

INTERNATIONAL UNION OF FOOD SCIENCE AND TECHNOLOGY



**IUFoST**

# **INTERIM REPORT 2020**

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## **ABOUT IUFoST**

IUFoST is the global scientific organization representing more than 300,000 food scientists and technologists through its work in over 100 countries around the world. It is a voluntary, non-profit association of national food science organizations linking the world's food scientists and technologists. IUFoST is one of only 39 scientific unions elected into membership of the International Science Council by its multi-disciplinary peers and IUFoST is the sole representative of the discipline of food science and technology. IUFoST also represents international food science and technology community to other international organizations, such as WHO, FAO, UNDP and UNIDO.

## **VISION**

To strengthen the application of food science and technology for the benefit of all humanity

## **MISSION**

Promote international co-operation and information exchange, to provide education and training to food scientists and technologists around the world and to promote professionalism and professional organization among food scientists and technologists.

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## IUFoST BOARD REPORT

The Members' Meeting of 31 January 2020 ratified the decisions and actions of the Board and supported the aims and objectives of the Union as expressed at the meeting. This Board Report follows the Report to Members in January but other aspects cover a longer period of time, including several welcomed Adhering Body Activity Reports, some news on Regional activity, work from IUFoST committees and of course, activities of IUFoST related to the COVID-19 global health crisis.

Good Governance has been the focus of the Board's work in a rather difficult period. The approach that has proved to be successful was to reinforce the Board's culture whereby all members are treated with respect and collegiality and mindful of the exercise of their duties to serve the greater good of the Union. The Board is pleased also to report that already several new and returning country members are being added to the roster of the Union.

The Board has continued to hold monthly Board meetings. All Board Directors have been involved in all the work of the Union and this has allowed the Board to practice governance that is not divided between operational branches (Executive and Board) as the Board is the ultimate authority in any case. This more democratic and effective approach to governance has served well, particularly as the Executive Director was made a full-time position by the Board in August 2019.

The Board wishes to take this opportunity to thank everyone for their dedication and service and is grateful for all their expertise in guiding IUFoST forward.

### Committees of the Union

The Board of Directors manages the work of the Union and works with all its committees to achieve the Union's objectives. New By-Laws were introduced in October 2018, which had a few unforeseen conflicts and deficiencies. The Board has promised to relay recommendations to the

Membership in advance of the General Assembly that is scheduled for 20 August 2020. In the meantime, there may be one or two proposals put before the Members to facilitate the circumstances of this Term of Office. The Board thanks all its committees, past and present for their work.

During these past few months the Board has initiated and/or approved many actions to benefit the Union, both administratively and scientifically. Members will see an outline of some of these measures in the following pages. IUFoST has turned its attention to science again with the support of its members, the Scientific Council, the International Academy of Food Science and Technology and its Fellows as well as other friends and colleagues.

IUFoST meetings and reports to its members, colleagues and friends will continue between now and the IUFoST General Assembly - to be held by virtual means - on 20 August 2020.

Lastly, but perhaps most important, the Board thanks the Members of the New Zealand Organising Committee, NIFST President Dr. Richard Archer, Executive Director Rosemary Hancock and the many others who have worked tremendously hard and effectively in preparing for the IUFoST World Congress. As you are aware, the Congress had to be postponed because of the current global health crisis. We will be working closely together to find the best timing to reinstitute the countdown to the IUFoST World Congress in New Zealand.

#### ***IUFoST Members' Inputs:***

*"Ensure an adequate supply of appropriately prepared personnel to meet the needs of the global food supply in the coming years."*

*"Strengthen food science and technology research."*

*"Engage with Policy Makers"*

The Union is again focused on advancing science and the discipline of Food Science and Technology to fulfill the IUFOST mission and vision. The role of IUFOST is to provide global leadership for the profession in ways most useful and relevant to its members and those who depend on food scientists and technologists as well as engineers to improve the safety and security of the food supply.

The outcomes of the information requests sent by the IUFOST Board late in 2019 showed that members overwhelmingly were in agreement that IUFOST must turn its attention back to its scientific mission and vision. Representing scientific professionalism and integrity, IUFOST should leverage its authoritative global scientific voice for the world's food science and technology community to increase the visibility of the profession and IUFOST members to position Food Science and Technology as central to policy development at all governmental levels. Members were particularly supportive of the introduction of Roundtables on critical and emerging issues. Members supported the introduction of other forums to show the depth of science available in IUFOST and to increase and enhance the discipline in general. Members were also invited to provide some detail of their work over the past year and you will find some of these contained in this report. Information on the work of IUFOST committees and working groups is provided here according to their recent activity.

*“Ensure that academic research is relevant to bringing solutions to food security and that the research can be applied to the real world.”*

### IUFOST SCIENTIFIC ROUNDTABLES (SRDs)

The series of Scientific Roundtables on current and important issues began with two subjects: SRD1 - *Food Losses and Food Waste* and SRD2 - *Climate Change and Food*. Summaries of these programmes are available through the Secretariat and on the IUFOST website ([www.iufost.org](http://www.iufost.org)). Panelists included Nobel Laureate **Gordon McBean**, scientists from the International Food

Policy Research Institute, Academy Presiding Officer **Roger Clemens**, Academy Fellows, **V. Prakash**, **Stephane Guilbert**, **Hongda Chen**, **Nina Federoff** and Early Career Scientist **Alexander Mathys**. Further information and actions are forthcoming from IUFOST members and regional bodies. Other Scientific Roundtables in the pipeline include one on Sustainable Packaging.

