



Food Safety, Everyone's Business

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Attorney-at-law, CAS Fellow & TWAS Fellow**

More than 200 representatives from the various Ministries, Organisations, Food Companies Universities, UWI staff and students and members of the public attended the first World Food Safety Day celebration, 7th June, 2019 with theme “*Food Safety, Everyone's Business*”. This celebration was organised by the Department of Food Production, Faculty of Food and Agriculture, UWI, St. Augustine held in collaboration with the Ministry of Agriculture, Land and Fisheries, Trinidad and Tobago.

On 20 December 2018 the United Nations General Assembly adopted a resolution proclaiming a World Food Safety Day. The aim was for the international community to speak with one voice to promote food safety awareness and inspire actions for safer food. Food safety is a matter that affects anyone who eats food. According to FAO/WHO (1997), food safety is defined as the assurance that food will not cause harm to the consumer when it is prepared or eaten according to its



Head Table : L to R : Dr. Lynda Wickham, Prof. Wayne Ganpat, Mrs. Carla Marcelle –Boyce, Professor Neela Badrie and Dr. Lisa Harrynanan



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- Caribbean Innovation and Science Meeting 2019!

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intended use (FAO/WHO 1997). Each year approximately 135,000 Trinidad and Tobago residents (about 1 in every 104 persons) would experience diarrhoea due to possible consumption of a contaminated food or drink. According to a research by Lakhan and co-authors 2016, there is an economic cost to this Burden of Illness.

The opening remarks were given by the Dean of the Faculty of Food and Agriculture, UWI, St. Augustine, Professor Wayne Ganpat. He indicated that *'although the primary responsibility may lie with food producers, a large proportion of the food borne disease incidence is caused by food improperly prepared at home, in food service establishments and even in our markets'*. Also, he stressed that *"not all food handlers and consumers understood the roles that they must play such as the adoption of basic hygienic practices in buying, selling or preparing food necessary to protect their own health and the health of the wider community in which they serve."*

The feature speaker was the Honourable Senator Minister Clarence Rambharat of the Ministry of Agriculture, Land and Fisheries. His concerns were that Trinidad and Tobago was able to survive without robust legislation, the required enforcement mechanism and the 'will' to provide safe food in respect to food handling, consumption, labelling and the variety of factors which are associated in the manufacture of food. Minister Rambharat also focused on food fraud and questioned whether 'coconut water is really coconut water. He reported that the interest in food fraud has led to discussions with his Ministry, Trinidad and Tobago Bureau of Standards, Ministry of Consumer Affairs, Ministry of Trade and Industry and the Trinidad and Tobago Farmers Association. Out of these discussions, the Finance and Legal Committee crafted a report of 26 recommendations labelled A to Z. Food fraud has been referred to as economic

adulteration, economically motivated adulteration, intentional adulteration, or food counterfeiting. It is a collective term that encompasses the deliberate substitution, addition, tampering, or misrepresentation of food, food ingredients, or food packaging, or false or misleading statements made about a product for economic gain.

The Trinidad and Tobago National Food Safety Policy of Trinidad and Tobago, 2018-2023 was presented by Mrs Carla Marcelle –Boyce, Advisor to the Minister of Agriculture, Land and Fisheries. This policy covers all foods, (unprocessed / processed/ primary / raw/ cooked/ uncooked) both domestic and imported. With respect to domestic foods, the policy covers the whole food chain, from input supply, primary production, through all stages of processing, distribution and sale, to consumption. The policy includes all public and private entities involved in the scientific, technical, operational and management aspects of food safety and control systems in the country.

The other speakers were: Dr Lisa Harryninan of the Inter American Institute for Cooperation on Agriculture (IICA) and Prof. Neela Badrie of the Department of Food Production UWI. Dr. Harryninan focused on the background of World Food Safety Day in the context of the Codex Alimentarius. Professor Neela Badrie highlighted the regional and local food safety perspectives and outlined some of the food safety and quality research conducted at the University of the West Indies.

The public forum was moderated by Dr. Lynda Wickham and supported by Dr. Mark Wuddivira, Head of the Department of Food Production, Faculty of Food and Agriculture, UWI. Professor Winston Mellowes, President of the Caribbean Academy of Sciences (CAS) President was in attendance.

