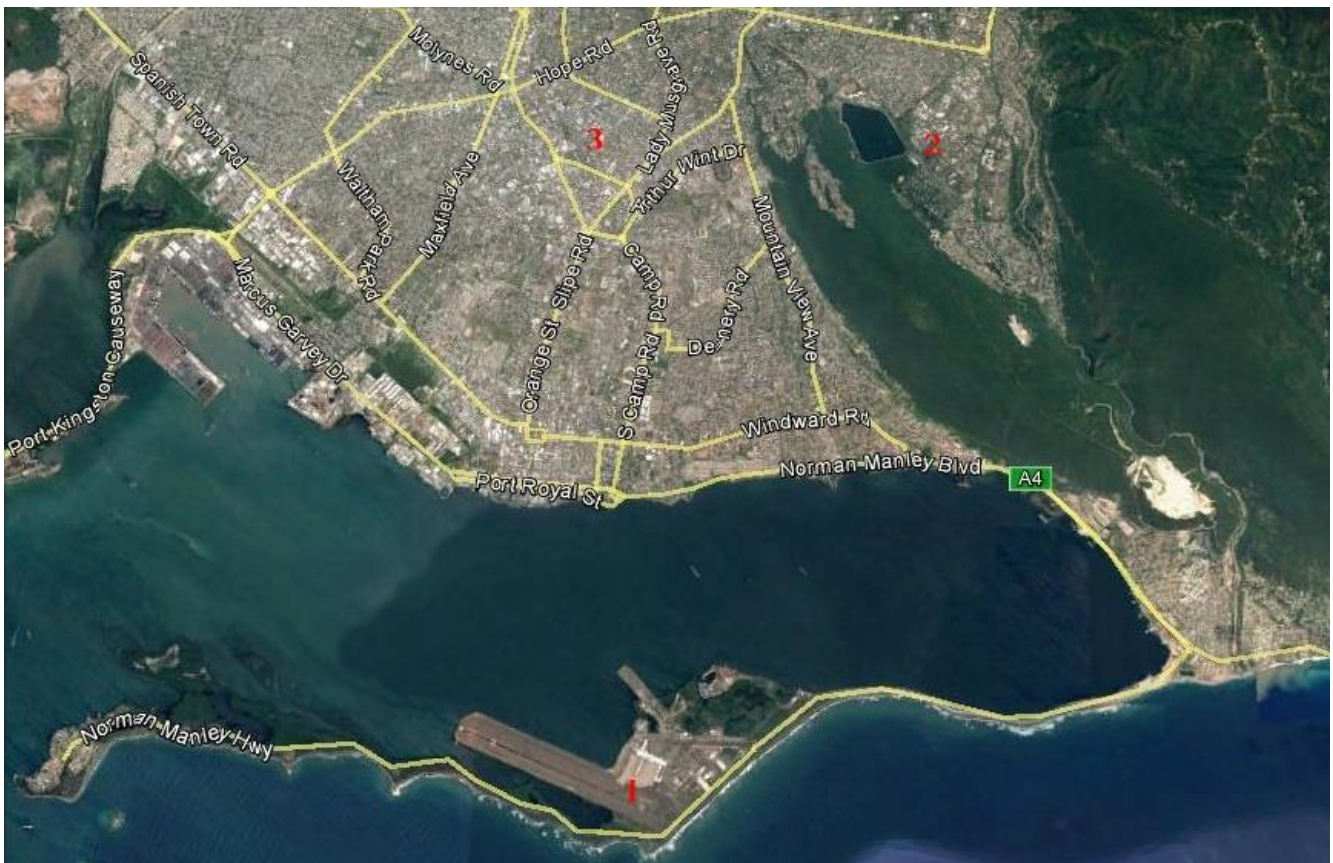
- **Mona Visitors' Lodge** – 14 rooms Reserved for Plenary Speakers
- **138 Student Living** – **under US 100 per night**, breakfast at the Mona Visitors' Lodge; reservations need to be made through the Lodge to obtain Breakfast included in the price

