



IUFoST

**International Union of
Food Science and Technology**

Strengthening Global Food Science and
Technology for Humanity

TERM OF OFFICE REPORT

***November 2022 through
August 2024***

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ABOUT IUFoST

IUFoST is the global scientific organization representing more than 300,000 food scientists, technologists and engineers 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 to 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 to other international organizations, such as WHO, FAO 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, technologists, and engineers.

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President's Message

Dear Friends,

Greetings to all.

After enduring extremely challenging years from 2020 to 2022, the 21st IUFOST World Congress in Singapore in 2022 demonstrated our resilience and unwavering spirit. Despite the prolonged COVID-19 pandemic, we have nearly returned to our previous levels of activity, and the Singapore event stands as an extraordinarily successful congress.

Advancements in communication technology have played a crucial role in revitalizing our organization. Programmes led by the Board, the Academy, Councils, Committees, Working Groups, Task Forces, and numerous Adhering Bodies across various regions and countries are flourishing, proving that IUFOST is active and vibrant. This remarkable achievement is supported by the relentless efforts of our secretariat, led by the Secretary General who work tirelessly to ensure smooth and harmonious operations.

My heartfelt gratitude goes to the leadership of the board, councils, committees, working groups, task forces, adhering bodies, and our partner organizations for making 2022-2024 a wonderful and successful period for IUFOST. A special thank you to the Italian Association of Food Technology (AITA) for hosting the 22nd Congress in Rimini with excellent programme preparation and hospitality.

Three regions, in particular, have demonstrated notable activity: Africa, Asia and the Pacific, and Latin America. Initiatives like the Association of African Universities and its Congress in Windhoek, Namibia; the engagement of the provincial government of Hohhot, Inner Mongolia, to establish a scientific world capital for dairy science and technology; the Annual Forum on Food Safety and Health in Beijing, China; the Food Summit Meeting in Bangkok, Thailand; the initiation of a food safety regulatory group in Egypt for North Africa and the Middle East; and food processing discussions in Latin America led by Uruguay and Brazil all invite new membership opportunities and their participation. Many other adhering bodies, including Nigeria, Myanmar, Indonesia, Malaysia, the Philippines, Sri Lanka, New Zealand, Canada, and Japan, have also been actively contributing.

With the 22nd World Congress in Rimini, Italy, we are optimistic that Europe and North America will become more actively engaged in IUFOST's regional and global activities. During this term, we have also witnessed the active role of the new College of Early Career Scientists, complementing the established Mid-Career Scientist group. This has fostered greater engagement among adhering bodies, such as the Young Scientist Awards Programme at the World Congress, encouraging younger food scientists worldwide to be interactive.

IUFOST remains steadfast in its commitment to advancing global food science and technology through education programmes, leadership opportunities, the encouragement of young scientists, industry innovation, workshops, regional symposia, international engagements, and through IAFoST, the International Academy of Food Science and Technology. We facilitate the worldwide exchange of scientific knowledge through biennial World Congresses, IAFoST publications, proceedings, scientific journals, an online journal, regular Scientific Information Bulletins, monthly News Briefs, newsletters, and social media. Our goal is to strengthen the role of food science and technology in securing the world's food supply and eliminating hunger through programmes like distance assistance training, workshops, and integrated food systems.

Despite our unwavering commitments, we face complex and growing challenges such as rapid population growth, climate change, environmental degradation, carbon footprints, and various conflicts. Our targets for the Sustainable Development Goals (SDGs) by 2030, where 13 goals directly relate to food and nutrition, are under pressure. IUFOST, represented by some of our Academy Fellows, contributed actively to the UN Secretary-General's Scientific Committee (2020-2022) and the UN Director-General's FAO-Scientific Advisory Committee (2023-2024), playing a crucial role in developing and implementing sustainable food systems transformations.

The role of food science and technology in nutrition and health is more critical than ever. Developing food processing technology based on scientific evidence that improves nutritional quality and healthy diets is imperative. We must study the relationship between food formulation, various processing treatments, and their effects on consumer health using a multidisciplinary approach to address this complex issue. Food processing must not only combat malnutrition and extend shelf life but also ensure that diets are nutritious, healthy and safe.

Many food innovations to address food and nutrition security sustainably are being discussed at our World Congress. I am confident that IUFOST's work, in collaboration with other scientific disciplines, will contribute significantly to advancing scientific knowledge to face the challenging future of our planet and humanity.

Warm regards,

- Aman Wirakartakusumah,
President 2022-2024

IUFOST

Board Term Overview

Following the Singapore Congress and General Assembly on 3 November 2022, The Board of Directors has met every four to six weeks through this Term of Office. The Board agendas have covered all governance aspects of the Union, including oversight on financial health, robustness of working groups, committee output and integrity and authority of IUFOST scientific resources and publications.

Expanding Global Leadership Profile

IUFOST looks to increase levels of engagement among scientists, government/policy bodies, public and private enterprises via science communication to educate and level knowledge gaps and assure informed decision-making regarding food policy for better food systems. Safety and sustainability, education and capacity building are IUFOST pillars directed at using Food Science and Technology to provide sufficient and safe food for all.

The Board has continued to strengthen IUFOST in positioning its leadership role as non-aligned global scientific communicator and global partner in the international arena. One main focus is on increasing IUFOST work in the area of policy development, working hand in hand with our members in all regions.

Raising IUFOST's profile in the international arena has been approached through Board directives around specific initiatives targeting issues of major interest and concern for Food Science and Technology. The work of the Task Force on Food Processing for Nutrition, Diet and Health is an excellent example, bringing together multi-disciplinary collaborators to find the science-based solutions together in the face of skewed facts and some fiction being communicated to everyone from consumers and policy makers.

The importance of the work of IUFOST is underscored here, as all Board members, through their Adhering Bodies and work in the field fully understand the importance of processing of food at different levels for sustainable consumption of safe food.

To redress the imbalance in this and other key areas around a sustainable and resilient food system, the IUFOST Board of Directors has focussed on the work above and other central missions.

The IUFOST Codex Committee and Disciplinary Group GFORSS have raised regulatory policy awareness of IUFOST as a global source of non-aligned scientific expertise through their interventions in multiple Codex meetings throughout this Term.

One area of principal action has been in gaining and strengthening partnerships globally and communicating information based in scientific fact to as many audiences as possible and to all types of audiences– from consumers to scientists of other disciplines, to policy makers, industries and to media.

Building Intersectoral/Inter-institutional Collaboration and Capacity

The Board initiated and approved a number of key actions. The first of which has been to strengthen our links to other international scientifically based organizations. In this respect, the agreement with the Association of African Universities has led to numerous joint actions, about which you can read more in these pages. Secondly, IUFOST is strengthening its ties with its sister Union, International Union of Nutritional Sciences (IUNS), through the active participation of the President elect in the IUFOST Task Force mentioned above and in Dr. Hyun Sook Kim's strong involvement in the upcoming congress. Nutritional Sciences and Food Science should be working hand in hand and strengthening the relationship between IUNS and IUFOST is recognised as important.

The recently signed agreement with the International Dairy Federation (IDF) is another case where the Board saw the importance of aligning with major players within the field of food science and technology, to share expertise and to speak with a collective and assertive voice. This new collaboration is reflected in the session prepared and to be presented by IDF in the IUFOST congress and there will be a similar one prepared and presented by IUFOST at the IDF congress, among other collaborative work together.

Through the work of the IUFOST President and his position in the scientific advisory committee of the FAO Director-General, as well as several of our IAFoST Fellows, Dr. Joachim von Braun and Dr. Shenggen Fan who also are members of this committee, IUFOST's visibility in FAO has been enhanced and appreciated through their participation in numerous FAO scientific programmes during this Term. We thank the President for his ongoing work to increase the visibility and scientific authority of IUFOST.

We have continued to include the United Nations International Development Organization (UNIDO) in our conferences, symposia, and global summits as they so closely align with the work of IUFOST. In that regard, we have now progressed in our relationship to the point that an MoU between UNIDO and IUFOST on future collaborations will be signed at the IUFOST congress in Rimini.

Increasing Focus on Policy

Strengthening global recognition and awareness of IUFOST scientific authority in all arenas and particularly for decision and policy makers has led this Board to establish, on an annual basis, an IUFOST Summit. The objective is a 'think tank' of key leaders from various disciplines with importance to Food Science and Technology. The Summit agenda is on forecasting and predictions of needs, heightening awareness, capacity building and involvement of all sectors, key for governmental policy making, research, general science education and awareness for the consumer – and all the areas of the food chain. This Summit is planned to fulfill IUFOST goals already mentioned, to allow IUFOST members and associates to host such events regularly. The Summits will have recognised outcomes in heightening awareness of FS&T in regions around the world, to increase scientific authenticity to issues that affect all citizens and to promote media awareness. Added to this is the plan that this event will generate income both for IUFOST and its Summit host each year. The first of these events was held in Thailand in November 2023. More information on this event and its outcomes, opportunities, are available in the following pages.

Extending communications reach

Dissemination of scientific information is a fundamental part of IUFOST's mission and the Board has made progress, in tandem with the Scientific Council (represented on the Board by Chair Dr. Hongda Chen), Academy Executive Council and others, to consolidating the parameters of our association with various publications, for the benefit of the authors and for the benefits of readers and IUFOST visibility in general. To that end, work has been ongoing to clearly underline the roles of IUFOST

official publications – such as Nature’s Science of Food, numerous Elsevier publications including *Trends in Food Science and Technology*, *Food Control* and others, plus Springer’s *Food Engineering Reviews* and others. MoUs are being signed or will be finalised at the Rimini Congress regarding these publications.

Mobilizing Resources

Close attention to the financial health of the Union has been made throughout this Term by members of the Board. Thanks are extended to Board member Dr. Pingfan Rao for his role as Treasurer during the Term. IUFOST is rebuilding after previous disruptive events, exacerbated by the pandemic and only now we are coming back to a ‘new normal’ as we find and seek to maintain a number of sources of funding. Collaboration with UN agencies such as UNIDO provide opportunities for project-oriented funding. The Academy, represented by President Charles Aworh in the Board of Directors, is beginning to focus Academy work on projects as defined by the ten issues they have canvassed among the Fellows. Project funding assists us in responding to recognised needs and allows us all to share in the scientific rewards. Developing stronger relationships with industry (in a pre-competitive setting) is imperative as they are part of FS&T.

A new Board sub-committee was struck to look at various streams of association with IUFOST and to establish parameters, both financial and otherwise. This group, including Drs. V. Prakash, P. Rao, P. Chinachoti and J. Meech are thanked for the time and attention to this work and in the following pages you will find some of the successful outcomes.

Consolidating and expanding the Secretariat resource has received the attention of the Board and by the time of this publication, additional secretariat resources directed at general administration and also scientific information will be established.

Acknowledging your support

We take this opportunity to express our gratitude to all of you for granting us the opportunity to work with you for the future of Food Science and Technology and the community of IUFOST during this Term of Office.

We thank you for your support and involvement in the successes achieved. Our service to IUFOST has been possible by your commitment to the goals and standards of our profession and its importance for a healthy and sustainable food system.

- **IUFOST Board of Directors**

TERM REVIEW

Future of Food Summit, Global Members' Fora, and Roadmap towards innovative, resilient and sustainable food systems- the key focus of IUFOST

1. IUFOST Global Members' Fora - Sharing Food Science and Technology by country and region

Preamble: The Fora's focus and purpose are to recognise and highlight some of the ongoing work of IUFOST Adhering Bodies and the policy framework in countries/regions towards the Sustainable Development Goals. These models offered science-based evidence of local solutions that can be translated to global problems. These together with reports from the Academy, Scientific Council, Task Forces and Committees offered a discussion platform between IUFOST members.

Two Meetings of Members took place during this Term of Office, both virtually, one in June 2023 and the other in January 2024.

June 2023 - The Meeting of Members held by IUFOST for its Adhering Bodies and invited guests was successfully held on June 29, 2023. Members received the interim report of the Task Force on Food Processing for Nutrition, Diet and Health. Task Force Chair Erich Windhab presented the latest considerations of the cross-disciplinary expert team who agreed, among other major outcomes, on the need to distinguish between Formulation and Processing as two independent but interacting factors in food product manufacture and as key aspects for food classification. There was huge interest in the report and rich and constructive Q&A exchanges followed until time constraints prevented its continuation.

IUFOST members, affiliates and other invited guests also heard the research needs and innovative plans from the Council of the College of Early Career Scientists (CECS). CECS Administrative Council members each presented some of the challenges in food science confronting their respective regions and offered actions to address these issues. Food waste/loss, general lack of knowledge in food processing and dwindling student enrollment in food science programmes were among the pressing problems raised by the CECS. The early career scientists called for policy review or reforms, efficient technology transfer, inter-stakeholder collaboration, better science communication, and promotion of food science education. Serving as Members Meeting programme rapporteur was CESC Administrative Council member, Dominic Agyei.

Members heard of Scientific Council actions to expand scientific outputs and manuscripts and Academy Executive Council challenges and plans for more inter-disciplinary work, all inviting everyone to work with IUFOST to strengthen the discipline and voice of Food Science, Technology and Engineering.

"To begin work with IUFOST in your community and region, just let us know your interest and we will put you in touch with our key contacts, region by region. We all need to become expert communicators of scientific fact to all sectors of society and promoters of sound scientific research and innovative developments to ensure future sustainable food systems."

One outcome announced to this meeting was the convening of the IUFoST Future of Food Summit in partnership with the Food Systems Division of the United Nations Industrial Development Organization (UNIDO). The first of these annual summits bringing together inter-disciplinary stakeholders among opinion leaders, regulators, governments, researchers, industry, would be on the subject of *Resilient and Innovative Food Systems* and taking place in Bangkok, under the auspices of the Thai Government in November.