### CHALLENGES OF THE COVID-19 PANDEMIC

In the light of the COVID-19 pandemic, the role of food science and technology to provide safe, sufficient and nutritious food for the billions of people on lockdown or restricted conditions is now urgent and unprecedented in scope. From research and development of new food systems to the practical need of providing food for front line workers, the challenge to the food science and technology community has never been greater. To respond, IUFOST has established a COVID-19 Task Force and has held two Roundtables related to the global health crisis, which are described below.

The first roundtable was initiated when IUFOST invited **the Chinese Institute of Food Science and Technology (CIFST)** to cooperate in a roundtable on COVID-19 and Food Safety. On 21 March 2020, IUFOST in collaboration with CIFST convened an Extraordinary Scientific Roundtable (SRD3) entitled - ***COVID-19 and Food Safety and its implications, Challenges and Solutions for the Food Industry.***

This Roundtable was arranged to provide preliminary guidance to the international food science and technology community and the food industry concerning the COVID-19 pandemic. IUFOST and CIFST recognized that the expert advice may be helpful to the food industry, scientific agencies and governments in ameliorating the impact of this crisis on the food supply, as well as offering suggestions for post-pandemic consideration. A summary report of this roundtable is posted on the IUFOST website ([www.iufost.org](http://www.iufost.org)).

**Dr. Junshi Chen**, Chief Adviser, China National Center for Food Safety Risk Assessment and **Dr. Pingfan Rao**, IUFoST Past President, Professor and founding Director of CAS.SIBS-Zhejiang Gongshang University Joint Center for Food and Nutrition Research in Hangzhou, China co-chaired the Roundtable.

The General Introduction on IUFoST and Welcome was provided by **Dr. Fereidoon Shahidi**, IUFoST Scientific Council Chair and the Background to this Extraordinary Roundtable was presented by Dr. Pingfan Rao.

The Programme: *Scientific cognition of COVID-19 zoonotic disease*, **Dr. Peter Ben Embarek**, Unit Head, Monitoring of Nutrition and Food Safety Events, International Food Safety Authorities Network (INFOSAN), World Health Organization; *COVID-19 and Food safety and its challenges to the food industry*; **Dr. Junshi Chen**, Member, Chinese Academy of Engineering; Chief Advisor of China National Center for Food Safety Risk Assessment; *The future of the food industry in the post-epidemic era*, **Dr. Luo Yunbo**, Honorary Vice President of CIFST; Director of Research Centre for Special Food, China Agricultural University; *How food industries are preparing for and coping with COVID-19 in Europe*, **Dr. Patrick Wall**, First Chair of the European Food Safety Authority; Professor of Public Health at University College, Dublin; Member of the Ireland COVID-19 National Emergency Response Team; *Work experience from the frontline of epidemic prevention in Wuhan – focus on public nutrition and health*, **Dr. Ding Gangqiang**, Vice President of CIFST; Director of Nutrition and Health Department, China CDC; *Requirements of the epidemic situation to the construction of online food safety standards*, **Ms. Liz Duffy**, Vice-President, Global Omnichannel Regulatory Compliance, Walmart.

The Panel Discussion led by Dr. Junshi Chen and Dr. Pingfan Rao then considered the challenges brought by COVID 19 to the global food industry, how these challenges could be faced and how the food industry could develop in the post-epidemic era. In particular the challenges were identified as follows:

#### **Lessons from the Pandemic:**

- Based on current epidemiological data, the virus is not foodborne. The virus is transmitted through droplets, or little bits of liquid, mostly through sneezing or coughing. This conclusion has been endorsed by WHO, USFDA, EFSA and several other national food safety authorities.
- The potential presence of the virus on food packaging is not currently considered sufficient to cause infection.
- The methodology used in Wuhan to control the disease should be emulated as much as possible, i.e., identifying, admitting and isolating confirmed COVID-19 cases and following up with all known contacts.
- The capacity to isolate and treat severe case needs to be adequate. In Wuhan, hotels were used to quarantine mild and asymptomatic cases.
- The nutritional impact of isolation and social distancing on consumers indicated that while energy-level intakes remained constant, intake of vitamins, minerals and plant-based protein and fatty acids were insufficient.
- A great reduction in physical activity was noted and could have longer-term effects on obesity and non-communicable diseases.
- As a group, the elderly did not pay sufficient attention or take adequate measures to change or control diet-related risk factors.
- The provision of safe and nutritionally balanced food to frontline workers, i.e. doctors, nurses and other healthcare workers, was considered essential, and cooked food was provided to them throughout the crisis in spite of numerous difficulties.

#### **Challenges of the Pandemic:**

- Primary production may not be severely affected because of its geographic dispersal away from population densities but transportation may be a problem.
- In this regard, the timely supply of both animal feed and ingredients for food products may be threatened, particularly if imported.
- The present reliance on specific markets, products and distribution channels are not

robust enough to respond to anticipated disruptions.

- In addition to the tourism and hospitality sectors, commercial catering, including restaurants and other food service establishments, will be severely disrupted with serious human and economic costs.
- Food businesses must keep their staff healthy if they are to function and this includes maximizing social distancing at work. Consumer behavior will distort the food supply chain by hoarding and panic buying that are, in many cases, fueled by false information
- E-commerce in food is undergoing tremendous growth as consumers respond to lockdowns, social distancing and fear of crowds but needs to be regulated by those engaged in e-commerce for food safety.
- Emergency measures imposed in various jurisdictions may not be consistent and may even be contradictory, resulting in blocked trade.

