



The Caribbean Academy of Sciences

20th GENERAL MEETING AND BIENNIAL CONFERENCE

FINAL ANNOUNCEMENT

Fort Royal Langley Resort, Deshaies, Guadeloupe
24th – 26th November 2016

**“Biodiversity, Energy, Risks and Health”
From scientific knowledge to the emergence of
innovative development strategies in the Caribbean”**

SUBMIT YOUR ABSTRACT NOW
(Any area of Natural and Social Sciences)

In each domain Prize for best
- Oral Presentation
- Poster Presentation

Academy and Industry roundtable

Caribbean Journal of Science – Special issue and CAS e-journal publication opportunities

IMPORTANT DATES

Abstract submission before September 30th of 2016
CAS General Meeting November 24th, 2016 1:15 to 4:00 p.m.
Grand Opening Ceremony November 24th, 2016 4:30 p.m.
Contact: cas2016@espe-guadeloupe.fr

The 20th General Meeting of The Caribbean Academy of Sciences (CAS) will be held in the beautiful island of Guadeloupe. The Biennial Conference will begin on the morning of 24th November 2016 and will finish on the evening of November the 26th with the Closing Ceremony and a Gala Dinner of French Cuisine. The venue and official accommodation, at special rates for the Conference, is the Fort Royal, Langley Resort, in Deshaies (Guadeloupe).

The theme of the Conference is :

**“Biodiversity, Energy, Risks and Health”
From scientific knowledge to the emergence of innovative development
strategies in the Caribbean”**

One of the main objectives of the Conference is to assemble regional and international natural scientists, social scientists and engineers to deliberate and focus their thoughts on the areas identified in the theme.

A second major objective of the Conference is to provide an opportunity, via parallel scientific sessions, for experts from the region’s Universities, Research Centers and Industry to come together to present their research, industrial and developmental findings for critical analysis. The scientific program will consist of plenary lectures by invited experts and short papers of 15 to 20 minutes total duration by participants. Short papers may be in any area of natural science and social science, including Agriculture, Medicine, Veterinary Medicine, Anatomy, Physiology, Earth Sciences, Pharmacology, Chemistry, Biochemistry, Biology, Biotechnology, Energy, Food Science, Physics, Engineering, Science Education, Economics and Health Economics.

A third objective of this conference is to consider the scientific innovations carried out in the Caribbean firms. A special opening will be given to exchanges between academic researchers and industrial or consulting firms.

We encourage all researchers with interest in the Caribbean to submit their original research and wish to all a very fruitful event.

Publication Policy

We are happy to inform participants that along with the Biennial Conference, CAS and the Caribbean Journal of Sciences (CJS) will edit a special issue of CJS. The CJS publishes original research, review articles or essays, and book reviews relevant to Caribbean natural science. The emphasis is on botany, zoology, ecology, conservation biology and management, geology, archaeology, and paleontology. The CJS has 0,353 of impact factor ranking (2014-2015). We invite all participants to submit their original research papers. Submissions will be externally peer-reviewed. For more information please contact the co-editors Pr O. Gros (olivier.gros@univ-ag.fr) and Dr Y. Mazabraud (yves.mazabraud@espe-guadeloupe.fr).

Persons rather wishing to have their full papers published in the CAS e-Journal should upload manuscripts directly to the CAS e-Journal web-site; to do so please follow the instructions for preparation and uploading at <http://www.caswi.org.jm/ejournal> (those without UWI Mona accounts will need to create a free account to log in).

Awards

Several awards will be presented during this conference. The CAS-TWAS Young Scientist Award and awards for the best oral presentation and poster for each scientific field.

Preparation of Posters

Posters should be a maximum of 84 x 112 cm (33" 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. Abstract
- f. Introduction
- g. Methods
- h. Results (including Tables and Figures)
- i. Discussion
- j. Conclusions
- k. References

Preparation of Abstracts

Abstracts for each oral and poster presentation must be submitted via electronic mail by the **10th of October 2016** at cas2016@espe-guadeloupe.fr

Abstracts must be typed to fit on a single sheet of letter size paper (8.5" x 11") using Times New Roman in Microsoft Word 2008.

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

The Abstract title should be centred and **bold**, "title style", in Times New Roman (12-point font). On the next line the Author(s) name(s), (11-point font, **in bold**) should be written as 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, the institution(s) of the author(s) must be typed in italics 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 on the institutions. The body of the abstract (**without any sub-headings**) should be in 11-point font and should start two line spaces below the institutions identification. The text should be typed using one and a half line spacing with one 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, conclusions and Keywords.