January 2024 – On the subject of innovative, resilient and sustainable food systems, members and invited guests gathered to discuss the November 2023 Future of Food Thai Summit outcomes including the Roadmap towards resilient and innovative and sustainable food systems (see page 10 for full report on Summit). The major purpose of this gathering was to take the Roadmap, created at the global Summit with UNIDO and the Thai Government held in Thailand in November 2023 and translate it into action. Members were called on to share what they are doing to move forward towards a Sustainable and resilient food system. In turn IUFoST governance talked about some ways to bring ideas into action through additional Task Forces, cooperative agreements with new partners.

This was an invitation to our Adhering Bodies to present initiatives underway in their countries that could assist others. The purpose was to take us to the 22nd World Congress, to be held in Rimini from 8-12 September, at which time we would meet in small groups and at the General Assembly to chart the way forward and to see how Food Science and Technology can be promoted, identified and prioritised by all those in society, from the consumer to the governments.

Some examples were given of how IUFoST could serve by highlighting and recognising innovation and excellence as it occurs in countries – by governments and in policy – India's Food Processing Directorate and the City of Hohhot provide two such cases. During the meeting, invitees heard from IUFoST members - New Zealand Institute of Food Science and Technology (NZIFST), Sri Lanka Association of Food Science and Technology, Food Science and Technology Association of Thailand (FoSTAT), Nigerian Institute of Food Science and Technology (NIFST), among others in presentations about national programmes and perspectives. Key issues emerging from the presentations and discussion were mitigation and adaptation to climate change; embracing social responsibility; exploring alternative food production systems; addressing issues of food loss and waste that also produces a social opportunity for positive change and helps pave the way for a future where the food system is both sustainable and resilient.

A proposed solution to improve resilience in Sri Lanka is MICRO (Many Integrated Crops Raised Organically), a farming method maximizing productivity on small plots. Utilizing intensive planting, crop rotation, companion planting, and sustainable practices, MICRO offers an efficient and sustainable approach to address the urgent issue of food security in the country and improve family nutrition security.

In Canada, where warming rates are double the global average and the Arctic faces an alarming three to four times acceleration, the intricate relationship between climate, food, and health is evident. To address these challenges, as recommended also by other countries, resilient systems must be developed to mitigate the impacts of extreme weather events. This involves optimizing resource use in food and feed production, considering the changing climate's effects on land and water.

New Zealand highlighted efficient resource management as crucial for sustainable agriculture practices that can adapt to evolving environmental conditions. Additionally, drawing from indigenous knowledge and re-developing traditional food systems holds significant potential. Indigenous communities possess valuable insights into sustainable practices that withstand the test of time, enhancing our ability to navigate climate change challenges and preserving both the environment and community health.

In the case of Thailand, the Food Innovation and Regulation Network (FIRN) plays a pivotal role in fortifying Thailand's future food system with a transformative, multifaceted approach. FIRN adopts a transdisciplinary research strategy, fostering collaboration across diverse fields to develop holistic solutions for complex food system challenges. The network is equally committed to capacity building and networking activities, empowering individuals and organizations with tools for navigating the evolving landscape of food innovation and regulation. FIRN's hallmark lies in cultivating clear consensus goals through strong determination and collective actions, aligning stakeholders toward a unified vision for a resilient and innovative food system in Thailand.

The importance of maintaining and scaling up traditional foods and food systems was emphasized by Nigeria.

Members accepted the Roadmap and urged continued investment in novel foods, advanced processing and crucial resource management. Emphasis was also on need for increased funding for R&D, knowledge transfer, scalability. IUFoST membership advocated for the development of effective public-private partnerships and consumer education to propel transformative change in the pursuit of a sustainable and resilient future for global food systems. The resulting new Strategic and Action plans would be considered next at the World Congress in Rimini.

2. IUFoST Future of Food Summit and Roadmap

Responding to the call for action stemming from the 2021 UN Food Systems Summit, and supporting commitments to transform food systems to address the rapidly growing needs of an increasing world population, the International Union of Food Science and Technology (IUFoST) partnered with the United Nations Industrial Development Organization (UNIDO) to organize the Future of Food Summit: Resilient and Innovative Food Systems, hosted by the Food Science and Technology Association of Thailand (FoSTAT), in Bangkok, Thailand on 13 November 2023.

Food scientists and researchers, opinion leaders, industry representatives and regulators* present at the meeting, reaffirmed:

- **The pivotal role played by food science and technology** to provide solutions to challenges testing the resilience of food systems, namely the vulnerability and scarcity of natural resources, climate change, regional and global conflicts, and continued food losses,
- **The importance to offer food processing solutions** as a means of prevention of food losses and remediation of the possible introduction of food safety hazards that can be further managed through post-harvest interventions. This needs to be coupled with awareness raising and education efforts aiming to clarify the role of food processing and to rebut the claims propagated about the negative impacts of processing interventions, as may be relevant,
- **The importance to continue to invest in innovation** supporting the development and availability of novel food and feed sources and ingredients, such as alternative protein being developed from plant origin and /or through the application of technologies of likes of precision fermentation,
- **The importance to consider optimization of use of resources in food and feed production** such as land and water resources as well as to consider the reliance on recycling technologies where relevant, supported by the corresponding safeguards ensuring the safety of food production applications and technologies used,
- **The need to benefit from the experience gained from indigenous knowledge and/or the re-development of traditional food**, as well through traditional knowledge to develop solutions to prevent and/or mitigate food loss and to identify new food sources and/or processes.

Participants in the Summit identified a Three-Pillared Path Forward to support the development of resilient and innovative food systems (Figure 1):

- **Continued Investment in Food Science and Technologies:** that enable the development of novel food sources and enhance current practices of food and agri-food production. These investments should include the development of research aiming to better understanding consumers' interests and concerns to support readiness to address such concerns or mitigate consequences of consumers acceptance of available food sources. Particular attention should be developed to the introduction of digital solutions, including the reliance on Artificial Intelligence that can facilitate and optimize food production conditions, food safety and traceability.
- **Availability of Funding and Investments:** dedicated not only to research and development but to the overall food and agri-food production sector, in particular to support knowledge and technology translation and scalability of innovative solutions of food production. Investments should cover skill and competency development, indispensable to sustain efforts of research, and food production.
- **Development of Effective Partnerships:** harnessing the capacities of the public sector i.e., government interventions, academia and the private sector, to support availability of sustainable food production operations resulting from research and innovation or to offer enablers and solutions to translate research, scale-up new production processes or facilitate market access where relevant.

These three pillars of interventions need to be enabled by a series of interventions that include:

- **Regulatory facilitation and early engagement of food regulators** in the development of novel food production systems,
- **Contributions of the Academic Sector** to accompany the foreseen developments with adaptation of curriculum of food science and technology and effective support to applied research efforts with appropriate capacity building programmes,
- **Leadership from individuals and organizations** supporting food security and integrity, to ensure these areas are at the forefront of the policy agendas regionally and globally,

Support to consumer education and awareness raising in relation with food production systems, to prevent and minimize food losses and waste and support acceptance of new products and ingredients based on scientific knowledge and facts.

***Summit speakers:**

A. Driando Ahnan-Winarno, CoFounder and CTO, Better Nature Tempeh, Indonesia; Ali Badarneh, United Nations International Development Organization (UNIDO) Food Systems Division Chief; Joachim von Braun, Chair, Science Group to UN Secretary-General on UN Food Systems Summit and Scientific Advisory Committee to Director General of FAO; Pavinee Chinachoti, Chair, Food Innovation and Regulation Network (FIRN), Thailand; Shenggen Fan, Scientific Advisory Committee to DG FAO, CGIAR Board and Former Director-General of the International Food Policy Research Institute (IFPRI); Chris Elliott, Queens University Belfast, Chair ASEAN/ASSET; Samuel Godefroy, IUFoST President Elect, Founder GFoRSS; Ng Huck Hui, Assistant Chief Executive, Biomedical Research Council, A*STAR Singapore; Lijing Ke, Plant Biochemistry and Nutrition, University of Leeds, UK; Sirinya Lim, Senior Department Director, National Higher Education Science Research and Innovation Policy Council NXPO Thailand; Lina Mahy, Technical Officer, Multi-sectoral Action in Food Systems Unit, Department of Nutrition and Food Safety, WHO; Gabor Molnar, Associate Industrial Development Expert, Sustainable Food Systems Division, Department of Agri-Business, UNIDO; Olusola Oyewole, Secretary-General of the Association of African Universities (AAU); Vish Prakash, Immediate Past President IUFoST and Former Director of CFTRI Mysore, India; Kaniittha Rutrattanamongkol, Faculty of Agriculture, National Resources, Thailand; Wisuwat Songnuan, Genetics Department, Faculty of Science, Mahidol University, Thailand; Moez Sanaa, Unit Head, Standards and Scientific Advice on Food and Nutrition, World Health Organization; Maria Tuazon, Senior Nutrition and Food System Specialist, FAO; Steve Wearne, Chairperson of Codex Alimentarius Commission (Codex); Erich Windhab, ETH Zurich; Aman Wirakartaksumah, IUFoST President, Indonesia; Weibiao Zhou, Head of Department, Department of Food Science and Technology, National University of Singapore.



Roadmap to Support Resilient, Innovative and Sustainable Food Systems



Figure 1: IU FoST Roadmap, December 2023

TERM REVIEW Interdisciplinary Activities Collaboration and Action to improve Food Systems

Preamble: Interdisciplinary collaboration as a focus area, for sustainable, adaptable, and healthy future of food systems, was in fact, one of the prime agendas for the UN System Summit. Evidence-based solutions for resilient future food systems require coordination and interdisciplinary work from the farm to table. Sustainable Development Goals in relation to Food Science and Technology represent 13 of the 17 listed goals. Prevention of food losses, food waste, use and focus on scientific support for understanding traditional foods, new and emerging processing, scale up of R&D, science based immune boosting foods with nutrients, training the trainer and capacity building all form the cornerstones of IU FoST work. Interdisciplinary partnerships are one of IU FoST’s goals to strengthen the future food system.

After the UN Climate Change Conference (COP 26), the UNFSS, the 76th UN General Assembly in 2021 and after Covid pandemic stress, it was agreed that the food science and technology community and the nutrition science community should work together with international, regional, and national partners to provide comprehensive solutions to transform food systems to ensure healthy and sustainable diets for the world’s people for today and tomorrow. It was also noted that the Covid pandemic and recent environmental calamities make this an urgent challenge. As an example, traditional foods were referred to as playing a central role in sustaining populations and to

popularize their use, there is need to adopt, upgrade and adapt small scale processes and small-scale entrepreneurship from where they are produced to make them sustainable.

[Adaptation Futures 2023, Hosted by Ouranos, Government of Canada and World Adaptation Science Programme](#), at the Palais de Congress, Montreal, Canada, 2 – 6 October 2023.

IUFoST was invited by the Government of Canada and others to prepare a special session at the Adaptation Future 2023 congress, related to climate change and food, led by Professor Gordon McBean, IAFoST Fellow and Nobel Prize recipient. The session IUFoST organised, with contributions from Dr. V Prakash, Dr. Charles Aworh, Dr. Fereidoon Shahid and Ms. Judith Meech from IUFoST were on the subject of Addressing the Challenges of Climate Change, Food Insecurity and Sustainable Health and Wellbeing – Time to innovate for progress on the global goal of adaptation.

Key presentations included Dr. V. Prakash “ Sustainable science-based solutions to mitigate food losses and waste, undernutrition, safety of food, poverty and hunger nationally and globally – in context of climate change”; Dr. Fereidoon Shahidi speaking about “Food Science and Technology addressing issues of food safety and human health: Full use of food resources and by-products”; and Dr. Charles Aworh on the subject of “Climate Change: Building Sustainability and Resilience at the Water-Energy-Food Nexus in Sub-Saharan Africa. They were joined by members of Future Earth and International Science Council and others for a well-received programme that highlighted IUFoST expertise and importance to inter-disciplinary work around climate change.

Continuing the emphasis on [Interdisciplinary activities through the execution of IUFoST Scientific Roundtable Discussions \(SRDS\)](#), IUFoST organised and hosted four SRDs.

- Millets for Enhancing Agri-economy, Nutrition, Environmental, and Sustainable Development Goals, March 31, 2023
- Sustainable food packaging: environmental and food safety issues, June 8, 2023, by Food Safety WG 2.2
- Precision Nutrition and Food Science Strategies to Combat Persistent Metabolic Challenges Associated with Long-COVID, Feb 29, 2024
- Interdisciplinary Approach towards Global Food and Nutrition Security of Sustainable Development Goals, March 29, 2024

All these SRDS have published or pending publication outcomes, and all are part of the IUFoST video library.

Association of African Universities (AAU) and IUFoST partnership

Preamble: This Memorandum of Understanding (MoU) signed in November 2022, established a collaborative relationship between the Association of African Universities (AAU), and The International Union of Food Science and Technology (IUFoST) for the purpose of organizing training and education for capacity building in Africa, especially in the areas of Food Science and Technology and Agro-food production and processing.

The Association of African Universities (AAU), an international non-governmental not-for-profit organization with an initial membership of 34 institutions in 1967 has grown to a current membership of more than 400 institutions in 46 African countries. It operates in three official languages, namely English, French, and Arabic.