#### **Implications for food safety:**

- This crisis shows again the real importance of food safety – good hygiene practices must be practiced by everyone, not just those in the food industry but also by the consumer.
- Food handlers, from industry to consumer, should be reminded that they should follow the WHO Five Keys to Safer Food, particularly handwashing.  
[https://www.who.int/foodsafety/areas\\_work/food-hygiene/en/](https://www.who.int/foodsafety/areas_work/food-hygiene/en/)
- The disruption of the food supply chain poses new and perhaps unexpected food safety risks, particularly for perishable foods. Information about food safety needs to be communicated in an easily understandable, scientific and thoughtful manner to all stakeholders in the food chain, from producers to consumers, particularly in uncertain and chaotic times.

#### **Response of the food industry:**

- The food industry needs to urgently respond to various disruptions to ensure that an adequate safe, sufficient and affordable food supply is

maintained for the global supply chains down to the local community.

- This is especially critical for large urban populations in developing countries.
- Food businesses need to be given the tools and training to be able to support diverse food supply and distribution of chains.
- The food industry needs to respond to rapid changes in the products that consumers need and want, which may require modifications in raw materials and/or processing to ensure product availability.
- Staffing in the food industry is essential if the food supply is to be maintained. Staying in operation will require staff to stay healthy.
- Social distancing in the workplace must be accommodated, especially on the factory floor. In some production lines, social distancing is not possible and the spread of the virus can decimate the workforce. Segregated workers and designated work zones can effectively address this issue.
- Employees who contract the virus need to be enabled and empowered to report and stay home. As a result, there may be labour shortages and solutions must be put in place, possibly through e-technology, regarding recruitment and training of new staff.
- Workers from commercial catering, tourism and hospitality industries with food experience can be redeployed into other parts of food industry.
- The food industry needs to allay consumers' anxiety by clear, scientific, user-friendly messaging that do not contain false claims.
- A priority must be placed on maintaining current food safety measures and preparedness for food recalls.

#### **Suggestions for post-pandemic consideration:**

- The post-pandemic phase may result in major reviews of food systems, with special emphasis on resilience.
- This also affords opportunities for changes in agri-food systems that may make better use of locally produced foods.
- Development of safe and effective foods to promote immune function should be a priority

for the food industry and governments. This may include foods for medical use by the elderly population as well as other vulnerable groups.

- A paradigm frameshift regarding safe food practices should be promoted and good food safety habits that were developed during the pandemic reinforced.
- The food science and technology community should contribute to the recovery of the food sector along with other sectors and disciplines.
- Food scientists and technologists should have a stronger role in government policy and contingency planning to ensure the resilience of the food supply chain in responding to future pandemics, including other civil emergencies.

### Published Reports

**SRD 3 – Extraordinary Roundtable**  
COVID-19 and Food Safety and its Implications, Challenges and Solutions for the Food Industry reports published in two peer-reviewed journals.

**Nature Journal Science of Food**  
Report by **Dr. Gerald G. Moy**  
IUFOST/CIFST hold an Extraordinary Scientific Roundtable on COVID-19 and Food Safety.

DOI: <https://doi.org/10.1038/s41538-020-0068-2>

**Journal of Food Bioactives**  
Report by **Dr. Fereidoon Shahidi**  
Does COVID-19 Affect Food Safety and Security?  
A Summary Report on the Extraordinary Scientific Roundtable of IUFOST-CIFST on March 21, 2020

DOI: <https://doi.org/10.31665/JFB.2020.9212>

### COVID-19 Crisis: Implications for Food Systems in Developing Economies (Focus on Africa and Lebanon) -SRD4

The critical importance of ensuring that developing economies are supported by the international community as they prepare to contain the spread of COVID-19 was highlighted in a Scientific Roundtable organized and coordinated by the International Union of Food Science and Technology (IUFOST) on April 17, 2020. COVID-19 Crisis: Implications for Food Systems in Developing Economies (Focus on Africa) brought together internationally renowned experts in food science looking at nutrition, agriculture, regulation, epidemiology, and industry to address challenges specific to Africa and Lebanon.

The Scientific Roundtable was co-chaired by **Dr. John McDermott**, Director, CGIAR Research Program on Agriculture for Nutrition and Health and Chair of the IUFOST Food Security Committee, and **Dr. Ruth Oniang'o**, Chair of Sasakawa Africa Association, Founder Rural Outreach Africa and Past President of IAFOST. Presentations were made by **Dr. Catherine Bertini**, World Food Prize Laureate, Former UN Under Secretary and Executive Director of the World Food Programme; **Dr. Cheikh Ndiaye**, Executive Director, African Food and Agriculture Skills Development Centre, Senegal; **Dr. Samuel Godefroy**, Senior Food Regulatory Expert, United Nations Industrial Development Organization, Arab Food Safety Initiative for Trade Facilitation (SAFE); **Dr. Lara Hanna Wakim**, Vice Director of Higher Center for Research, Holy Spirit University of Kaslik, Lebanon; **Dr. Theo Knight-Jones**, Senior Scientist Epidemiology, Animal and Human Health, International Livestock Research Institute (ILRI); and **Ms. Silnia Badenhorst**, Group Food Safety Manager (SME) Massmart/Walmart, South Africa.

Speakers raised warnings about the potential impact of measures taken to contain the virus that could result in a food crisis with dire implications beyond those of the virus itself unless solutions matching the African reality are developed and implemented now. The expectation is that COVID-19 will move 80 million Africans into extreme poverty. While each expert presented a

different aspect of COVID-19, key concerns identified were the critical need for financial support for African government measures in fighting virus spread; the importance of communication of factual information; ensuring the integrity of both informal and formal food supply and distribution; and accurate definition of essential goods and services to include all activities and processes which support the production, processing, distribution, consumption, and waste disposal of food in the system.