Mona Visitors' Lodge and Conference Centre and 138 Student Living	Contact: Sandra Blair sandra.blair@uwimona.edu.jm
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Off Campus Options where prices range from US \$120-200

per night including breakfast and all taxes:

- **The Jamaica Pegasus**, 81 Knutsford Blvd, Kingston 5 Phone: (876) 926-3690 (8.7 km)
Email: reservations@jamaicapegasus.com
<http://www.jamaicapegasus.com/>
- **The Courtleigh**, 85 Knutsford Blvd, Kingston 5, Phone: (876) 936-3570
Email: sales@courtleigh.com (8.6 km)
<http://courtleigh.com/>
- **The Liguanea Club**, Knutsford Blvd, Kingston 5, (876) 926-8144-6 (8.6 km)
Email:salesmanager@theliguaneaclub.com
<https://www.theliguaneaclub.com/>
- **The Knutsford Court**, 16 Chelsea Ave, Kingston 5, Phone: (876) 929-1000 (8.2 km)
Email: sales@knutsfordcourt.com
<http://www.knutsfordcourt.com/>
- **Hotel Four Seasons**, 18 Ruthven Road, Kingston 10, Jamaica (876) 926 8805 (9.0 km)
Email: reservations@hfsjm.com
<http://www.hotelfourseasonsjam.com/>



- 1 Norman Manley International Airport 2 The UWI, Mona Campus
3 Hotel District in New Kingston

Entitlements of Fee-Paying Participants

In addition to conference literature, payment of conference fees entitles participants to lunch and snacks served during the refreshment breaks. The Opening Ceremony and Cultural Evening are free to all Registered Participants.

Method of Payment

Payment can be made by US Dollar Money Order or Bank Drafts payable to The Caribbean Academy of Sciences, J\$ Account Number 40-103-5737 at National Commercial Bank Limited, UWI Campus Branch, Mona, Jamaica. Persons holding Jamaican Accounts may pay the US-Dollar equivalent by cheque or direct transfer to the same NCB account 40-103-5737.

Credit card facilities will be available at the Registration Desk

All participants should travel to the Conference with their proof of payment.

RETURN COMPLETED REGISTRATION FORM AND FEES TO:

Caribbean Academy of Sciences, Jamaica (CASJ)

Conference Secretariat

2 Plymouth Crescent

The University of the West Indies

Mona, Kingston 7

Jamaica, West Indies

Tel/Fax: (876) 977-7764

For Conference updates,

visit the CAS website: http://www.caswi.org/cas_home/cas-general-meetings

Persons interested in attending the Conference are requested to complete the registration form and return it to the CAS Secretariat.

CARIBBEAN ACADEMY OF SCIENCES



Caribbean Academy of Sciences, Jamaica
 2 Plymouth Crescent
 The University of the West Indies
 Mona Campus
 Kingston 7
 Jamaica

21st General Meeting
 The Caribbean Academy of Sciences
 Kingston, Jamaica
 27-30 November 2018

(CASJ) Secretariat
 Englebert Davis
 englebert@caswi.org
 Tel/Fax: 876-977-7764
 876-935-8788
 http://www.caswi.org
 http://www.caswi.org.jm

“Science, Technology and Innovation: Vehicles for a Knowledge Based Economy”

Title:	Mr.	Mrs.	Ms.	Dr.	Prof.	Other (specify):	<input type="text"/>				
Surname:	<input type="text"/>					Discipline:	<input type="text"/>				
First Name:	<input type="text"/>					Phone:	<input type="text"/>				
Institution:	<input type="text"/>					Fax:	<input type="text"/>				
Address:	<input type="text"/>					E-Mail:	1) <input type="text"/>				
							2) <input type="text"/>				
Presenting a Paper?	Yes	No				Abstract submitted?	Yes	No	Presentation preference:	Oral	Poster
	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>

Subject to demand, shopping, sightseeing tours and day trips can be arranged for those attending the conference.
 I am interested in: shopping sightseeing trip day trip