AAU and IUFoST are developing a work plan for each of the first five years of the MoU addressing future food security challenges and the SDGs through actions to address and thus reduce food losses and waste; mitigating environmental effects through encouragement for innovative and new

technologies; expanding knowledge of traditional foods and processes and their health aspects; educating the consumer on food choices and new alternatives; expanding knowledge of how food reacts with the body to reduce over nutrition; improve capacity building and education and training at all levels, especially in combating undernutrition, and safe food for all. These help AAU and IUFoST in collaboration through capacity building and education to address food system issues at the global and regional levels that meet the local needs as well.

IUFoST and AAU have agreed on joint execution of the following actions through short- and long-term activities.



Immediate Actions

- Development of Food Science and Technology database in Africa with contents including:
 - ✓ All African Universities Teaching Food Science
 - ✓ Names, Contacts, and Expertise of lecturers in the various Departments teaching Food Science and Technology
 - ✓ Research focus and specialties of experts

Long Term Actions:

- Implementation of developed IUFoST Food Safety Curriculum in Africa through the African Centres of Excellence related to Food Science and Technology.

Achievements

Development of Food Science and Technology (FST) Lecturers database in African Universities

- i. Development of a database for 518 African Universities teaching Food Science and Technology.
- ii. Development of a database for Head of Departments in different institutions in Nigeria (West Africa), Kenya (East Africa), and South Africa (Southern Africa).
- iii. Organizing of regional webinar for the identified Head of Departments.

The first regional webinar on capacity development jointly coordinated by IUFoST and AAU was held on 15 February 2024 via Zoom—the virtual workshop featured plenary sessions with simultaneous interpretation (English, French, and Arabic).

The agenda included the following speakers and participants (not in order): Professor O.B. Oyewole, Professor of Food Science and Technology and Secretary-General of the AAU introducing the African Research Innovation and Development Networks - Food Science and Technology Network in Africa; Professor Charles Aworh, President of the International Academy of Food Science and Technology (IAFoST) spoke about mentoring. Professor Ruth Oniang'o, IUFoST Lifetime Achievement Award Winner followed with a talk on promoting regional collaboration and partnerships in Food Science and Technology. Dr. Paul Singh, IAFoST Fellow and Distinguished Professor, University of California-

Davis presented digitalization and Virtual Learning in Food Science and Technology. This was followed by the IUFOST Focus on Africa, presented by IUFOST President, reflecting on the purposes and objectives of the joint agreement with the Association of African Universities.

IUFOST Task Force: Food Processing for Nutrition, Diet and Health

Erich Windhab - Chair (Switzerland)

Lilia Ahrné (Denmark)

Hongda Chen (USA)

Jeyakumar Henry (Indonesia)

Hyun-Sook Kim (Korea)

Barbara Schneeman (USA)

Preamble: This Task Force, IUFOST Task Force: Food Processing for Nutrition, Diet and Health – began through consultations with internationally well-known experts from the global communities of human nutritionists, food scientists and food process engineers. Then, IUFOST established an International Task Force in 2022 to address and clarify the role of food processing and the uses of terms such as ultra-processed foods in food classification systems. The latter include the very well-known NOVA classification where food processing has been built-in to define and use a concept of ultra-processed foods. As this concept has created significant controversies, the uses of food processing concepts in food classification systems must be critically reviewed. IUFOST has also recognised an international need for food systems classifications to harmonize underpinning dietary guidelines and policies as well as public health-related decisions that are based on scientific facts and data to support objective decisions across the involved sectors.

Term Report - The International Task Force on Food Processing for Nutrition, Diet and Health, established by the International Union of Food Science and Technology (IUFOST) has developed a rational approach to define the impact of food processing on the nutritional value of processed food products, referred to as IUFOST Formulation and Processing Classification (IF&PC) scheme.

Refinement of the NOVA classification system

The initial purpose in developing this scheme was to refine and improve the NOVA classification concept by addressing the confusion between formulation and processing and the non-quantitative assessment in the NOVA system. NOVA has expanded globally and is used by the general public, although the definition or meaning of the phrase as used by the general public, is not always clear nor are the criteria for identification of foods included in the “ultra-processed” category explicitly or quantitatively defined. The frequently heard argument that NOVA represents a simple classification system is offset by the difficulty of its application due to described ambiguities and unquantified assessment criteria.

Nevertheless, the task force is of the opinion that the NOVA system has drawn attention to processing as a significant influencing factor on the nutritional properties of processed food products and that such a classification of such products has so far not been sufficiently considered.

Accordingly, the Task Force developed a problem solution methodology consisting of a six step approach:

- (1) identification of the target food property to be addressed (nutrition value in the NOVA context)
- (2) differentiation of formulation (F) and processing (P),
- (3) quantification of levels (classes) for F and P,
- (4) development of a simple representation scheme for the two-parameter (F&P) classification,
- (5) rational consolidation into a coupled F&P one-parameter (FPFI^N) classification and
- (6) derivation of refinement suggestions for the NOVA system.

This approach constitutes the IUFoST Formulation and Processing Classification (IF&PC) scheme.

Modification of the NOVA system by applying this scheme can quantitatively classify processed food products at the point of purchase. Such quantification to better define processed foods can then be used, to more accurately identify the association of certain food products with obesity and related health risks in both epidemiological and clinical studies as well as determining the role of both formulation and processing. An advantage of this approach is to reduce or eliminate the current ambiguities and confusion in applying the NOVA classification system and, thus facilitate research designs that are reproducible and recommendations that are evidence-based.

Transferability of the IF&PC scheme

Another important outcome of the Task Force's approach, which focused on nutrition value, is the potential to consider other food properties in such a scheme. Such food properties of essential relevance are: (a) safety, (b) sustainability, (c) palatability, (d) affordability and (e) convenience. Based on proposed mechanisms of action within the NOVA classification, additional parameters that should be addressed include e.g. (f) satiation kinetics, (g) digestibility and (h) metabolic response.

For all of the main food properties named before (a)-(h) one can explore differentiated property-specific formulation (F) and processing (P) related classification parameters (CP and DCP), derive a two parameter (F&P) classification and consolidate to a one-parameter (FPFI^{CP}) classification.

Such holistic approach creates a quantifiable basis for the realistic development of food products, which usually have to take into account other product properties in addition to the nutritional value.

For both scenarios, the NOVA System refinement (9.1) and the consideration of several essential food product properties (9.2), there are demanding future R&D and industrial application requirements which relate to the systematic acquisition of data (classification parameters CP, e.g. NRFx.y.z and DNRFx.y.) for food product formulations before and after execution of processing steps. Such data will support research on the IF&PC scheme application in a wider food product framework to validate and refine the scheme. Related investigations should include all suggested essential food properties.

In order to successfully manage accessing and orchestrating the required interdisciplinary expertise for such R&D activities, the IUFoST Task Force highly recommends to the communities of food scientist, food engineers, and nutrition scientist as they are represented by IUFoST and IUNS, to join forces and encourage related concerted international R&D actions.

The IUFoST Task Force on Processing for Diet, Nutrition and Health (P4DNH) was set up before the 21st IUFoST World Congress of Food Science and Technology in 2022. Seven experts on Food Science and Nutrition in the Task Force with some assistance of eight members of an Advisory Board to the Task Force had 15 Meetings to work out the Report which will be presented at the 22nd IUFoST World Congress 2024 in Rimini.

Scientific Council Term Report

Chair: Dr. Hongda Chen

Past Chair: Dr. Fereidoon Shahidi

Chair Elect: Dr. Lilia Ahrne

Councillors: Dr. Roger Clemens

Dr. P. G. Rao

The Scientific Council (SC) is a standing Committee of the IUFoST. The purpose of the Scientific Council is to advise on opportunities of scientific activity for IUFoST in keeping with the Union's vision and mission and to oversee the scientific output of the Union.

The Scientific Council operates in conjunction with the Board. Its responsibilities include:

- a) oversight of the scientific standard and integrity of IUFoST activities,

- b) oversight of publicly released scientific materials and the content of learned statements on scientific matters,
- c) oversight of IUFoST official publications and related congress publications,
- d) advice for chairs and members of working Groups, scientific commissions and Task Forces as requested, no larger than is essential, to carry out specific tasks such as preparation of position papers and offering of expert advice,
- e) development and fostering of relationships with the international scientific community according to IUFoST's vision and mission in conjunction with the ongoing global work of the Union,
- f) representation and Ambassadors role in IUFoST at all scientific events in which members of the Scientific Council participate during their terms in office.
- g) involvement in the production and release of selected scientific information and related activities as decided in SC annual activity plan, for example Scientific Roundtable Discussions (SRDs), Scientific Information Bulletins (SIBs)
- h) key roles in the scientific organization of the world congresses, in conjunction with the Local Congress Organizing Committee.

During the term of office 2022-2024, the Scientific Council has been actively involved and advised in every area of IUFoST and IAFoST scientific activity. Some highlights are listed below.

The Chair of the Scientific Council is a voting member of the Board and has participated in the meetings of the Board regularly. He reported ongoing and emerging scientific activities, outcomes and impact of the Union at the Board meetings and to the IUFoST members' meetings. On an ongoing basis the Scientific Council has been consulted to provide advice and support to the General Secretariat on all issues related to the scientific output of the Union, various working groups and all scientific activities.

One of the significant documents that the SC reviewed and provided input and guidance is entitled "Top 10 Hotspots of Global Food Safety and Health Research for 2023-2024" jointly prepared and issued by CIFST and IUFoST at the CIFST Annual Food Safety Conference held in Beijing in April 2024.

The SC has played key roles in the scientific organization of the 22nd World Congresses of Food Science and Technology to be held in Rimini, Italy, in conjunction with the Local Congress Organizing Committee. The Chair has actively participated and contributed to the regular and frequent meetings with the local organizing committee for planning the scientific directions and programming details. The IUFoST scientific disciplinary groups were proactively promoted and engaged to enrich scientific content of the Congress. The Chair-Elect has diligently engaged publishers to advocate and encourage timely dissemination of scholarly works to be presented at the Congress in professional journals, and to elevate the recognition of the IUFoST. All the members of the SC are a part of the Congress Governance, and the members of its International Scientific Advisory Committee. They have provided important contributions in reviewing the programmes and the scientific abstracts.

The SC Chair has been a key member of, and the Chair-Elect an important leader of the Scientific Advisory Committee to the IUFoST Task Force on Food Processing for Nutrition, Diet and Health from get-go. The establishment of the Task Force was to discuss and propose a rational approach to define the impact of food processing on the nutritional value of processed food products. The goal is to develop recommendations to refine and improve the popular NOVA classification system to address ambiguities and uncertainties in the classification approach that have caused criticism and some confusion among scientists, food industry, policy makers, the public and news media. The Task Force has approached to its final report and will present it at the World Congress in Italy through a keynote speech, plenary talks, and a panel discussion.

The SC has organized, guided, conducted and/or assisted the following Scientific Roundtable Discussions (SRDs)

- Millets for Enhancing Agri-economy, Nutrition, Environmental, and Sustainable Development Goals, March 31, 2023
- Sustainable food packaging: environmental and food safety issues, June 8, 2023, by Food Safety WG 2.2
- Precision Nutrition and Food Science Strategies to Combat Persistent Metabolic Challenges Associated with Long-COVID, Feb 29, 2024
- Interdisciplinary Approach towards Global Food and Nutrition Security of Sustainable Development Goals, March 29, 2024

The following publications are prepared, reviewed and supported by the SC:

- Clemens, R.A., and Shahidi, F. (2022). Upregulation of immune system against COVID-19: the role of food science, nutrition and bioactive compounds. *J. Food Bioact.* 17: 1.
- Clemens, R., Rao, P.G., Elouafi, I., Oniang'o, R., Chandrasekara, A., Pressman, P., and Yadav, J. (2023). A commentary on millets for enhancing agri-economy, nutrition, environmental, and sustainable development goals. *J. Food Bioact.* 22: 1–4.
- Interdisciplinary Approach towards Global Food and Nutrition Security of Sustainable Development Goals (in preparation)

Scientific Information Bulletins (SIBs) that have been initiated, reviewed, published and distributed are shown below. These Scientific Information Bulletins (SIBs) were or are authored by invited experts and peer reviewed:

- Antimicrobial Resistance: A Food Safety Concern (July 2023)
- Computer-Integrated Food Manufacturing (March 2023)
- Fresh Produce Decontamination: Adapting to a World of Sustainable Resources (October 2022)
- Use of biotechnology to develop Probiotics as innovative functional food (in preparation)
- Industrially viable extraction processes for natural pigments from food wastes (in preparation)
- Innovation in Dry Cleaning and Sanitation Technology in Food Manufacturing (in preparation)
- AI for microbial detection in food systems (in preparation)

Academy Executive Council Term Report and Fellows Election Results

Charles Aworh, (Nigeria) President
Fereidoon Shahidi (Canada) President Elect
Aman Wirakartakusumah, (Indonesia) Past President
Stephane Guilbert (France) Councillor
Chin-Kun Wang, (Taipei, PRC) Councillor

1. Meetings

The first meeting of AEC was held on 12 December 2022 and the AEC met regularly every month, invariably as scheduled on the second Monday of the month, during the period under review.

2. Priority Areas

IAFoST identified three areas of priorities, working within IUFoST, to advance global food science and technology namely i) communication and knowledge sharing; ii) research, education and capacity building; iii) project development and implementation, working with Adhering Bodies and other international organizations to address global food and nutrition security and food safety issues; escalating local solutions to address global problems.

3. Summary of Key Areas of Activities and Accomplishments

(i) Robust Engagement with Fellows

AEC developed a comprehensive Fellows Database and actively engaged with Fellows that resulted in stronger participation of Fellows in IUFOST activities and contributed to the success of the IUFOST Members meetings of 29 June 2023 and 25 January 2024. Ten top FST issues and solutions were articulated including a) provide nutritious and safe food for all; b) strengthen global visibility of IUFOST; c) funding for research; d) communication with consumers on beneficial effects of food processing; e) climate change and the effects on agricultural production, food processing and preservation etc.; f) population growth and urbanization; g) need to interface with local universities in over 100 countries; h) need for interdisciplinary cooperation to properly address issues of food safety, security, nutrition and health; i) need to bring food industry, academia, government and civil society together; j) food sustainability solutions for developing countries.