*“While there will be some challenges in global food supply chains, most disruptions in food production, supply chains, markets and services will come from domestic circumstances and livelihood shocks.” (John McDermott)*

Ruth Oniang’o compared the COVID-19 pandemic to a conflict, with major disruptions in people’s lives impacting food production for a majority of smallholder farmers and the food supply chain. With the world predicting the worst for Africa’s 54 sovereign states, countries with very weak economies have been forced to get ready, despite the fact that these governments do not have social safety net programs to cushion the impact on their populations. They have no reserves and have coped with their periodic food crises through donors who now have to mobilize all resources to help themselves.

Following on this theme, Cheikh Ndiaye stressed that the strategy of everyone solving their own problems is unsustainable and counter-productive. The globally accepted practice of closing down cities and businesses is difficult to implement in the African context without food shortages, price increases and starvation in vulnerable populations. Efforts should be made to assist workers in all sectors of food systems impacted in the hope that with support from the international community it may be possible to mitigate some of the foreseeable negative impacts.

Regulators must continue to play an important role in limiting supply disruption and maintaining operations through communication of

*“Guidance needs to be provided for practices of sanitation, but also how to protect workers’ health and conditions in order to make sure that they continue to operate.” (Sam Godefroy)*

scientifically credible information, especially with regard to transmission of the virus; including providing guidance to food and agri-food producers in sanitation and worker protection standards, amongst other things; and ensuring that no new threats or hazards are introduced, including food fraud and prevention of dumping to avoid shortages. Sam Godefroy noted that guidance must be adapted to African food production sector and supply chain realities, including how to practice social distancing in the context of farmers markets and small farmer production.

*“From villages to nations, leaders must be nimble and must quickly fix disruptions in the food chains.” (Catherine Bertini)*

The inevitable rise in demand for food and the need for innovation on how food can be safely sold and distributed rules for acceptable sales and distribution to avoid wasting food also was a key issue. Catherine Bertini advocated against knee-jerk political decisions, such as closing borders, that negatively impact consumers, farmers, and processors and strongly supported finding creative approaches for delivery of food and food aid including sufficient production of special food for children from birth to two years of age to avoid the potential creation of a generation of stunted children during a food shortage.

*“Continuous tracking of operations within the value chain will be necessary. A disruption of activities at any single point in the value chain will have knock-on implications for others. Furthermore, problems with cross-cutting services, such as transportation of employees and goods, could impact at multiple nodes simultaneously. In this regard, the importance of logistical services within the chain, to ensure efficient movement of both products, services and labour, cannot be overemphasised.” (Silnia Badenhurst)*

With regard to food access, the focus was on the importance of a number of measures, including promotion of school feeding at home; establishment of food banks; compelling food-producing companies and food retail stores to recycle consumable foodstuffs and make it available to the most vulnerable; establishing humanitarian food reserves; ensuring emergency foodstuffs are mobilised; and scaling up nutritional support and feeding schemes. The informal sector plays an essential part of the 'business as usual' food system, as it supplies a variety of essential food and related services to the poor and vulnerable groups, Silnia Badenhurst emphasized.

The specific issue is the access to inputs in time for the agricultural planting season, as delays due to transport and market disruptions may affect yields and income. A declining demand due to a decline in purchasing power will in turn affect the ability and willingness of farmers and producers to invest and adopt adequate technology and will consequently further shrink food production and availability.

*"This global health crisis is not an ordinary shock to supply and demand or access to food; it is a shock to the world as a whole. It is a human crisis." (Lara Hanna Wakim)*

Thus, the COVID-19 pandemic creates a spike in demand, due to panic buying and hoarding of food by consumers, which is increasing food demand in the short-term, primarily among those who have the means to over-buy food for storage in their homes. There is an urgent need to raise awareness among people to reduce food waste, and to better look after the categories of food they are buying in terms of nutrition facts. Therefore, in the absence of responsive social safety nets and robust income assistance, the working poor will see their ability to access nutritious food decline in many situations, pointed out Lara Hanna-Wakim.

John McDermott requested panelists to provide advice as to what IUFOST might do in the COVID-

19 response and recovery phases. Advice included:

1. Engage with government policy makers and community leaders
2. Compile food lessons from other epidemics (Ebola in West Africa) and the 2007-9 food price crisis
3. Look beyond the urgent response to continue to build food science and regulatory capacity
4. Engage IUFOST Adhering Bodies in workshops on food science and food safety
5. Monitor and rapid learning of changes in food supply chains
6. IUFOST to support resources for food scientists and food supply practitioners.

Relative to the challenge of COVID-19 in Africa, Ruth Oniang'o closed by saying:

*"We have a chance to actually begin to find local solutions, to begin to see how further engagements with other partners can emerge in a way that is completely different."*  
(Ruth Oniang'o)

#### SRD5 – IUFOST/UNIDO/PARERA

The next scientific roundtable (SRD5) is on the subject of **Supporting the Resilience of the Food Production Sector and Limiting Food Supply Disruption During COVID-19 Pandemic**. The roundtable is being held 27 May at 08.00 to 09.30 Advanced Eastern Time (New York). IUFOST is partnering with the Nutrition and Food Systems Division of the United Nations Industrial Development Organisation (UNIDO) and the Food Risk Analysis and Regulatory Excellent Platform (PARERA) of Universite Laval, Quebec, Canada, to hold a roundtable discussion to share perspectives of the food production sector as to the challenges they faced, solutions developed and lessons learnt and those of food regulators in various parts of the world as to their efforts to prevent disruption of the food supply chain and contribution to maintaining safety of food products and confidence of consumers. Registration available through [www.iufost.org](http://www.iufost.org) and a summary will be produced and distributed following the roundtable.