Celebrating the Periodic Table!

Petal Jetoo (Guyana Chapter) and Prof. Robert Lancashire (Jamaica Chapter)

Science impacts our lives in countless ways and it is our job to remember and honour the legends of the past who made phenomenal contributions towards our very existence. The University of Guyana's Chemistry Club collaborated with the National Centre for Educational Research and Development (NCERD) and the Caribbean Academy of Science (CAS) to commemorate the International Year of the Periodic Table of Elements in keeping with the proposal from the United Nations General Assembly to celebrate 2019 as the 150th Anniversary of the Periodic Table.

In 1869, Dmitri Mendeleev, generally regarded as the father of the Periodic Table of Elements, published his version of the table. Born in 1834 in Siberia, he was the youngest of his numerous siblings. The family moved to St. Petersburg after the death of his father and failure of the family business. He graduated as a trained Teacher in 1855. In his quest to write his own Inorganic Chemistry textbook he accepted the challenge of arranging the elements. At that time there were 63 known elements and he arranged them according to their atomic masses leaving spaces for those he believed were yet to be discovered. It was later in 1913 that Mosley showed that the elements were more properly arranged using increasing Atomic number rather than Atomic mass. Today the periodic table contains **118 elements** including both naturally occurring and manmade.

A week of activities were planned from the 10th to

14th of June 14, 2019, starting with an outreach program to various schools in three regions across Guyana and Georgetown. Members of the Chemistry club along with the National Science Coordinator, Petal Jetoo and other NCERD staff embarked on a mission to raise awareness of the importance of Science and the relevance of the Periodic Table. From Monday to Thursday, presentations and interactive discussions were facilitated at various schools.

Among the schools visited were Richard Ismael Secondary, Tutorial High School, St. Joseph's High, St. Stanislaus, The Bishop's High School in Georgetown. Wismar/Christianburg Secondary and Mackenzie High region 10. Annandale Secondary and Buxton Secondary in region 4 and Uitvlugt and Zeeburg Secondary in region 3. The outreach impacted a total of 439 students from grades eight, nine and ten.

The week of activities concluded with a special program featuring Professor Robert Lancashire, foreign secretary of the Caribbean Academy of Science. The professor shared a detailed history of the development of the periodic table in his presentation and engaged students from a number of secondary schools. The students and teachers who participated were provided with printed copies of the Periodic Table, and information on the global Periodic Table challenge was shared.



Attendees at a presentation on IYPT2019 at the University of Guyana, Georgetown, Guyana

NEWS ON OUR MEMBERS

T&T's first beekeeping newsletter—Gordon Deane

When I applied for membership in CAS in September 2017, along with two of my beekeeping colleagues, the first issue of the quarterly newsletter, Bee News, had recently been released. Since then, eight more issues have been released, the latest being in August 2019.

As a beekeeper, it was always my intention to explore the scientific aspects of the field in order to best progress and develop the commercial aspects of my brand, Elsie's Finest Honey. Bee News is aimed at both the beekeeping community and the customers who support the industry. From the feedback received, it appears that both groups have found it to be interesting and informative.

Each issue carries two feature articles. In the first, I try to share information on some related topic which readers may find to be of value. Here, topics such as the scourge of Neonicotinoids, swarming, the habits of drones, food fraud, forest flowers and pollinators were covered. The opportunity was also taken in this space to cover the history of beekeeping in my family, which explains both the origin of the brand and the influence of my parents.

The second feature article, News from the Apiary, keeps readers abreast of what is taking place on the ground. It tells the story of the many challenges faced, assistance received and successes realized in the development of the apiaries from ten colonies in 2015 to fifty-two by the end of 2018. It further covers the devastating story of how an act of vandalism destroyed

most of the apiaries leaving just four colonies intact. The story is currently being told of the 2019 recovery and the determination to return to full strength by the end of the year.

Bee News also carries a testimonial from a customer of

Elsie's Finest Honey and a health tip on various uses for honey provided by our Content Editor, Miss Breanne McIvor. Dr. Jo Anne N. Sewlal is our Managing Editor who in addition to ensuring quality,

accuracy and final layout, also provides an interesting and very informative bee fact for each issue. All issues of Bee News are available online. You can access them at caribbeanspiders.wordpress.com/as-an-editor/. You can also receive your personal copy, hot off the press, by emailing us at elsiesfinest@gmail.com and indicating your interest in receiving it. It's free!