(ii) IUFOST World Food Congresses

- AEC conducted a post-conference evaluation of the 21st IUFOST World Food Congress in Singapore (31 October to 3 November 2022) with suggestions for improving future World Food Congresses.
- AEC contributed to the scientific paper on 'Nutritional Strategies for Post-Acute Sequelae of Covid-19 (PASC) Management' from the Academy Session at the 21st IUFOST World Food Congress for publication in npj Science of Food.
- AEC was involved in every aspect of the preparations for the 22nd IUFOST World Food Congress in Rimini Italy, 8-12 September 2024 including, amongst others, the selection of the Distinguished Lecturer, the Lifetime Achievement Award recipient, the Young Researcher Award recipient, the evaluation of other award recipients including young scientists, the evaluation of abstracts submitted for paper and poster presentations, and entries submitted for competitions.
- AEC conceptualized the Academy Session entitled 'Nutritious and safe food for all (8 billion mouths) through novel food sources, plant-based alternatives, new applications and reduction of food loss and waste.'
- AEC was involved in the arrangements for the induction of new Fellows and the Academy Dinner.

(iii) Partnership with Association of African Universities (AAU)

- AEC strengthened the partnership between IUFOST and AAU and contributed to the implementation of the MOU.
- Academy President represented IUFOST and delivered a Goodwill Message at the 22nd Conference of Rectors, Vice Chancellors & Presidents of African Universities (COREVIP), with the theme 'Advancing Excellence in African Higher Education' organized by the AAU and the University of Namibia, 4-7 July 2023, Windhoek, Namibia. IUFOST participation at the Conference also included a special invited session on 'Promotion of Nutritious and Healthy Diets with Food Safety Education in Africa.'
- Academy President was a lead presenter at the IUFOST-AAU joint webinar on 'Leadership and capacity building in food science and technology in Africa' held on 15 February 2024.

(iv) Partnership with African Food Regulatory Authorities Forum (AFRAF)

Academy President represented IUFOST and made an invited presentation entitled 'Investing in capacities and competencies to upgrade performance of the agrifood production sector in Africa' at the inaugural meeting of AFRAF, 11-13 October 2023, Cairo, Egypt.

(v) Support for Adhering Bodies, Regional Groupings and Working Groups

- Supported the publication of the Scientific Information Bulletin (SIB) on 'Antimicrobial resistance: a food safety concern' by Martin Cormican and Dearbhaile Morris initiated by the IUFOST Food Safety Working Group WG 2.2.
- Supported the SRD on 'Sustainable Food Packaging: Environmental and Food Safety Issues' initiated by the IUFOST Working Group on Food Safety WG 2.2 held on 8 June 2023.

- Supported the interdisciplinary symposium organized by the Institute of Food Science and Technology Sri Lanka (IFSTSL) on 7 June 2024 to mark the World Food Safety Day by nominating Dr. Deirdre Mikkelsen of the Food Safety Working Group (WG 2.1) as speaker.
- Academy President received an Award of Excellence at the 47th Annual Conference and General Meeting of the Nigerian Institute of Food Science and Technology (NIFST), 17-20 October 2023 at the International Conference Centre, Umuahia, Abia State, Nigeria.

(vi) Support for Early Career Scientists

Encouraged and supported the activities of the College of Early Career Scientists including Webinar Series 'Strive to Thrive: Doing Quality Research under Resource-Constrained Settings' on 11 August 2023.

(vii) Collaboration with Scientific Council

Academy President contributed to the SRD on 'Precision Nutrition and Food Science Strategies to Combat Persistent Metabolic Challenges Associated with Long-COVID' organized by the Scientific Council, held on 29 February 2024.

(viii) Other IUFOST-Related Activities

- Academy President prepared an IUFOST editorial column entitled 'Fortification of Traditional Foods to Mitigate Hidden Hunger' published in IUFOST News Brief March 2023.
- Academy President made a presentation at a special session involving IUFOST entitled 'Addressing the Challenges of Climate Change, Food Insecurity, Sustainable Health and Wellbeing – Time to Innovate for Progress on the Global Goal of Adaptation' at the 7th Adaptation Futures International Conference, Montreal, Canada, 4 October 2023.
- Academy President participated in the 5th Conference on Euro-African Partnership 2023 'Euro-African Academic Cooperation towards Sustainable Cultural and Agricultural Practices for Food Security' held in Teramo, Italy, 28-30 September 2023 and gave an invited presentation entitled 'African Traditional Foods: Culture, Safety, Health Benefits and Contributions to Sustainable Food Security.' His invitation and participation were facilitated by Prof. dr. Paola Pittia (FIAFoST), Vice-Rector for Internationalisation, University of Teramo.

(ix) Election of New Fellows and Academy Executive Council

AEC facilitated the processes for the election of the 25 new Fellows of the 2024 Class of IAFoST and the President Elect and Councillors of the AEC for 2024-2026.

The Academy Executive Council (AEC) began the Call for Nominations to the Academy, 2024, in November, followed by the ballot of 46 nominees for election in late December 2023. The election deadline of new Fellows for class 2024 induction was end of January 2024. Those elected to the Academy are listed below. We thank everyone who put forward nominations of outstanding scientists and we congratulate those elected who are recognised by their peers as the scientific leaders in our discipline. **The 14th Class of Fellows** will be inducted at the 22nd World Congress of Food Science and Technology to be held in Rimini, Italy in September 2024. The following are the names of fellows to be inducted in Rimini:

Francisco J. Barba (Spain), Phil Bremer (New Zealand), Osvaldo Campanella (USA), Lijun Chen (China), Kuan-Chen Cheng, (Taipei, PRC), Marco Dalla Rosa (Italy), Ferruh Erdogdu (Turkey), Haiyan Gao (China), Maduebibisi Iwe (Nigeria), Bo Jiang (China), Johannes Le Coutre (Australia), Alexander Mathys (Switzerland), Shingo Matsukawa (Japan), Dolores O'Riordan (Ireland), Olusola Bandele Oyewole (Nigeria), Min-Hsiung Pan (Taipei, RBC), Zhongli Pan (USA), Conrad Perera (New Zealand), Rekha S. Singhal (India), Baoguo Sun (China), Dongziao Sun-Waterhouse (New Zealand), Brijesh Kumar Tiwari (Ireland), Declan Troy (Ireland), Jason Wan (USA), Jianping Wu (Canada).

Education Emerging Issues and Key Focus Areas

Working Group 1.2 Term Report

Cristina L.M. Silva (Portugal) Chair
Azis Sitanggang (Indonesia)
Ferruh Erdogan (Turkey)
Estela Nunes (Brazil)
Chelo Gonzalez (Spain)
Fátima Miller (Portugal)
Obadina Adewale (Nigeria)
Guests: Liu Mei Hui (MH)

Report period: October 2022 – July 2024

Meetings held (dates): 13 October 2022, 7 December 2022, 18 January 2023, 23 February 2023, 23 March 2023, 28 April 2023, 31 May 2023, 26 June 2023, 27 July 2023, 14 September 2023, 20 February 2024, 5 March 2024, 6 May 2024, 1 July 2024

1. Working Group Outline (including refinement/additions by WG members)

- Assess the 'Learning Platforms' in place and teaching methods to build educational and training capacity for current and future food systems.
- use networking, surveys and other methods to determine the current state of education and how institutions have responded (or are responding) to disruptions such as the COVID-19 pandemic.
- Identify emerging issues for academia.
- Identify potential actions to be taken to ensure capacity building.
- Prepare a comprehensive listing of the approaches to learning used in various training programmes at the primary, secondary, college and university levels.
- Working Group WG1.2 may add to these objectives and plans while noting the outline of activity for other Education Working Groups to ensure no overlap

2. Overview of activities

The working group activities can be organized according to the following main topics:

Topic 1: Teaching Methods , Methodologies (lead by Chelo Gonzalez)

- Based on the survey results, (presented at IUFOST 2022 in Singapore, Chelo Gonzalez is coordinating the preparation of a guidance document & paper on teaching methods. This is an ongoing work to support academia (teachers and students) during the hybrid teaching classes.
- Organization of two sessions for IUFOST 2024 in Rimini (lead by Cristina Silva)

Topic 2: Current Key Topics needed in Food Studies Curricula (lead by Cristina L.M. Silva; previously initiated by Azis Boing Sitanggang)

- A survey was implemented by Cristina Silva, in collaboration with Sam Saguy and Eli Cohen
- Based on this work, Cristina Silva made two oral presentations at IUFOST 2022 and ISEKI-Food 2023 conferences
- With the leadership of Sam Saguy, a paper was written and recently published:

Saguy, I. S., Silva, C. L. M., & Cohen, E. (2024). Emerging challenges and opportunities in innovating food science technology and engineering education. Npj Science of Food, 8(1). <https://doi.org/10.1038/s41538-023-00243-w>

- Survey on Use of Large Language Models (Chat-GPT) in Higher Education (lead by Cristina Silva)

Topic 3: Organization of two sessions for IUFoST 2022 in Singapore (lead by Cristina Silva)

- Two sessions for IUFoST 2022 in Singapore:
Session 1 : **WG 1.2 Education – Lessons for the Future: a Post-Pandemic New Context for Food Studies Teaching Methods**
Session 2: **WG 1.2 Education – Emerging Issues on Education and Key Focus Areas**
- Videos on Use of Large Language Models (Chat-GPT) in Higher Education (lead by Liu Mei Hui)

Topic 4: IUFoST Forum for Higher Education on Food Studies (lead by Fátima Miller & Cristina Silva & Liu Mei)

- Based on the round table discussions at IUFoST 2022 in Singapore, the idea of creating a Forum platform was identified.
- The Forum - <https://www.iufost.org/about-iufost-forum> - IUFoST-FAKT (International Union of Food Science and Technology Education Forum on Emerging Issues, Key Focus Areas, Knowledge, and Teaching) was established
- A webpage was developed, together with a [promotion video](#).
- The IUFoST-FAKT was orally disseminated at the 7th ISEKI-Food conference - <https://iseki-food2023.isekiconferences.com/en/>;
<https://isekifoodconf2023.meetinghand.net/projectData/1171/webData/ProgrammeA4-v3.pdf>

Topic 5: Manuscript on Innovative Curriculum Strategies for Managing the Future of Food Science, Technology and Engineering Education (lead by Sam Saguy)

3. Priorities identified and targets established to date

Topic 1: Teaching Methods, Methodologies (Chelo Gonzalez)

- To support academia (teachers and students) during hybrid teaching classes.

Topic 2: Current Key Topics needed in Food Studies Curricula (lead by Cristina L.M. Silva; previously initiated by Azis Boing Sitanggang)

- Identify emerging issues/key topics that may be introduced or inserted in Food Science and Technology Curricula.
- A paper was just published and is being disseminated.
- **Task force Artificial Intelligence in Higher Education Food Studies.**

Topic 3: Organization of a session for IUFoST 2024 in Rimini, Italy (lead by Cristina Silva)

- Disseminate current activities and progresses on Emerging Issues and Key Focus Areas in Education
- **Task force on Food Science, Technology and Engineering career.**

Topic 4: IUFoST Forum for Higher Education on Food Studies (lead by Cristina Silva)

- Need to share knowledge and resources through the IUFoST-FAKT (International Union of Food Science and Technology Education Forum on Emerging Issues, Key Focus Areas, Knowledge, and Teaching)
- Need to create a development and sustainable workplan for the IUFoST-FAKT.
- **Task force on dissemination and sharing emerging food studies teaching and education topics – fully implementing the IUFoST Forum**
- <https://www.iufost.org/about-iufost-forum>

The following activities were developed further in the last nine months (2024):

Topic 1:

- This was the main activity. It involved the definition of 2 sessions at IUFoST 2024 and corresponding author's invitations and abstracts submissions - <https://iufost2024->

[italy.com/wp-](https://italy.com/wp-content/uploads/2024/07/Programmema_Scientifico_IUFoST2024_vers8.pdf)

[content/uploads/2024/07/Programmema_Scientifico_IUFoST2024_vers8.pdf](https://italy.com/wp-content/uploads/2024/07/Programmema_Scientifico_IUFoST2024_vers8.pdf)

Session 1 - Navigating New Frontiers in Food Studies: Integrating Generative AI for Enhanced Education and Global Insights (Annex 1)

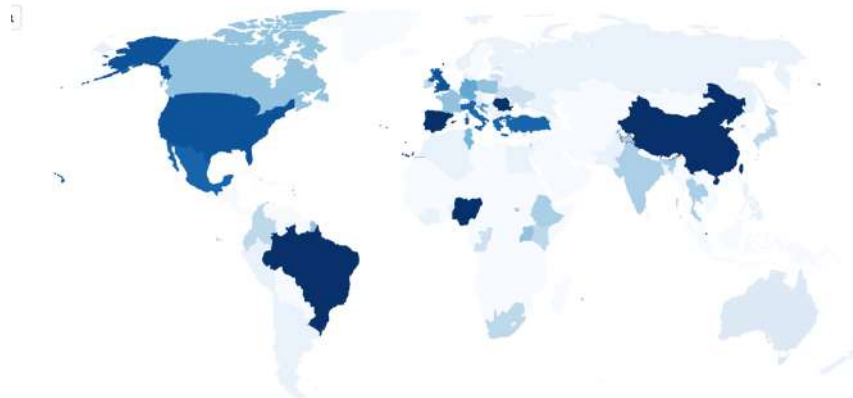
Session 2 - Cultivating Success: Innovative Pathways in Food Studies and Global Careers (Annex 2)

Top2:

- A survey was developed and widely distributed:



- 544 answers were received from students and teacher with a good geographical distribution: <https://public.flourish.studio/visualisation/18552316/>



- Results are under analysis and will be presented at IUFOST 2024 – session 1 above mentioned.