## GLOBAL CHALLENGES AND CRITICAL NEEDS OF FOOD SCIENCE AND TECHNOLOGY

Deepening and widening the impact of the **Global Challenges and Critical Needs of Food Science and Technology** report prepared by Academy Fellows **Drs. Anne-Marie Hermansson** and **Peter Lillford** has been one IUFoST priorities. With the input of members and regional bodies worldwide this has been ongoing and this work is being expanded through a number of IUFoST activities. Disseminating the information has taken Drs. Hermansson and Lillford to many meetings and the topic has been the subject of various working groups, in both Europe and South America specifically. The document (a living document in that is amended as new information is received) is available on the IUFoST website. IUFoST commissioned a video of their presentation in Buenos Aires to assist other members and Regional Groups in using the Report and its outcomes in their own work. A copy is available through the IUFoST Secretariat.

Drs. Hermansson and Lillford have given keynote presentations and been involved in discussions at the ISOPOW (IUFoST Disciplinary Group on the Properties of Water in Food) conference and two Regional group conferences – EFFoST in Europe and ALACCTA in Central and South America. They have been invited to write an updated version of the report in a special edition of *Trends of Food Science and Technology*, one of IUFoST's official publications. This paper will be disseminated as soon as it is available.

### UN FOOD SYSTEMS SUMMIT 2021

In 2021, The United Nations will convene a Food Systems Summit to raise global awareness and land global commitments and actions that transform food systems to resolve not only hunger, but to reduce diet-related disease and heal the planet. The Secretary-General is calling for collective action to radically change the way we produce, process, and consume food.

The COVID-19 pandemic has further exposed deficiencies in food systems that can threaten the lives and livelihoods of people around the world, particularly the most vulnerable and those in fragile contexts. As the global representative for Food Scientists and Technologists and Engineers, IUFoST will be working with its members to assure that food science and technology has a significant role in this conference. <https://www.un.org/sustainabledevelopment/food-systems-summit-2021/>.

## SCIENTIFIC INFORMATION BULLETINS (SIBs)

Five Scientific Information Bulletins are in peer review and will be ready for publication in the coming weeks. These SIBs are on the following topics:

- Food Processing for Urban Agriculture
- Food Micro- and Nano-Structural Changes in GIT
- Advanced Food Manufacturing
- Ultra-processed Foods
- Partially Hydrogenated Oils

## IUFoST EDUCATION COMMITTEE SURVEY

The IUFoST Education Committee has distributed a survey of Innovative Teaching Approaches in Food Studies, which is to be completed by educators in the field of food in higher education. The main objective of this survey is to evaluate the status of higher education teachers on the use of different teaching resources, especially open access, and methods in the field of food studies. The second goal is to anticipate that the current COVID-19 pandemic will lead to significant changes in methods and resources for teaching, and, thus, this survey can assist in preparedness with methods and resources that can accelerate that change. This questionnaire should take maximum 10 minutes to complete. The data collected by this survey will be critically and statistically evaluated and publicly made available. Please forward a copy of this link also to other colleagues who may have an interest in this survey. IUFoST Education Committee appreciates your time and your contribution.

Survey link: [shorturl.at/bdCTU](https://shorturl.at/bdCTU)

## IUFoST GLOBAL FOOD SUMMIT

IUFoST is convening its Second GLOBAL FOOD SUMMIT to bring together educators, industry, international organisations and policy makers to discuss the needed central role of Food Science and Technology in decision making to inform government policy making at all levels. Enabling and funding research development and innovation in our discipline to further global health and wellbeing, using the current crisis as the backdrop is a fundamental need that needs to be addressed. This Summit is being organised to take place soon. You will be advised as soon as the date is set.

## ADHERING BODY FOCUS

Included here are some examples of IUFOST Adhering Body activities. These colleagues are thanked for sharing their work with us.

*"Promote food science and technology in the different countries through regional or local events (seminars or congress); Support the visit of experts in different fields of food science."*

### Czech Republic Activities

The Expert Group for Food and Agricultural Chemistry of the Czech Chemical Society organized the 49th Symposium on new trends in food production and analysis (CzechFoodChem2019), Skalský Dvůr at Bystrice nad Pernštejnem, in May 2019, offered in three languages, Czech, English and Slovak. Participants presented 26 papers and 19 posters and two commercial companies exhibited during the conference. Opening block of plenary lectures on the conference topic Reformulations - changes in the composition of food products with respect to current nutritional recommendations included eight requested contributions.

The CzechFoodChem Award 2019 was presented to **Iveta Štefanová**, a member of the Department of Applied Chemistry of the Faculty of Agriculture, University of South Bohemia in České Budějovice, who with a team of authors presented a winning poster on "Thiols arising from onion processing".

Proceedings: Cejpek K., Ed.: Proceedings of CzechFoodChem 2019 – XLIX Symposium on New Directions for Food Production and Evaluation, Skalský Dvůr, May 27 - 29, 2019, 178 pages. Published by: Institute of Chemical Technology in Prague, Technická 5, 166 28 Praha 6, ISBN 978-80-7592-057-7 (Institute of Chemical Technology, Prague), ISBN 978-80-86909-98-1 (Food Research Institute Prague) ISSN 1802-1433, electronic version: [http://www.czechfoodchem.cz/Sbornik\\_2019.pdf](http://www.czechfoodchem.cz/Sbornik_2019.pdf).

Members of the Czech adhering body took part in the following congresses and conferences: The 13th International Congress on Engineering and Centre, Australia, 23-26 September 2019 and XX EuroFoodChem Congress, Faculdade de Farmácia Complexo do Instituto de Ciências Biomédicas de Abel Salazar, Porto, Portugal, June 17-19, 2019.

### Nigerian Institute of Food Science and Technology (NIFST) Activities

The key areas of impact in the year gone by were the following:

#### 1. Partnership and engagements

NIFST made significant progress in enlarging the size of partnership and increasing the numbers of B2B engagements with bodies/organisations that would add value to its five year (2019-2024) strategic objectives - Government relations, coalition building and public policy.