Cover page of the latest issue

Leading the way in Chemistry Prof. Raymond C. Jagessar

Professor Raymond C. Jagessar presented two papers at the Biennial Regional Conference and Expo on Chemical Sciences, Technology and Industry (BRCESTI) during the period, 22nd - 24th May, 2019, at St. Augustine Campus, Trinidad and Tobago. The title of the papers are: "The Ethanolic content of Papaya (*Carica papaya*) verses Sapodila (*Manilkara Zapota*) via fermentation and the "Fermentation Capacity of the pulp of *Magnifera indica*, *Carica papaya* and the Peel of *Magnifera indica* in the absence and presence of additives". The papers presentations were well received.

MARK YOUR CALENDAR!

Caribbean Science and Innovation Meeting

October 19-22 2019, Le Gosier (Guadeloupe)

The main aim of the Caribbean Science and Innovation Meeting is to increase collaborations between scientific teams, develop a common partnership in educational programmes and boost commercial exchanges involving French speaking territories and other Caribbean countries.

The Caribbean Science and Innovation Meeting wants to broaden perspectives for Caribbean research and industry, starting from the positive experience gained during the periodic meetings organized by Caribbean scientific associations (Caribbean Academy of Sciences, CARISCIENCE, Caribbean Science Foundation).

The international meeting of *Sargassum*, which will be held October 23 to 26, will bring together specialists and stakeholders involved in the study and management of a problem that affects the health and economy of most Caribbean countries, "the transit of *Sargassum* in the Caribbean and their massive stranding on the shores of the islands". The "Science and Innovation of the Caribbean" meeting is the side event dedicated to the identification of scientific and technological priorities common to Caribbean countries and representing the key for their development and innovation.

The sharing of the results already achieved and the strengthening of exchanges between researchers and entrepreneurs in the Caribbean can favor the implementation of future collaborations and the identification of new cutting-edge activities in industry and research. Scientific conferences and workshops involving researchers, entrepreneurs and stakeholders from the different countries of the Caribbean are being planned to explore these possibilities. A special workshop will be devoted to continue the establishment of a new research and education consortium bringing together Caribbean, Central and South American universities, research organizations and industries. By addressing –current and relevant topics for the Caribbean future, this "university research school" aims to be at the forefront of science. We expect a signing ceremony of an agreement between the universities of the Greater Caribbean involved in this consortium during this congress.

As the "Caribbean Science and Innovation Meeting" will be held from 20 to 22 October and the International *Sargassum* meeting will start on the evening of October 23rd, a "Guadeloupe tour" will be organized on that day of October 23rd to visit renewable power plants, *Sargassum* valorization plant and other sites of interest related to the conference themes. This event will bring together the participants of both meetings.. However, on the morning of the 23, an ice breaker meeting will take place so that researchers attending both the Caribbean Science and Innovation Conference and the international conference on *Sargassum*, would have an opportunity to better know each other. The aim is to strengthen collaboration among experts on *Sargassum* and thus pave the way for a network of experts on *Sargassum*.

The "Caribbean Science and Innovation Meeting" will cover the following topics:

- **Biodiversity** (including knowledge, preservation, valorization, sustainable agriculture and bioeconomy)
- **Health** (animal, plant and human: One Health)
- **Natural risks**
- **Renewable energies**
- **Circular economy**

MARK YOUR CALENDAR! (CONT'D)

IMPORTANT INFORMATION

- Completed registration forms are to be emailed to olivier.gros@univ-antilles.fr and fanny.paturot@univ-antilles.fr
- Opening of the registration and submission of abstracts: 15th July 2019
- Registration deadline: **1st October 2019.**
- Abstract submission deadline: **15th September 2019**
- Abstracts should be sent by e-mail to olivier.gros@univ-antilles.fr
- The posters can be submitted as a pdf version, by e-mail to olivier.gros@univ-antilles.fr

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:
joannesewlal@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) joannesewlal@gmail.com
- 2) secretariat@caswi.org

Deadline for submission of material for the 4th Quarter 2019 issue of the Bulletin is December 1st, 2019.