Topic 3:

- Instruction guide was prepared and videos are being produced: <https://drive.google.com/drive/folders/1XIEZUSyVpza-NPh5gfIJ-2jqSALsLKBD>
- A movie will be produced to be presented at IUFOST 2024 - session 1 above mentioned.

Topic 4:

- Based on the round table discussions at IUFOST 2022 in Singapore, the idea of creating a Forum platform was identified and is being taken care - <https://www.iufost.org/about-iufost-forum> - IUFOST-FAKT (International Union of Food Science and Technology Education Forum on Emerging Issues, Key Focus Areas, Knowledge, and Teaching).
- A webpage was developed, together with a [promotion video](#).
- The IUFOST-FAKT will be formally presented at at IUFOST 2024 - session 1 above mentioned.

Topic 5:

- Prof. Sam Saguy led the writing of another manuscript, based on the survey “Emerging challenges and opportunities in innovating food science technology and engineering education” results.
- The manuscript: “Innovative Curriculum Strategies for Managing the Future of Food Science, Technology and Engineering Education” was submitted to International Journal of Food Studies.

Food Safety Working Group on Emerging Issues, Key Focus Areas and Global Research Interests

Term Report

Charles Aworh, (Nigeria) Chair

Jong-Bang Eun (South Korea)

Srinivasa Gopal, (India)

Conrad Perera (New Zealand)

Kazutaka Yamamoto (Japan)

Chen Zheng (China)

1. Preamble

The IUFoST Working Group (WG 2.2) on Food Safety worked closely with Carol Wallace, Chair of IUFoST Working Group (WG 2.1) on Food Safety, and Deirdre Mikkelsen and Sophie Wu (members), and this report reflects that collaboration.

2. Objectives

The objectives of IUFoST Working Group (WG 2.2) are related to Emerging Issues, Key Focus Areas and Global Research Interests in the area of Food Safety.

3. Terms of Reference

- (i) Advise on emerging Issues in food safety, the areas of key focus needed by IUFoST and its members and provide scientific dissemination of areas of global research interests
- (ii) Elaborate on focus areas, technology, research and the benefits to human health, nutrition, and wellbeing
- (iii) Identify key focus areas and global research interests to encourage networking and collaboration
- (iv) Identify strategies for alerting and predicting (when possible) food safety issues and potential food hazards in different regions of the world
- (v) Examine methods of interacting with academia, industry, and government, and interdisciplinary approaches to promote food safety issues and to provide the scientific underpinning to all issues to all audiences
- (vi) Provide strategies for furthering IUFoST’s mission related to food safety
- (vii) Organize at least two scientific roundtable discussions annually.

4. Membership

Charles Aworh (Nigeria) Chair, Conrad Perera (New Zealand), Don Mercer (Canada), Srinivasa Gopal (India), Kazutaka Yamamoto (Japan), Jong-Bang Eun (South Korea) and Chen Zheng (China).

5. Meetings

The Group met regularly every month, invariably every 4th Wednesday of the month as scheduled.

6. Summary of Activities and Accomplishments

- Proposed, arranged and facilitated the publication of the Scientific Information Bulletin (SIB) on ‘Antimicrobial Resistance: A Food Safety Concern’ by Martin Cormican and Dearbhaile Morris of the University of Ireland.

- Proposed and organized the Scientific Roundtable Discussion (SRD) on 'Sustainable Food Packaging: Environmental and Food Safety Issues' held on 8 June 2023 to coincide with World Food Safety Day, with the Chairs of IUFoST Food Safety Working Groups 2.2 (Charles Aworh) & 2.1 (Carol Wallace) as Chair and Co-Chair respectively. The speakers were Drs. Vimal Katiyar (India), Young Kim (USA), Deirdre Mikkelsen (Australia) and Nathalie Gontard (France) with Conrad Perera (WG 2.2) and Sophie Wu (WG 2.1) as rapporteurs. A scientific paper is under preparation from the SRD.
- Contributed to the SRD on 'Millets for Enhancing Agri-economy, Nutrition, Environmental and Sustainable Development Goals' held on 31 March 2023 by nominating possible speakers for the SRD.
- The Chairs of IUFoST Working Groups 2.1 & 2.2 updated the chapter on 'Institutions Involved in Food Safety: International Union of Food Science & Technology (IUFoST)' written by Alan Mortimer and Ken Buckle in 2014 which has now been published in Elsevier *Encyclopedia of Food Safety* 2nd Edition, 2023 (Smithers. G. Editor-in-Chief). DOI:10.1016/B978-0-12-822521-9.00132-5.
- Dr. Deidre Mikkelsen and Dr. Ratih Dewanti-Hariyadi of the IUFoST Working Group (WG 2.1) on Food Safety were speakers at the interdisciplinary symposium on 7 June 2024 to mark the World Food Safety Day organized by the Institute of Food Science and Technology Sri Lanka (IFSTSL).
- Served as jury for 22nd IUFoST Rimini World Food Congress competitions.

7. Recommendation

It is recommended that in reconstituting Working Groups and committees, the two Food Safety Working Groups (WG 2.1 and 2.2) be merged into one formidable Food Safety Working Group.

IUFoST Codex Committee Term Report

Samuel Godefroy (Canada)
 Charles Aworh (Nigeria)
 Pamela Byrne (Ireland)
 Pur Hariyadi (Indonesia)
 Nik Daud (Malaysia)
 Kazutaka Yamamoto (Japan)
 Lara Hanna Wakim (Lebanon)
 Amine Kassouf (ECS)

Preamble: The Codex Committee of IUFoST was formed in mid 2021. For the 44th Session of the Codex Alimentarius Commission (CAC44) in November 2021, the document – *IUFoST Providing Food Science and Technology Expertise and Solutions – Supporting the CODEX Mandate* – was prepared by the IUFoST Codex Committee. The document reminds Codex and its member states that IUFoST is a key scientific resource to promote the goals of Codex to ensure food safety and to promote trade in food. The text of the IUFoST Codex document for CAC44 is available here. (<https://www.iufost.org/resources/iufost-codex-documents>).

1. Background

The International Union of Food Science and Technology (IUFoST) holds Observer status in the Codex Alimentarius Commission (Codex) and has been actively contributing to the establishment and implementation of international food safety and quality standards. As the leading global organization in food science and technology, IUFoST aims to enhance its contribution to the international standard-setting process and maximize the impact of its Observer status in Codex.

This report provides an overview of the activities and achievements of the IUFOST Codex Committee from November 2022 to August 2024. The committee's efforts are directed towards promoting the leadership of IUFOST in offering scientific principles, identifying emerging food safety issues to support the development and adoption of Codex standards. The report outlines the objectives and activities of the IUFOST Codex Committee, highlighting its role in fostering effective participation and contribution to Codex proceedings.

2. Objectives of the IUFOST Codex Outreach Activities:

The International Union of Food Science and Technology (IUFOST) has been an active Observer in the Codex Alimentarius Commission (Codex), contributing to discussions that support the establishment and implementation of global food safety and quality standards. Recognizing the importance of its role, IUFOST is committed to enhancing its contributions to the international standard-setting process and leveraging its Observer status to its fullest potential.

To fulfill these objectives, the IUFOST Codex Committee, created in September 2021, is dedicated to defining and recommending IUFOST's contributions to Codex proceedings. Its objectives include:

- Leveraging IUFOST's expertise to support the development and adoption of Codex standards and guidelines.
- Characterizing new food safety and quality challenges arising from advancements in science and technology.
- Prioritizing Codex activities where IUFOST's input is most relevant and impactful.

3. Activities and Achievements

From November 2022 to August 2024, the IUFOST Codex Committee convened four times to deliberate on key topics arising from various Codex committee sessions. During these meetings, the committee developed a range of resources, including analysis documents, expert opinions, and detailed reports to support and enhance Codex activities. **Table 1** provides a summary of these meetings and the resources produced.

TABLE 1: IUFOST CODEX COMMITTEE MEETINGS FROM NOVEMBER 2022 TO AUGUST 2024.

Meeting Date	Target Codex Committee	Developed Resources
May 2023 (online correspondence)	Codex Committee on Food Labelling (CCFL), 47 th session, Gatineau, Canada, 15-19 May 2023	Conference Room Document (CRD26)
24 November 2023	Codex Alimentarius Commission (CAC), 46 th session, 27/11/2023 - 02/12/2023 Rome, Italy	Conference Room Document (CRD46)
12 April 2024	Codex Committee on Food Contaminants (CCCF), 17 th session, Panama City, Panama, 15-19 April 2024	Conference Room Document (CRD41)

18 April 2024	Codex Committee on Food Additives (CCFA), 54 th session, Chengdu, Sichuan Province, China, 22-26 April 2024	Conference Room Document (CRD31)
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The Conference Room Documents (CRDs) were developed by the Disciplinary Group of the International Union of Food Science and Technology (IUFOST) for Food Regulatory Science, the Global Food Regulatory Science Society (GFORSS). CRDs were reviewed and endorsed by IUFOST Codex Committee before their submission.

Under its observer status in Codex, IUFOST also supported engagement in Codex sessions. Experts from GFORSS represented IUFOST and participated, both online and in-person, in the Codex committees listed in **Table 1**.

4. IUFOST Supporting other Codex Outreach Programs

IUFOST through its disciplinary group, the [Global Food Regulatory Science Society \(GFORSS\)](#), is actively advancing its Codex outreach to enhance Codex capacities in the Near East, Asia, and Southwest Pacific regions. These initiatives are implemented by GFORSS in collaboration with Land O'Lakes Venture 37, the Risk Analysis and Regulatory Excellence Platform of Laval University (PARERA), Codex regional coordinators, and standardization organizations from the targeted regions and are funded by the United States Codex Office (US CO).

This endeavor significantly contributes to developing Codex communities of practice within the targeted regions and countries through comprehensive training materials on Codex procedures and protocols, analyses of agenda items related to upcoming Codex committees, and strategies to strengthen Codex programs.

Key activities included organizing coordination meetings for Codex contact points, observers, and stakeholders; establishing Expert Working Groups (EWG) to analyze Codex Technical Committee documentation; creating repositories of resources such as analysis documents, opinions, and reports; and developing enablers for Codex work, including data availability and information exchange tools (**table 2**). Through these efforts, IUFOST and GFORSS are enhancing the capacity and effectiveness of Codex communities, ensuring thus robust and informed participation in Codex processes.

TABLE 2: ACHIEVEMENTS OF THE ARAB, SOUTH-WEST PACIFIC AND ASIA CODEX INITIATIVES FROM NOVEMBER 2022 TO AUGUST 2024.

<u>Arab Codex Initiative</u>	20 Sessions of Codex Committees	
	2 Arab Codex Colloquia	The Second Arab Codex Colloquium 10 – 11 June 2023, Muscat, Oman
		The Third Arab Codex Colloquium 11-13 June 2024, Amman, Jordan
	3 Experts Working Groups	• The electronic Arab working group on the collection and

		<p>analysis of data on moisture in fresh dates in the Arab region.</p> <ul style="list-style-type: none"> • The electronic Arab working group on the maximum level for total aflatoxins in ready-to-eat peanuts. • The electronic Arab working group on the development of a Codex standard on Camel Milk.
	7 Interregional Colloquia (CCAFRICA-CCLAC-CCNE-US)	
<u>SWP Codex Initiative</u>	9 Codex Roundtable meetings	
	2 Codex Colloquia	The First SWP Codex Colloquium 8 – 9 November 2022, Auckland, New Zealand
The Second North America Southwest Pacific (NASWP) Codex Colloquium 26-28 February 2024, Nadi, Fiji		
<u>Asia Codex Initiative</u>	2 Codex Colloquia	CCASIA Codex Colloquium 2023 15-16 November 2023, Xiamen, China
		CCASIA-US Codex Colloquium in preparation of the CCCF17 (Virtual) 2 April 2024

5. Conclusion

The IUFOST Codex Committee remains dedicated to advancing IUFOST's contributions to Codex proceedings, fostering effective participation, and supporting the global food safety and quality standard-setting process. This report highlights the committee's significant achievements and ongoing efforts to enhance IUFOST's impact within the Codex framework.

College of Early Career Scientists (CECS) Administrative Council Term Report

Elizabeth Arenas (Philippines)
Artur Wiktor (Poland)
Cynthia Cano Sarmiento (Mexico)
Aziz Boing Sitanggang (Indonesia)
Dominic Agyei (New Zealand)
Jay Kant Yadav (India)



Dr. Elizabeth Arenas
Philippines



Dr. Artur Wiktor
Poland



Dr. Cynthia Cano Sarmiento
Mexico



Dr. Aziz Boing Sitanggang
Indonesia



Dr. Dominic Agyei
New Zealand



Dr. Jay Kant Yadav
India

During this term of office, the CECS reaffirmed its commitment to intensify IUFoST's efforts to promote food science and technology through a series of organized activities, particularly for the youth. The CECS kicked off its active involvement in the union through its participation in the roundtable discussion sponsored by the IUFoST Scientific Council last March 31, 2023. Representing the CECS, Jay Kant Yadav presented the position of the council on the theme "*Millet for Enhancing Agri-economy, Nutrition, Environmental and Sustainable Development Goals*". CECS advocates for the cultivation and utilization of millets as a sustainable means of mitigating global food security and nutrition problems. Following this successful exchange of ideas, Yadav co-authored a commentary on this topic together with Roger Clemens, Paruchuri Gangadhar Rao, Ismahane Elouafi, Ruth Oniang'o, Anoma Chandrasekara and Peter Pressman published in the Journal of Food Bioactives (Vol. 22, 2023).