NIFST was able to broaden its relations with government agencies such as the standard organisation of Nigeria (SON) and National agency for food drug administration & control (NAFDAC). The relationships yielded the establishment of several critical standards for manufacturers and safety of consumers. NIFST has initiated a pact with the United State department of agriculture via the councillor in charge of food and agricultural systems at the US embassy in Nigeria. The pact was made to jointly improve the quality of food and agricultural produce from Nigeria to the United States.

#### 2. NIFST Charter

The bill for an act to establish the Council for Food Science & Technology in Nigeria was passed into law on world's food day (16th October 2019), by President Muhammadu Buhari. The Nigerian Institute of Food Science & Technology is now a Chartered Institution under the Federal Ministry of Science & Technology as Nigerian Council for Food Science & Technology Establishments (NCFST).

NIFST has legal mandate now to perform its core responsibility of defining and upholding professional standards of competence, integrity and ethical behaviour among practitioners in line with best global practice; and ensure that the critical control areas of our food supply chains are handled by professionals in the food Industry.

### **3. Food safety campaign**

In line with responsibility to the mandate of Federal and States' Ministry of health and community health Departments of our Local Government Administrations, NIFST is championed the street food safety campaign in 2019. The feedback from the street demonstrated that our markets require regular food safety visits and orientation initiatives. To this end, NIFST has intensified its effort by structuring street food safety advocacy approach with NIFST chapters across the country executing the initiative. The message to everyone on the street is that Food Safety is everyday business; it is everybody's business.

### **4. Training and research**

Quality is an indispensable tool in the food & beverage industry. It cuts across the entire food handling process ranging from the raw materials, processing, storage and distribution. For a product to gain consumer acceptance amidst other rivals and still maintain its place in a highly competitive market like Nigeria, such product must continually undergo quality improvement measures.

Most food companies in Nigeria rely on borehole water for their processing operations. Ensuring safety of water extracted from underground reservoirs has continued to be a challenge. Uncontrolled drilling of boreholes has continued to impose huge health and environmental risks. The correct and accurate frontier is to take safety into the boreholes instead of implementing safety protocols from when the water reaches the surface.

Traceability facilitates and precisely targets the recall or withdrawal of foods when necessary; enables consumers to be provided with targeted and accurate information concerning implicated

products; and is crucial to the investigation of the causes of food poisoning and other contamination outbreaks.

In view of all these, the Nigerian Institute of Food Science and Technology in collaboration with Intercontinental Distillers Limited (IDL) organized an in-house training workshop on -Current Quality Assurance Practices & HACCP, Water Treatment and Management and Food Traceability I 2019.

The joint Wageningen Economic Research (WER) Netherlands & Nigerian Institute of Food Science and Technology (NIFST) co-development of effective interventions to contribute to a healthier street food industry took off in Lagos in November 2019. Chain actors in the street food sector (suppliers, vendors and consumers) were the key informants for our survey and Focused Group Discussions (FGDs). Interviews and FGDs were held between November and December 2019 at Oshodi, Yaba, Mushin, Surulere, Agege and Ikeja. The report shall be shared between the development partners (NIFST & WER). The next phase of the research study in 2020 shall be using the information supplied by the informants to develop, test and implement innovative and desirable upgrades in the different street food chain segments in Nigeria.

### **5. Annual National Conference**

The 43rd Annual Conference and AGM of NIFST was held at Professor Akunyili Women Development Centre, Awka, Anambra State, between 14th and 18th of October 2019. The theme of the conference was "TRADITIONAL FOOD PROCESSING: PROSPECTS AND CHALLENGES". The conference had in attendance over 1000 participants drawn from Food industries in Nigeria; research institutes, government agencies, food professionals from tertiary institutions, ministry of agriculture, and organized private sectors of the economy; to promote among other objectives, the understanding of appropriate technologies for the development of novel traditional foods for the development of the economy through job creation and wealth generation.

One major observation of the conference was the lack of policy framework for science, technology and innovation for traditional food development. In view of this, the conference recommended that the Federal Government of Nigeria should collaborate with NIFST and other stakeholders to provide appropriate policies for the development of our traditional foods sector.

The 44th Annual Conference and AGM of NIFST tagged Lagos2020TheSummit shall be held sometime in October in Lagos mainland. More details shall be forwarded when available.

### Review of TAFST Activities

The Taiwan Association for Food Science and Technology (TAFST) aims to promote members of the industrial, governmental, and academic sectors to jointly improve research and development in food science and technology. To reach this aim, TAFST convenes four joint meetings of directors and supervisors and one annual general meeting every year to promote professional connections. Moreover, TAFST organizes un-official expert communication forums to promote a conversation among experts from all walks of life and to assist the development of policy recommendations. Press conferences are held to allow food experts and researchers to accurately report the latest information in the field of food science to the media. TAFST actively contributes to the training of a new generation of food science professionals through organizing various innovative product competitions for students. It also helps them to apply the knowledge acquired at school toward new food processed technology and functional ingredients development. Furthermore, TAFST encourages the research and publication.

TAFST aimed to narrow the skill gap among food science graduates entering the workforce by

organizing a Food Processing Teaching Experience Symposium in 2019. The representative lecturers at the symposium were invited to share current syllabi and curriculum content. Moreover, they had the opportunity to connect and interact with representatives from industries and academics, thus providing lecturers with ideas for curriculum planning. In addition, the food Q&A section on the website was updated with food-related informational articles, aiming to introduce accurate concepts of food safety to the general public.