Sample abstract

***Colwellia* and sulfur-oxidizing bacteria: an unusual dual symbiosis in a *Terua* mussel (Mytilidae: Bathymodiolinae) from whale falls in the Antilles arc.**

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Abstract

Seven individuals of a single morphotype of mussels (Bivalvia: Mytilidae) were found attached to naturally sunken vertebra collected in Guadeloupe (Caribbean) at 800m depth. These specimens resemble small *Idas* mussels which are found worldwide at cold seeps and hydrothermal vents, and harbour ectosymbiotic bacteria on their gills upon which they depend for nutrition. Based on multi-locus gene sequencing, these specimens appear to belong to a new species closely related to two species now included within the genus *Terua*. Unexpectedly, its closest relatives are found in the Pacific, questioning how this species has reached the Antilles arc. Based on marker gene sequence analysis, electron and fluorescence microscopy, *Terua* n. sp. harbours two distinct and abundant extracellular bacterial symbionts located between microvilli at the apical surface of host gill epithelial cells. One is a sulfur-oxidizing bacterium similar to the symbionts previously identified in several deep-sea mussels, meanwhile the other is related to *Colwellia* species, a group of cold-adapted heterotrophic bacteria able to degrade organic compounds. This study provides the first evidence for the existence of a dual symbiosis in mussels from whale fall ecosystems in the Caribbean. The evolutionary history of *Terua* n. sp. and potential role of its *Colwellia* symbionts are discussed.

Keywords: Symbiosis, whale falls, sulfur-oxidizing bacteria, *Colwellia*, *Terua*.

Keynote Speakers

The conference is honoured to welcome distinguished researchers for highlights in Health, Biodiversity and Natural Risks:

Dr Dalila ALDANA

Center for Research and Advanced Studies, Unidad Merida, Mexico
Former President of the Mexican Academy of Sciences-Southeast
Former President of the Gulf and Caribbean Fishery Institute
President of the Association of Marine Laboratories of the Caribbean
Former Coordinator of the Ibero-American Science and Technology Program for Development
National Ecological Merit Award
Chevalier des Palmes Académiques

Pr Jean-François THIMUS

Ecole Polytechnique, Université Catholique de Louvain, Belgium
President of the Board of Directors of *Centre Terre et Pierre* research laboratory
President of the Board of Directors of the Belgian Association of Underground Civil Engineering and Urbanism.

Workshops

We welcome submissions for Workshops. The deadline for submission of workshops is the same as for single abstract submissions. Each workshop submission will be processed as a whole, under the same conditions as individual abstracts submissions.

The submission shall include the abstracts of each oral presentation of the workshop and a synthetic presentation of the workshop. The synthetic presentation shall include a general overview of the chosen topic and precise the relations between the different oral presentations, followed by a general conclusion focusing on the expected results of the workshop.

Conference preliminary timetable (November 2016)

Day 1

Thursday 24th

11.00 am – 1.30 pm Registration

1.15 pm – 4.00 pm CAS General Meeting

4.30 pm – 10.00 pm Opening Ceremony/ Guest of Honour plenary conference / Cocktail Reception

Day 2

Friday 25th

8.30 am – 12.30 am - Guest of Honour plenary conference, symposiums

2.00 pm – 4.00 pm - Poster session

4.00 pm – 5.30 pm - Symposiums

6.00 pm – 7.30 pm - Academy and Industry “come-together” round table

Day 3

Saturday 26th

8.30 am – 12.30 am - Guest of Honour plenary conference, symposiums

2.00 pm – 5.30 pm - Symposiums

6.00 pm – Until - Closing Ceremony and gala dinner

(there will be coffee breaks too!)

Hotel accommodation

The conference and General Assembly will be held at the Fort Royal Langley Resort in Deshaies (<http://www.fortroyal.eu/en/>).

Participants may book directly or via the conference secretariat. **Please indicate that you will be attending the Conference when booking for benefitting of the special rates.**

The resort offers deluxe single, double and triple rooms and bungalows.

Free internet WiFi access available through the hotel.