In the Meeting of IUFOST Members held on June 29, 2023, the CECS Administrative Council members each presented some of the challenges in food science confronting their respective regions and offered actions to address these issues. Food waste/loss, general lack of knowledge in food processing and dwindling student enrollment in food science programmes were among the pressing problems raised by the CECS. The early career scientists called for policy review or reforms, efficient technology transfer, inter-stakeholder collaboration, better science communication, and promotion of food science education. Serving as programme rapporteur was CECS Administrative Council member, Dominic Agyei.



Fueled by its passion to support young food scientists on the flight towards career advancement, CECS conducted a webinar entitled **“Strive to Thrive: Doing quality research under resource-constrained settings”**, on August 11, 2023. The lack of resources is a major barrier in producing high-impact research – Dr. Ogugua Charles Aworh, Dr. Erich Windhab and Dr. Declan Troy presented strategic alternatives on how to optimize available resources in planning and carrying out research effectively. Early Career Scientists Biniam Kebede from New Zealand and Tonna Ashim Anyasi from the UK joined the discourse and provided their perspectives and experiences.:

The CECS convened its 2nd International Virtual Symposium last September 28, 2023, to continue its legacy of fostering knowledge exchange for the advancement of food science. This symposium entitled “Food Innovations in a Post-Pandemic World” focused on new opportunities in food product and process development as a result of the global pandemic. Invited guest speakers Dr. Ian Noble, Dr. Delia Rodriguez-Amaya, Dr. Ruth Oniang'o and Dr. John McDermott zeroed in on the role of innovation to ensure a healthy and safe food supply as well as to attain a more sustainable and food secure environment. The theme exemplifies the union’s efforts to disseminate innovative research outputs to fight world hunger and food insecurity.



To provide opportunity to young food science students to get involved in this advocacy, the CECS sponsored a Photovoice Competition as part of the symposium. The competition showcased food innovative ideas from our future food scientists that will shape the post-pandemic world. Winners were Mariah Aqilah Mohd Affandy (1st Prize), Cynthis Andirani (2nd Prize) and Jenifer Amanda Puente Moreno (3rd Prize). This competition gave the youth a chance to share their ideas and demonstrate their ingenuity.



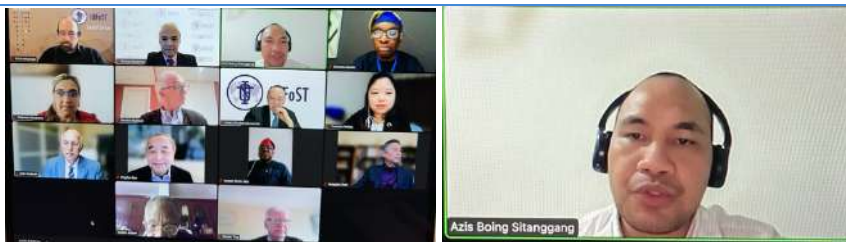
The CECS brought together over 200 participants composed of students and young food science professionals during its Pre-Congress Workshop at the 17th ASEAN Food Conference that took place at the Borneo Convention Centre in Kuching, Sarawak, Malaysia. Elizabeth Arenas of the CECS Administrative Council officiated the programme entitled “*The Sweet Spot: Finding your Niche in Food Science Research*” last October 24, 2023. Powerful speeches were delivered by IUFoST Fellows Dr. Christiani Jeyakumar Henry and Dr. Maria Leonora Francisco. The event also included inspirational stories and motivational messages by Early Career Scientist Sze Ying Leong (New Zealand) and IUFoST President, Dr. Aman Wirakartakusumah. The workshop concluded with a brief networking session among participants over afternoon snacks provided by the organizers.



Elizabeth Arenas, ECS-Philippines, together with IUFoST President Dr. Aman Wirakartakusumah, represented IUFoST at the 62nd Philippine Association of Food Technologists (PAFT, Inc) Annual Convention in Manila, Philippines on November 21, 2023. Playing ambassadorial role, Arenas took the stage to share IUFoST's goals and activities and urged involvement among fellow Filipino food science professionals and students. On the other hand, Dr. Wirakartakusumah gave an insightful presentation on the “Policy and Strategy Considerations for Future Foods: Science, Innovation and Potential Roadmap”.



Meanwhile, CECS Administrative Council member Azis Boing Sitanggang participated as rapporteur and prepared the meeting summary during the last IUFoST Members' Meeting conducted on January 25, 2024.



The CECS is set to host another Pre-Congress Workshop at the 22nd World Congress on Food Science and Technology in Rimini, Italy this September 8, 2024. *"Youth Action in Addressing Future Food System Challenges"* is an engaging workshop that will bring together young scientists to brainstorm actionable initiatives directed to this issue.

IUFoST Regional Groupings



ALACCTA (Central and South America) 'Food Processing, Safety and Health', ALACCTA Scientific Roundtable Discussion (SRD), September 2023 Joint SRD with IUFoST

Food processing plays a fundamental role in our modern life, and as a consequence of the application of new processing technologies, foods with an extended shelf life and proper nutritional quality, have been developed. The purpose of the ALACCTA roundtable, jointly organized with IUFoST was to promote discussions among professionals from different fields, such as nutrition, health, technology, and engineering, emphasizing the importance of food processing to ensure safety, accessibility, nutrition, and sustainability, clearly distinguishing between food processing and formulation definitions. The participation of diverse experts enriched the discussion, aimed at generating clear and precise information on this topic. The SRD was made available with Spanish and English translations. Outcomes included the video produced and several publication papers. ALACCTA and IUFoST established an MoU in 2022 that includes a number of joint endeavours towards dissemination of scientific information.

Federation of Food Science and Technology in ASEAN (FIFSTA)

From 2022 to mid-2024, the Federation of Food Science and Technology in ASEAN (FIFSTA)* actively promoted food safety and sustainability in the region. In 2022, FIFSTA's session at the IUFOST World Congress in Singapore, titled "Food Safety and Sustainability in ASEAN: Where the Future Lies," featured key contributions from five FIFSTA countries. Representatives shared insights on enhancing professional development, improving food safety standards, modernizing traditional foods, and strategic plans for sustainable agricultural development. A subsequent post-convention event in Taipei, attended by delegates from PAFT, IAFT, SIFST, and VAFoST, furthered regional cooperation, solidifying the commitment of the ASEAN food sector to sustainable practices and food safety through collaboration and shared knowledge.

In 2023, FIFSTA's activities were highlighted by the 17th ASEAN Food Conference (AFC) in Sarawak, Kuching, Malaysia. Despite a postponement due to the COVID-19 pandemic, the event underscored the resilience of the ASEAN food science community. Key highlights included a plenary session by IUFOST President Prof. Aman Wirakartakusumah, and a pre-conference workshop on finding niches in food science research, organized by the CECS Executive Council led by Dr. Elizabeth Arenas. In June 2024, a crucial FIFSTA meeting was held in Bangkok, attended by representatives from eight out of ten FIFSTA members countries. The leadership transition of FIFSTA to the Philippines marked a new chapter for the organization. Plans for the 18th ASEAN Food Conference, scheduled for 2025 in Davao City, Philippines, were a significant agenda item, symbolizing a fresh chapter for FIFSTA. These activities facilitated knowledge exchange and strengthened regional bonds, setting a progressive course for future initiatives in the ASEAN food industry.

Food Science and Technology experts participated in several national and regional food-based activities as reported below:

Western African Association of Food Science and Technology (WAAFoST)

1st Postharvest Connect Conference and Exhibition, Abuja, Nigeria

The inaugural Postharvest Connect Conference and Exhibition was organized by the Nigerian Stored Products Research Institute (NSPRI) under the leadership of Professor Lateef O. Sanni, WAAFOST President and Executive Director, NSPRI, NAF Conference Centre, Abuja, Nigeria, 18th to 19th April 2024. The Postharvest connect tagged 'Scaling Appropriate Postharvest Solutions for Sustainable Food and Nutrition Security' provided an opportunity to chat sustainable pathways for mitigating postharvest food losses and ensuring food and nutrition security by upscaling appropriate postharvest technologies and protocols in Nigeria and the West African Sub region. Challenges, solutions and recommendations for ensuring food and nutrition security were presented in eight (8) technical sessions with ten lead presentations and three side events.



The conference was attended by 265 participants from 7 African Countries, with a high of 510 virtual participants drawn from 128 organizations comprising research institutes, universities, international development and civil society organizations, as well as the organized private sector. Some guests at

the event were Sen. Dr. Aliyu Sabi Abdullahi, the Honourable Minister of State for Agriculture, Dr Emmanuel Okogbenin, the Programme Director for Commercialization at AATF (who represented the Executive Director of AATF); Prof. Garba H. Sharabutu, the Executive Secretary, Agricultural Research Council of Nigeria (ARCN) ; Sen. Adeniyi A. Adegbonmire Chairman, Senate Committee on Agricultural Colleges and Institutions -, represented by his vice, Sen. Dr. Titus T. Zam; Director General, International Institute of Tropical Agriculture (IITA) and CGIAR Regional Director Continental Africa, Dr Simon Ehui, represented by Head, IITA Abuja Station, Dr Beatrice Aighewi; Country Director, International Fund for Agricultural Development (IFAD), Dr Dede Ekoue; and Chairman, Governing Board, Sierra Leone Agricultural Research Institute (SLARI) and IITA Country Representative in Sierra Leone - Chief Dr. Alfred Dixon. Additional goodwill messages were delivered by Country Director, Sasakawa Africa Association (SAA) - Dr Godwin Atser; Country Director, Global Alliance for Improved Nutrition (GAIN) - Dr Michael Ojo, represented by Dr Godwin E. Ebiabhi; Mission Director, United States Agency for International Development (USAID) - Melissa A. Jones, represented by Mitchell Corzine; and Managing Partner, Sahel Consulting, Mr. Temitope Adegoroye and MDs and GMs of Agricultural Development Programme (ADP) from 6 states in Nigeria.

Official Launch of Mechanization of Cassava Production and Processing, Oyo State, Nigeria

Agricultural Technology Foundation (AATF) in collaboration with Agricultural Research Council of Nigeria (ARCN), Nigerian Stored Products Research Institute (NSPRI), National Root Crops Research Institute and IITA launched mechanization of cassava production and processing plant in line with its mission to explore Science Technology and Innovation (STI) to reposition agriculture economic driver for better Africa`s food security prospects. Cassava production and processing mechanization has the potential to increase household incomes through the development of value-added products like high quality cassava flour (HQCF) which can substitute for imported wheat flour. Cassava utilization in composite flour for use in bakery and confectionery products provides an opportunity to diversify its food applications in the food insecurity and nutrition situation of Nigeria.

Dr. Canisius Kanangire, Executive Director of AATF gave the welcoming address and opening remarks. He appreciated the Federal Government of Nigeria, Oyo State Government, and the host communities for enabling environment. The Executive Director also eulogized the foundation partners for their support. He stressed their vision and how to change the narrative to mitigate postharvest losses and food insecurity in Nigeria. Goodwill messages were received from Prof. Lateef O. Sanni who doubles as the President of WAAFoST and Executive Director of NSPRI, and other lead organizations.



Prof. Lateef Oladimeji Sanni (President, WAAFoST/ED, NSPRI) delivering his goodwill message

Promotion of New Innovative Agricultural Technologies under the World Bank Food Systems Resilience Programme in Sierra Leone

The World Bank Food Systems Resilience Programme, a collaborative effort between the Government of Sierra Leone (Ministry of Agriculture and Food Security) and the International Institute of Tropical Agriculture (IITA) was officially launch on 3rd and 4th May 2024 at Radisson Blu Hotel, Freetown Sierra Leone. This ground-breaking initiative aims to enhance food security, promote sustainable agriculture, and build resilience in Sierra Leone's food systems. The Honorable Minister of Agriculture and Food Security Dr Henry Musa Kpala was ably represented by Honorable Deputy Minister for Agriculture and Food Security Dr Theresa Tenneh Dick, who gave Ministerial remarks. Amongst IITA Scientists were ...

The programme will leverage innovative agricultural practices, technology, and research to improve productivity, enhance food quality, and ensure food security for all citizens. Through capacity building, training, and knowledge sharing, the programme seeks to empower local farmers, women, and youth to actively participate in sustainable agricultural practices. The Food Systems Resilience Programme (FRSP) will also prioritize the promotion of nutrition-sensitive agriculture to address malnutrition and improve public health outcomes in Sierra Leone.



Group photograph with Honorable Deputy Minister for Agriculture and Food Security, Prof Lateef Oladimeji Sanni, WAAFOST, President/IITA Consultant.

Expectations for the future

1. Training of Early Career Food Science and Technology Experts on grants winning proposal writing workshop.
2. Mentoring of young scientists in mainstreaming of all IUFOST opportunities.
3. To organize thematic seminars on
 - advancing Sciences of food and nutrition using microarray and nanotechnologies.
 - mobilizing climate smart postharvest management systems for sustainable agricultural value chain enterprises in Africa.
 - Success stories of Industrial Pilot Plants for food security in the south, etc.