Regarding globalization, TAFST also convened the "NAPA 2018 (International Conference on Nutrition and Physical Activity)" and the "International Conference of Food Safety and Health 2019" to promote interactions between TAFST and the international community.

This year we will celebrate the 50th anniversary of the Taiwan Association for Food Science and Technology (TAFST). In the future, the TAFST will continue encouraging technological innovation, supporting academic advancement, integrating the academic and industrial sectors, and assisting members to grow and thrive in the food industry.

### Webinar of the Regional Group for Central and South America (ALACCTA)

The ALACCTA video webinar was held in April 2020 around COVID 19 Challenges and Strategies to aid in making scientific expertise available in all areas of food science, for governments, industry and populations around the world. Current ALACCTA President **Alejandra Medrano** of Uruguay and **Jairo Romero** of Colombia (IAFoST Fellow) are among the distinguished speakers. The webinar **Desafíos y estrategias para la cadena alimentaria ante la pandemia de COVID 19** is available through <http://alaccta.org/especial-covid-19/>

*“Lead comprehensive or systematic reviews on topics such as functional foods, risk assessment; Set up plan of action per region, in line with IUFoST's vision and mission.”*

IUFoST acknowledges and supports the scientific meetings of the **Malaysian Institute of Food Science and Technology (MIFT)**, **Philippine Association of Food Technologists (PAFT)** and **Colombian Association of Food Science and Technology** in 2020 as per their requests. Adhering Bodies wishing for IUFoST Endorsement or sponsorship of its activities, should apply to the IUFoST Secretariat. IUFoST welcomes news of its members activities and also awards and achievements.

## FINANCIAL REPORT

<b>The International Union of Food Science and Technology Incorporated (IUFOST)</b>			
<b>Profit and Loss (in CAD)</b>			
<b>January - December 2019</b>			
<b>DRAFT</b>			
	<b>Jan - Dec 2019</b>	<b>Jan - Dec 2018 (PP)</b>	<b>Change</b>
<b>INCOME</b>			
8221 Membership fees			0.00
Adhering Body Membership (USD in CAD)	80,724.10	78,689.21	2,034.89
Corporate Associate Membership (USD in CAD)	91,804.98	61,574.10	30,230.88
<b>Total 8221 Membership fees</b>	<b>\$ 172,529.08</b>	<b>\$ 140,263.31</b>	<b>\$ 32,265.77</b>
Academy Fellows Dinner Income (USD in CAD)		6,580.07	-6,580.07
Conference Income (USD in CAD)	40,181.10		40,181.10
Partnership Income (CAD)		60,000.00	-60,000.00
Services (USD in CAD)		26,688.63	-26,688.63
Sponsorship Income (USD in CAD)	60,576.01	34,731.52	25,844.49
<b>Total Income</b>	<b>\$ 273,286.19</b>	<b>\$ 268,263.53</b>	<b>\$ 5,022.66</b>
<b>GROSS PROFIT</b>	<b>\$ 273,286.19</b>	<b>\$ 268,263.53</b>	<b>\$ 5,022.66</b>
<b>EXPENSES</b>			
8523 Meals and entertainment		191.78	-191.78
8690 Insurance	1,846.80	2,029.47	-182.67
8710 Interest and bank charges	280.62	1,827.42	-1,546.80
8715 Bank charges (CIBC USD in CAD)	847.19	1,845.20	-998.01
8717 Collection and credit costs (Paypal USD in CAD)		302.46	-302.46
<b>Total 8710 Interest and bank charges</b>	<b>\$ 1,127.81</b>	<b>\$ 3,975.08</b>	<b>-\$ 2,847.27</b>
8761 Memberships	2,021.13	2,132.84	-111.71
8810 Office expenses	2,152.27	4,274.75	-2,122.48
8861 Legal fees	20,129.34	54,948.27	-34,818.93
8862 Accounting fees	17,916.25	29,662.50	-11,746.25
8863 Consulting fees	19,209.32	30,619.78	-11,410.46
8871 Management and administration fees		22,655.02	-22,655.02
9060 Salaries and wages	30,900.89	17,318.08	13,582.81
9150 Computer-related expenses	1,083.36	3,682.68	-2,599.32
9200 Travel expenses	10,726.57	3,728.53	6,998.04
9225 Telephone and telecommunications	414.47	984.08	-569.61
Academy Certificates, Pins, Awards	6,755.77	2,385.14	4,370.63
Prizes Certificates		1,960.05	-1,960.05
Secretarial	35,308.96		35,308.96
<b>Total Expenses</b>	<b>\$ 149,592.94</b>	<b>\$ 180,548.05</b>	<b>-\$ 30,955.11</b>
<b>OTHER INCOME</b>			
8100 Interest income	458.48	158.83	299.65
<b>Total Other Income</b>	<b>\$ 458.48</b>	<b>\$ 158.83</b>	<b>\$ 299.65</b>
<b>OTHER EXPENSES</b>			
Exchange Gain or Loss	7,425.48	48,089.30	40,663.82
<b>Total Other Expenses</b>	<b>\$ 7,425.48</b>	<b>\$ 48,089.30</b>	<b>-\$ 40,663.82</b>
<b>PROFIT</b>	<b>\$ 116,726.25</b>	<b>\$ 39,785.01</b>	<b>\$ 76,941.24</b>

All IUFOST final statements for 2019 with explanation will be forwarded to Members in documentation for the upcoming General Assembly and 2020 Account activities will be provided for January to June 2020 in July 2020. Information available through Dr. Mansel Griffiths, IUFOST Treasurer.