Other complimentary services include: Swimming pool • Tennis courts • sail and surf club • child club



Travel

Air Travel

The international airport of Guadeloupe (<http://www.guadeloupe.aeroport.fr>) has flights to and from the following destinations:

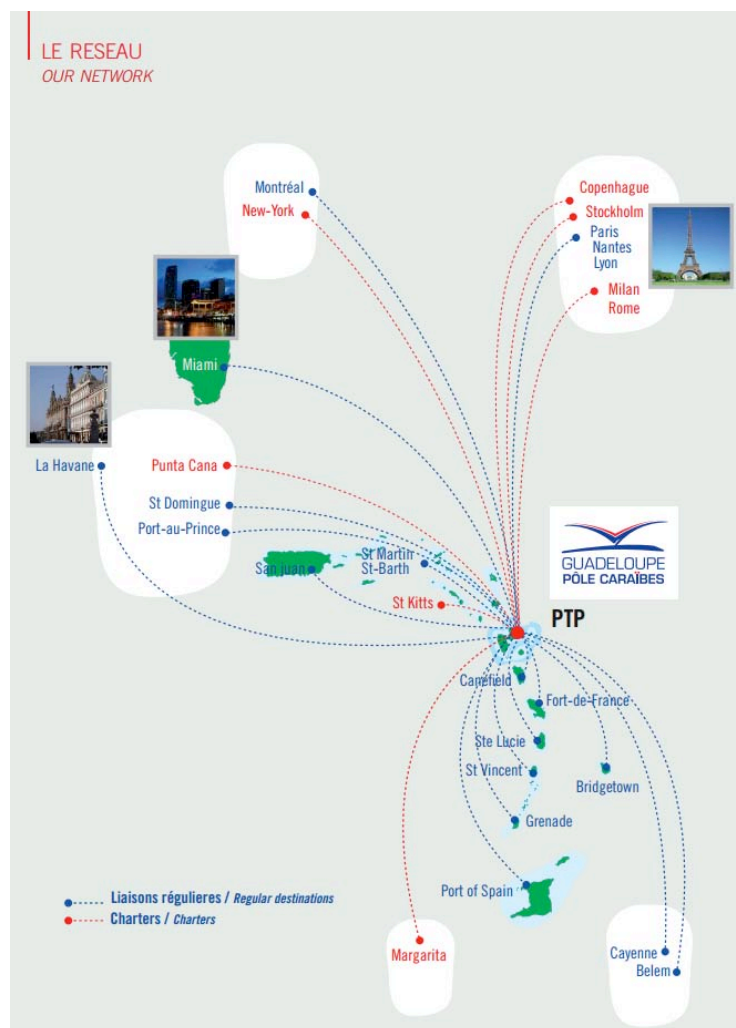
Domestic : Saint-Martin Grand-Case, Saint-Barthélemy

Caribbean : Antigua, Barbados, Cuba, Curaçao, Dominica, Grenada, Haïti, Jamaïca, Margarita, Martinique, Montserrat, Porto Rico, Santo-Domingo, Saint-Kitts and Nevis, Santa-Lucia, Saint-Vincent, Tortola, Trinidad and Tobago, Siint-Maarten

North America : Montréal, Chicago, Miami, New-York

Central and South America : French Guiana, Brazil, Mexico

Europe : Bruxelles, Copenhagen, Dusseldorf, Francfort, Metz/Nancy, Milan, Mulhouse, Nantes, Palerme, Paris Orly, Paris Charles-de-Gaulle, Rome, Stockholm



Sea Travel

L'Express des Iles ensures regular ferry transportation to and from Santa-Lucia, Dominica, Martinique

<http://www.express-des-iles.com/index.cfm?lng=en>

Registration

Registration for the Conference must be done using the conference email address:

cas2016@espe-guadeloupe.fr

Note that registration will only be considered to have been completed on receipt of the appropriate fee.

Registration Fees

<i>(Payable in Euro)</i> EUR €	Before September 30 th 2016
Members	€ 250
Non-members	€300
Students	€200

Method of Payment

Payment of the registration fee can be made either online or by EUR€ Bank draft payable to “Universite des Antilles, CAS conference”. See details on the registration form (next page).

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

Contact information

Persons planning to attend the Conference are requested to complete the Registration Form and return it to the conference addresses : cas2016@espe-guadeloupe.fr

For more information, please contact:

The Conference Secretariat

c/o Dr. Thomas Forissier

Centre de recherches et de ressources en education et formation (CRREF)

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or

CAS Secretariat

c/o Mrs. Carol-Ann Crossley

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or 1-868-793-2351

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For Conference updates, visit the CAS website: <http://www.caswi.org>