10th Regional Food Science and Technology Summit (ReFoSTS) NIFST Day 2024, (Western Chapter) Ogbomoso, Nigeria

NIFST Western Chapter celebrated NIFST Day as part of the activities of the 10th Regional Food Science and Technology Summit (ReFoSTS) under the chairmanship of Professor Bolanle Aishat Akinwande. The summit held between 5th and 6th of June 2024 at Ladoko Akintola University of Technology Ogbomoso, Ogbomoso Nigeria. This summit theme, "Innovations in Food Technology: Enhancing Safety, Nutrition, and Economic Opportunities," resonates deeply with the core mission of NIFST and the collective aspirations of Nigeria communities.

The summit was attended by 235 physical participants and 27 virtual participants from the four zones (Oyo-Osun, Ondo-Ekiti, Kwara-Ogbomoso and Abeokuta) of the Western region of Nigeria. In addition to the keynote address and six (6) plenary sessions for the two days, there were five parallel technical sessions (four physical and one virtual). The participants, including students, were from academia, research institutes, government and private organizations. The NIFST day (i.e., the designated day to celebrate the founding fathers of the Nigerian Institute of Food Science and Technology) was marked on the 6th of June with cutting of cake and presentation of awards to individuals that have made remarkable achievements to the field of Food Science and Technology.

The summit recommended the following:

- (1) The relevant law enforcement agencies in the country must do the needful by ensuring that cottage food industries in Nigeria comply with all aspects of good manufacturing practice (GMP) requirements that can guarantee food safety, nutrition and economic development.
- (2) The practice of collecting feedback from the end-users (processors and consumers) is the most appropriate approach for a good seed system programme that can guarantee safety, nutrition and economic development.

- (3) The Nigerian Institute of Food Science and Technology (NIFST), in collaboration with the Public Health Officers at local government level, should be empowered to investigate and prosecute vendors of non-packaged food commodities who are involved in the violation of food safety standards.
- (4) Researchers must focus on upgrading the effectiveness of the existing indigenous technologies for the reduction of postharvest losses and wastes such as drying, fermentation and heat treatment, among others.
- (5) NIFST leadership must embark on robust interaction and collaboration with the management of various food industries.
- (6) The academia-industry relationship should be strengthened for mutual benefits through interactions and collaborations such as industrial outputs in our curriculum development. Students in higher institutions should be allowed to have regular visits to the industries. Food developers should get into information technology (IT) space which will assist in process technology improvement for quality food products and efficiency.
- (7) Researchers should direct their efforts towards the development of appropriate packaging system for our indigenous commercial food products that can guarantee safety, nutrition and economic values.
- (8) Vegetable vendors need to be properly trained on vegetable handling after harvest to guarantee safety and hygiene.
- (9) Encouragement of researchers in various Higher Education Institutions and Research Institutes towards the conduct of research that satisfy the SDG goals.



Prof **AMANI Georges**

Scientific fortnight of the food security research cluster, Nangui Abrogoua University, Abidjan, Côte d'Ivoire

Professor Amani N'Guessan Georges, Full Professor of Biochemistry and Food Technology, Lecturer and Researcher at the Food Science and Technology Training and Research Unit (UFR-STA) of the Nangui Abrogoua University (UNA), Chairman of the Scientific Council of the UNA and the UFR-STA, Expert Consultant-Evaluator for Higher Education Institutions and Agri-Food Industries and Past President of WAAFOST, gave two lectures during the scientific fortnight of the Food Security Research Unit at the Nangui Abrogoua University (UNA). The scientific fortnight ran from Wednesday 29 May to Wednesday 12 June

2024 in Abidjan/Côte d'Ivoire.

On the first day (29 May 2024), a panel was held to refocus the process of developing master's degrees in STA. Professor Amani Georges presented a remarkable lecture on the theme: "Master: generalities and technical aspects specific to Biochemistry and Food Technology (BTA)". The second lecture took place on Wednesday 5 June 2024. Professor Amani spoke on "Good practice in the scientific management of research: general aspects and the particular case of doctoral thesis work". Professor Amani's speeches highlighted the current challenges and possible solutions for making the most of research results and strengthening academic and professional capacities.

IUFoST Disciplinary Groupings

Preamble: In accordance with IUFoST's mission to strengthen the world community of Food Science and Technology, every effort is being made to integrate or closely cooperate with all groups active related to the discipline. The **Disciplinary and Special Interest Groups** of the Union broaden IUFoST's scientific base and increase IUFoST's international impact as it is crucial to the profession and in the promotion of IUFoST's mission for the global Food Science and Technology community to speak with a clear scientific voice on critical issues.

Global Food Regulatory Science Society (GFORSS)

The GFORSS has been added to the list of IUFoST global specialist advisors. The Society aims to promote the development of competencies, know-how and knowledge including scientific and

policy analysis, underpinning food regulatory decisions and in support of the development and implementation of Food control systems. Founding members are from multiple countries: Australia, Canada, Chile, China, Egypt, India, Ireland, Lebanon, Morocco, Saudi Arabia, Tunisia, and from the United Nations International Development Organization (UNIDO).

As one of its first actions, GFORSS launched a series of food safety capacity building webinars. To kick off the series, GFORSS organised two virtual events dedicated to food contact material assessment and regulatory management. *Food Contact Materials – International Regulatory Framework and Food Contact Materials Recycling – Regulations and Guidance*. (See pages 27-28 for GForSS and Codex actions).

International Society of Food Applications of Nanoscale Sciences (ISFANS)



In 2023, the year between IUFOST congresses, the ISFANS community organised a number of activities and was present at various conferences and workshops. Besides, preparations were started for a number of activities that are planned to take place in the future. We are also proud to report that a number of ISFANS members received professional honours from different organizations.

Activities and contributions in 2023-24:

June 2023:

Frontier Scientist Workshop, Stockholm,

Sweden: Packaging Nanotechnology in Functional Food and Pharmaceuticals for Future Human Wellness. Special invitation to ISFANS community by the Korean Academy of Science and Technology. Contributions from Hyun Jin Park and Karin Schroën.

January 2024:

Start of the organization of the special session dedicated to Nanotechnology and Food for the IUFOST congress in Rimini, Italy (September 2024), with Hongda Chen and Karin Schroën leading this process, together with IUFOST liaison Judith Meech. The session will be chaired by Hongda Chen, the keynote lecture will be by Karin Schroën, and other ISFANS contributions are by Hyun Jin Park (South Korea), Cristina Sabliov, Louisiana State University (USA), and Harjinder Singh (New Zealand).

March 2024:

Start of the special issue for the Journal of Nanoparticle Research focused on Nanotechnology for Sustainable Food Production. Cristina Sabliov, Jason White and Hongda Chen are co-editing. The submission deadline is September 1, 2024.

June 2024:

Gordon Research Conference: Nanotechnology for Agriculture and Food, Manchester, New Hampshire, USA. Co-organization of the event was by Melanie Kah, and Carmen Gomes. Attendance of Hongda Chen, Cristina Sabliov, Jason White and Karin Schroën. Karin Schroën delivered a plenary speech. Cristina Sabliov led the GRC Power Hour which was designed to promote diversity and inclusion in the scientific workplace.

September 2024:

IUFOST congress (Rimini, Italy), with special session organised by ISFANS.

Early 2025:

Scientific Roundtable Discussion (SRD) on the current trends, challenges and opportunities of nanoscale science and nanotechnology for food and nutrition security. This endeavour is supported by the Scientific Council of the USA.

International Society of Nutraceuticals and Functional Foods (ISNFF)

The ISNFF is a Disciplinary Interest Group of the International Union of Food Science and Technology (IUFoST; approved 2008 in Shanghai, China). ISNFF was founded in 2007 and officially began its activities in 2008 by establishing its first journal, Journal of Functional Foods (JFF), published by Elsevier, as a cooperative initiative, and the Annual Conference and Exhibition (the first meeting was held in Taichung in 2008, Taiwan) as well as pre-conference and short course offerings. The Journal of Food Bioactives (JFB) is a recent dedicated publication that is published directly by ISNFF and Associates since 2018.

The objectives of ISNFF have been and shall continue to be as follows:

- Provide an appropriate international forum to foster communication among professionals in academia, industry, and governments. This is done through its annual conferences, exhibitions and newsletters, journals, short courses, and workshops.
- Provide technology transfer and facilitate communications among inventors, investors, and other interested parties.
- Foster cooperative endeavors with other professional organizations in nutraceuticals, functional foods, natural health products, and dietary supplements.
- Assist the development of Nutraceuticals and Functional Foods Curricula and provide relevant authoritative evaluations around the globe.

The ISNFF Review of Activities following the Singapore Congress of IUFoST

The ISNFF activities following the Singapore meeting of IUFoST in which ISNFF organized two sessions included publication of one newsletter (volume 14, issue 2) and the December issue (volume 20) of the Journal of Food Bioactives in 2022. In 2023, ISNFF held the 15th International Conference and Exhibition on Nutraceuticals and Functional Foods at the Sheraton Princess Kaiulani Hotel in Honolulu, Hawaii, from December 10-13, 2023. Nearly 300 participants were present. The programme included 9 plenary lectures and 18 sessions on various topics related to nutraceuticals and functional food. The topics covered during the three plenary sessions included “food bioactives and their metabolites, approaches to prevent adulteration of nutraceuticals, sustainable bioproducts to promote a circular economy, bioactives in food: high activity upon digestion but low bioavailability, flavor challenges in functional foods, flaxseed as an ideal dietary supplements, anthocyanins help reduce *Helicobacter pylori* infection an Alzheimer’s disease, and nutraceuticals and functional foods in reducing the risk of COVID 19”.

There were four volumes (21-24) of JFB published in 2023, and two Newsletter issues of the ISNFF (volume 16) distributed in July and December of 2023. Contents of the Newsletter included short scientific review articles, updates on the society journal, a list of upcoming nutraceutical and functional food events, new book titles, and in the December issue there was a recap of the 2023 Annual Conference & Exhibition naming the professional awardees and student flash talk winners.

In 2024, the ISNFF activities include publication of two volumes (25 and 26) of JFB and distribution of two issues of its newsletter (volume 17). The ISNFF has again organized two sessions during the upcoming IUFoST Conference in Rimini, Italy.

IUFoST Adhering Body and Disciplinary Group Supported Events

CIFST/IUFoST 14th International Forum on Food Safety and Health, April 2023, Beijing, China

'Food Standards Save Lives' Webinar

Celebrating World Food Safety Day by Institute of Food Science and Technology Sri Lanka (IFSTSL) 7 June 2023. **Speakers included** Prof. Samuel Godefroy, IUFoST President Elect, Prof. Conrad Perera, Member of IUFoST Working Group on Food Safety

Understanding Ultra-processed Food and its Potential Consequences' Webinar

organized by IUFoST Global Outreach and Industry Relations Working Group, FoSTAT (Food Science and Technology Association of Thailand), and FIFSTA, (Federation of Institutes of Food Science and Technology of ASEAN) on 15 June 2023

World Dairy Industry Convention and Recognition Ceremonies

Hohhot, Inner Mongolia, **Theme:** "Promoting Sustainable Development of the World Dairy Industry through Innovation and Cooperation, and Green and Low-carbon Development", 4-7 August 2023

INNOVA 10, International Symposium of Food Innovation and Development

27 September – 29 September 2023, Uruguay.

Foundation Latitud held Innova 2023, the *11th International Symposium of Food Innovation and Development*.

CYTAL 2023, Biennial Congress of Argentine Association of Food Technologists (AATA)

Puerto Madero, Argentina, 4-6 October 2023

17th ASEAN Food Conference 2023 (AFC), Theme: "Future of Food In ASEAN: What's Next?" Food Conference and IUFoST ECS

Borneo Convention Centre, Kuching, Sarawak, Malaysia, 24-27 October 2023

Latin American Symposium on Food Science and Nutrition - 15 SLACAN

The Food and Nutrition Science Revolution: Feeding the World Sustainably
12-14 November, Campinas, Brazil, Supported by SbCTA and ALACCTA

IUFoST Future of Food Summit

In partnership with the Food Systems Division of the United Nations Industrial Development Organization (UNIDO) "Resilient and Innovative Food Systems"

13 November, Bangkok, Thailand

51st Annual Food Science and Technology Conference

Food Systems in a Changing World - the Science, Challenges and Opportunities

Organised by Institute of Food Science and Technology of Ireland (IFSTI) and Teagasc Research Centre
6-7 December 2023, Dublin, Ireland

ISNFF 2023 Annual Conference and Exhibition of the International Society for Nutraceuticals and Functional Foods 10-13 December 2023, Honolulu, Hawaii

The Chinese Institute of Food Science and Technology (CIFST) and IUFoST collaborated again for the 15th International Forum on Food Safety and Health, April 2024.

2024 Egyptian Global Food Safety Symposium (EGFoSS): Modernized Food Regulatory Systems as an Engine of Innovation and Investment in the Food Production Sector, Cairo, May 2024

World Food Safety Day IFSTSL Symposium, Prepare for the Unexpected.

Celebrating World Food Safety Day by **Institute of Food Science and Technology Sri Lanka (IFSTSL)** 7 June 2024. Speakers included Dr. Aman Wirakartakusumah, Dr. Deirdre Mikkelsen, Dr. Conrad Perera, Dr. Ratih Dewanti-Hariyadi.