### **TOMISLAV LOVRIĆ, Professor Emeritus, Croatia, IAFOST Fellow**

Professor Emeritus Tomislav Lovrić, PhD has been generally acknowledged for a long time as a leading expert, scientist and educator in the field of food technology and engineering. His work has been recognized in scientific circles worldwide. His research interests covered food color and flavor stability (particularly flavor retention mechanisms); water activity; and food preservation processes (foam-mat drying, freezing, freeze drying and non-thermal food processing). He authored or co-authored over 80 original scientific papers, over 50 technical papers and 45 food processing plant design studies for food industries in Croatia and abroad.

His peers recognize Dr. Lovrić as the pioneer of food science and technology in Croatia. He was respected for his involvement and creativity in organizing and stimulating scientific research in both academia and the food industry. He established numerous research teams and initiated key courses of study, such as: Food Process Engineering, Fundamentals of Plant Design for Food Industry, Fruit and Vegetable Preservation and Processing, Processes in Food Service (undergraduate study curriculum), and Food Science, Food Processing and Product and Process Development in Food Industry (graduate study curriculum) at the Faculty of Food Technology and Biotechnology, Zagreb University - along with a number of corresponding courses at the Faculty of Food Technology, Strossmayer University in Osijek. He served in a number of positions at these two schools; he co-founded the Osijek School and served as Director of the Institute of Food Technology in Zagreb. He was a Visiting Professor at various institutions in Europe and the USA. Through his long-time scientific and pedagogic work, he has educated a considerable number of prominent scientists and experts, recognized both in Croatia and abroad, who have contributed to the advancement of food science and industry.

He was honored with several awards and decorations for his scientific achievements and public service: Nikola Tesla Award (1982); Ruđer Bošković Medal for scientific achievements (1995); Award of the Croatian Academy of Sciences and Arts for contributions in technical science (1997); National Chamber of Commerce Lifetime Award Zlatna Kuna (The Golden Marten) for scientific achievements (2006) and State Lifetime Award for scientific achievements (2007).

Prof. Lovrić was a Professional Member of the Institute of Food Technologists (IFT), Member Emeritus of the Croatian Academy of Technical Sciences, member of the Scientific Committee for Agriculture and Forestry of the Croatian Academy of Sciences and Arts (and the Section Head, Processing of Agricultural products, of that Committee); the President of the Croatian Society for the Advancement of Nutrition and a Board Member, Production Science (Technical Science Section) of the Croatian Academy of Sciences and Arts, the Fellow of the International Academy of Food Science and Technology (IAFOST).

*Dr. Kata Galic, CRoSFOST, Croatia*

### **BENGT HALLSTROM, Professor Emeritus in Food Engineering, Sweden**

Bengt will always be remembered by his colleagues and students at Faculty of Engineering Lund University, (LTH) as a truly kind human being. Bengt's generous and open-minded personality permeated his entire life's work, a particular feature of his was his selflessness. He encouraged his students to take their own initiative, was always available to help and support, but kept himself in the background and nothing was more foreign to him than highlighting his role in all the research that brought prominence to his newly established department.

Bengt Hallström came from Ystad in Skåne but took his engineering degree at Chalmers Technical University in Gothenburg, there being no engineering departments yet at Lund University. He came to Lund to work in development at Alfa Laval, and after a solid career in the industry, combined with continued research at Chalmers, he was recruited in 1968 to become associate professor at the Department of Chemical Engineering at Lund Institute of Technology the newly established Faculty of Engineering at Lund University. In 1971 he became Sweden's first professor in Food Engineering in a newly established Department of Food Engineering at LTH, which he then led and developed for two decades. The subject, which deals with both theoretical and practical aspects of equipment and processes used by the food industry, requires large premises, and the institution was first housed in a former dairy in Alnarp, fairly far from Lund. To Bengt's great joy, the department moved to Lund when a large experimental hall was built at the Chemical Center in 1985, which facilitated both teaching and collaboration with other institutions. It is a telling illustration of Bengt's character that he never mentioned that it was mainly his effort that brought the multi-million project to fruition.

One of Bengt's pioneering moves was to initiate research on membrane technologies, a rather marginal topic at the time. Membrane technology is now used industrially in countless areas, including desalination of seawater, production of feta cheese and milk with extended shelf life and clarification of wine. The field continues to be an active research area at LTH.

We are many who remember Bengt with warmth and sorrow and miss him.

*Petr Dejmek, professor emeritus, Bengt's first doctoral student.*

## ADMINISTRATIVE MATTERS

### IUFoST Committee Membership

Nominations will be invited for membership in IUFoST Committees for the next Term from IUFoST Adhering Bodies. A call for nominations will be circulated on 28 May and Adhering Bodies are encouraged to put forward a representative for nomination to each of the IUFoST Committees. Accompanying the submission should be a short note from the Adhering Body on the background of the Adhering Body member or Fellow associated with your Adhering Body pertaining to the position. The Board will make the final decision and provide the reasoning for each decision to all members. This follows the procedure in place by the International Science Council and represents a fair and transparent approach and equitable geographical distribution to membership in these important committees of IUFoST.

### General Assembly of IUFoST

The IUFoST General Assembly will be held on **August 20, 2020**. Further details forthcoming and you will be advised of other official activities in the meantime. We hope to welcome back face to face activities and recognitions as soon as possible. We thank you all for your service and dedication to furthering food science and technology for the benefit of humanity.

We invite you to offer your thoughts regarding emerging and current issues where IUFoST is needed to take the lead and other ideas to further our Mission. We welcome your interest in participating in any IUFoST work and information is available through the Secretariat on how to be involved as an IUFoST Ambassador.

If you have activities, honours and recognition, or events that you would like to see included, send them to the Secretariat by the 10th of each month: [secretariat@iufost.org](mailto:secretariat@iufost.org), subject: IUFoST Bulletin.