ISOPOW 50th Anniversary Symposium

Purdue University, West Lafayette, Indiana, USA. June 11-13, 2024

Publication Special Issues underway and additional IUFoST Resources now available- for the record

- ⇒ **Food Control Special Issue** from Rimini Congress 2024. Editor in Chief – Ralf Greiner.
- ⇒ npjScience of Food – **Report of the IUFoST Task Force on Food Processing for Nutrition, Diet and Health**, September 2024.
- ⇒ npjScience of Food - **Emerging challenges and opportunities in innovating food science technology and engineering education**, based on study of IUFoST WG 1.2
<https://doi.org/10.1038/s41538-023-00243-w>
- ⇒ npjScience of Food – Review article based on IAFoST presentations at Singapore Congress: **Precision Nutrition to reset virus-induced human metabolic reprogrammimg and dysregulation (HMRD) in long-COVID** , published March 2024.
- ⇒ **Innovative Curriculum Strategies for Managing the Future of Food Science, Technology and Engineering Education**, (based on WG 1.2 survey results) was submitted to International Journal of Food Studies.
- ⇒ **IUFoST Codex Documents**: The Codex Alimentarius Committee (Codex) has published the conference room documents (CRDs) containing comments by the International Union for Food Science and Technology (IUFoST) and its disciplinary organization, the Global Food Regulatory Science Society (GForSS), on various agenda items tabled at the recent 17th Session of the Codex Committee on Contaminants in Food (CCCF17) and the 54th Session of the Codex Committee on Food Additives. IUFoST comments are expressed to aid in the connection between Codex and science, based on our global scientific expertise and competencies.
- ⇒ Meeting report, Journal of Food Bioactives - **The Power of Food Science and Technology and Nutrition for Sustainable Planet Health: Food Processing Saves Lives**.
DOI: <https://doi.org/10.31665/JFB.2021.16286>
- ⇒ **Emerging challenges and opportunities in innovating food science technology and engineering education**. *Npj Science of Food*, 8(1).<https://doi.org/10.1038/s41538-023-00243-w>
- ⇒ Video presentations of **IUFoST Scientific Roundtable Discussions**
i.)Millets ii) Food Packaging iii) Precision Nutrition iv)Food and Nutrition Security and CECS Roundtables on v) Research needs and vi) Food Innovation and vii) ALACCTA/IUFoST on Food Processing, Safety and Health
- ⇒ Video presentation of **webinar on capacity development** jointly coordinated by IUFoST and AAU (see page 14) was held on 15 February 2024 —the virtual workshop featured plenary sessions with simultaneous interpretation (English, French, and Arabic).
- ⇒ **IUFoST Scientific Information Bulletins** <https://www.iufost.org/scientific-council/scientific-information-bulletins-sibs>
- ⇒ **IUFoST News Briefs**, 12 issued from November 2022 to July 2024.
- ⇒ Special **Announcements**, Reports for World Food Day, World Food Safety Day, Lifetime and Young er Award Winners, Scientific Roundtable Discussions, Celebrating Codex at 60, 2024 Fellows of the Academy

IUFoST Lifetime Achievement Award Winners

IUFoST called for nominations and announced the outcome of the IUFoST 2023 Lifetime Achievement Awards during this term. **Dr. Fereidoon Shahidi** is the winner of this award because of his outstanding work and scientific achievement over a lifetime of service and excellence. Dr. Shahidi will be addressing the delegates to the IUFoST 22nd World Congress of Food Science and Technology in Rimini, Italy.

IUFoST Young Researcher Award Winner

From among global nominations, The Young Researcher Award for 2023 was awarded to **Dr. Lutz Grossman**, University of Massachusetts, USA. Dr. Grossman will be recognised at the World Congress and is speaking in one of the scientific sessions on the subject of his expertise.

IUFoST/IAFoST Governance 2022-2024

The Call for Nominations for election to the IUFoST Board of Directors, Academy Executive Council and Scientific Council was overseen by the IUFoST Nominations and Elections Committee and sent to IUFoST Delegates in March and April 2024.

By-Laws Excerpt:

The Call for Nominations for the Board of Directors shall be sent to all Adhering Bodies and for the Scientific Council to all members of the Academy according to appropriate practice with oversight from the Nominations and Elections Committee. For positions for which the number of candidates exceeds the number of positions, a ballot containing the full list of candidates and statements outlining their credentials shall be circulated to delegates of Adhering Bodies in due time before each General Assembly.

The Nominations for all elections, Academy Executive Council, Scientific Council and Board of Directors produced a roster of excellent nominees, many of whom are returning for their second of possible two terms in the positions, affirmed by their Adhering Bodies, vetted by the Nominations and Elections Committee, and who fulfill the need as well for appropriate geographical representation. The results are noted here.



[IUFoST Board of Directors, Term 2024- 2026](#)

With short introductions for new members of the 12- member Board:

President, **Dr. Samuel Godefroy** (Canada)

Past President, **Dr. Aman Wirakartakusumah** (Indonesia)

Incoming President Elect, **Dr. Pavinee Chinachoti** (Thailand)

Professor PAVINEE CHINACHOTI, Ph.D. graduated in Food Science, University of Illinois, Urbana-Champaign, USA. She joined the Department of Food Science at Univ. of Massachusetts in 1986. Her core strengths are in food shelf-life extension, marine oils, pet food, starch and bakery technology, health, and functional foods. She has over 80 papers published in peer-reviewed journals, over 100 abstracts and presentations, about 30 book chapters and proceedings. She joined Hill's Pet Nutrition, Inc. Over 6 years she produced 6 patents, several product launch supports and Colgate's Chairman You Can Make a Difference Award (global award). She received Outstanding Professor award from NE IFT (Institute of Food Technologist, Eastern Conference), Outstanding Advisor Award (College of Food and Natural Resources, Univ. of Massachusetts), etc. She was Chemistry Leader in the Global Innovation Incubator (GII) of Thai Union Frozen Products. She was the past President of Food Science and Technology Association of Thailand (FoSTAT). She is acting as Advisory board of FoSTAT, Chair of Food Innovation and Regulation Network (FIRN) project and joining the National Food and agriculture committee of many government agencies in Thailand. She is a Fellow of IAFoST and chair of GOIR working group of IUFoST. She has been a member of the IUFoST Board since 2022.

Mr. Richard Khaw (Singapore)

Richard's extensive leadership experience in food science, exemplified by his roles with the Singapore Institute of Food Science & Technology (7 terms as President), the Federation of Institute of Food Science & Technology in ASEAN (active member since 2017), and IUFoST Board of Director (2020-2022) makes him an exceptional nominee for the IUFoST Board of Directors. His tenure as President and involvement in organizing the 21st IUFoST World Congress and membership in the IUFoST Global Outreach and Industry Relation working group demonstrates his dedication, ability to oversee large-scale initiatives, and his international perspective on FS&T issues. In his current roles at Nanyang Polytechnic and with the Singapore Accreditation Council, Richard has showcased his capability in governance and strategic planning, vital for an IUFoST Board member. His expertise extends to being a member of the Expert Panel on the Novel Food Infrastructure Working Group by the Singapore Food Agency (SFA), where he also serves on the Licensing Advisory Panel, and further appointed as National CODEX Committee Member on Food Safety, further emphasizes his commitment to food science advancements and policy setting. Richard's willingness to dedicate time to IUFoST affairs is evident in his consistent engagement in leadership positions and significant industry events. His experience as an ambassador for the field aligns with the ambassadorial role of an IUFoST Board member, highlighting his suitability to represent the Union globally. Richard's background assures his ability to contribute significantly to IUFoST's strategic direction and global outreach. Keywords: SIFST, FIFSTA, Leadership, International Engagement

Dr. Alejandra Medrano (Uruguay) – second term of office

Dr. Misutoshi Nakajima (Japan) – second term of office

Dr. Cheikh Ndiaye (Senegal) – second term of office

Dr. Sebastiano Porretta (Italy)

Sebastiano Porretta is President of AITA, Italian Association of Food Technology.

Prof. Porretta is the leading researcher of the Ministry of Economic Development at the Experimental Station for the Food Preserving Industry of Parma where he is responsible for the Department of Marketing & Consumer Science.

He is very well known to the scientific community for research in food quality and product development market and consumer based. He is actually coordinating National and International research projects on food development aiming to create new market segments of soft processed food products coherent with actual market demands with a particular attention to sustainability by processing waste recovery.

His original approaches to studying the interactions between foods and consumers and evaluating the effect of ingredients on food quality and consumer acceptability are considered ground-breaking.

Prof. Porretta is actually Professor at the Catholic University of the Sacred Heart.

A professional member of Institute of Food Technologists and member of numerous other professional societies, Sebastiano Porretta is author of more than 350 papers and essays published in International journals and books and author/editor of over thirty specialist books in Italian and English. He is the scientific coordinator of the main biennial conference "Italian Congress on Food Science and Technology" now at 12th edition. He serves on editorial boards for several international peer reviewed journals and reviewer of national and International EU research projects evaluation. He is scientific responsible of Food Ingredients and Functional Foods journals.

Prof. Porretta is an elected Fellow of the Academy of the International Academy of Food Science & Technology.

Keywords: PRODUCT DEVELOPMENT, MARKET RESEARCH, NEW FOOD PROCESSES

Dr. Declan Troy (Ireland) – second term of office

Joining the Board as per their governance roles in the Academy Executive Council and Scientific Council:

Dr. Fereidoon Shahidi (Canada) Academy President

Fereidoon Shahidi, Ph.D., FACS, FAGFD-ACS, FAOCS, FCIC, FCIFST, FIAFoST, FIFT, FISNFF, FRSC, is a University Research Professor and Distinguished Scholar in the Department of Biochemistry at Memorial University of Newfoundland. He has authored over 1,000 publications as research papers and book chapters, 78 books, and 10 patents. His research interests are primarily in the areas of nutraceuticals and functional foods with particular attention to lipids, proteins, polyphenols, natural antioxidants, and oxidation control. His work has been cited widely (see Google scholar). He has received numerous awards from different societies, including the American Chemical Society (ACS), American Oil Chemists' Society (AOCS), Institute of Food Technologists (IFT), and the Canadian Institute of Food Science and Technology (CIFST), among others. He has served on and chaired many international committees, evaluating different programmes both nationally and globally, such as the nutraceuticals and functional food research at the USDA and as a member of the Washington-based Council of Agricultural Science and Technology on nutraceuticals. He is currently the chair of the Scientific Council of the International Union of Food Science and Technology (IUFoST) and serves as the editor-in-chief (EIC) of the *Journal of Food Bioactives* (JFB) and the journal of *Food Production, Processing and Nutrition* (FPPN). Shahidi is the principal founder of the International Society for Nutraceuticals and Functional Foods (ISNFF), a Disciplinary Interest Group of IUFoST and Founding EIC of the *Journal of Functional Foods* for which he served in that capacity for 10 years. He was a principal founder of the Nutraceutical and Functional Food Division of IFT. He has trained nearly 200 graduate students, highly qualified personnel, visiting professors, scholars, and PDFs, now his colleagues in over a dozen countries.

Dr. Lilia Ahrné (Denmark) Scientific Council Chair

Prof. Lilia Ahrné is Professor in Dairy Process Technology at University of Copenhagen. She has a PhD in food engineering from the School of Biotechnology at the Catholic University of Portugal with an internship at University of California Davis. In 1994, she moved to Sweden with an EU fellowship from the FP5 (Air Mobility) to perform a one-year PostDoc project hosted by Tetra Pak Processing Systems in collaboration with Lund University. After working for Tetra Pak, she joined SIK- The Swedish Institute for Food and Biotechnology, now part of RISE – Research Institutes of Sweden, and for 10 years, she was the director of Process and Technology Development department and adjunct Professor in Food Technology at Chalmers University of Technology. She has been president of EFFoST (European Federation of Food Science and Technology) and led the Food Science Sweden, a collaborative platform financed by the major Swedish food research actors. She has been member of the National Committee Food Sciences of The Royal Swedish Academy of Sciences (KVA) and member of the Expert Group on FOOD 2030 for the European Commission R&I Directorate F. Her research interests are to understand the effect of processing on physical, chemical, and structural characteristics of foods, and use this knowledge to develop new processes and products. Processes under study include both traditional and novel technologies.

Ms. Judith Meech, Secretary-General (non-voting)

IUFoST Scientific Council

Chair: **Dr. Lilia Ahrne** (Denmark)

Past Chair: **Dr. Hongda Chen** (USA)

Incoming Chair Elect **Dr. P.G. Rao** (India)

Dr Rao occupied various Scientist positions in CSIR Institutes, before attaining the position of Director at North East Institute of Science and Technology, Jorhat, India. Subsequently, he was CSIR-Distinguished Scientist. Dr Rao's significant contributions were in the area of process development and providing engineering packages to Chemical, Leather, Food and Allied Industries during his professional career. Dr Rao has more than 165 publications in peer reviewed international and National journals, 70 papers presented in national and international seminars, proceedings, 21 patents, 3 copy rights, 2 books and 10 chapters in books to his credit. Dr Rao is Fellow of several Academies including IAFoST.

Dr Rao was key member of the organizational committee for the IUFoST World Congress 2018 in Mumbai, India and was also Scientific Chair for the congress, through which he had exposure to the international scientific community of the Food Science & Technology. Dr Rao has played a key role in organizing nearly 80 scientific sessions and 30 Plenary Talks, Keynote and Valedictory Lectures with the interaction of professionals in Food Science & Technology globally relevant to IUFoST. Dr Rao is currently serving as Co-Chair of the IUFoST working Group on Food and Nutrition Security and has served as Councillor in the Scientific Council since 2022.

Councillor **Dr. Roger Clemens** (USA) – second term as councillor

Councillor **Dr. H.S. Ramaswamy** (Canada)

Ramaswamy's early research led to the demonstration that heat transfer distribution, thermal processing , high pressure processing, Pulse light technology etc. He has been done very good contribution in the establishment of pilot plant for High pressure processing and thermal processing. He is the editor of Food Engineering an international journal for the past 8 years. . He is the editor of several books, and has published 400 peer-reviewed scientific papers,[7] His work has been cited over 6000 times, with his H-index being 34.. He is the recipient of several awards viz. 1999 W.J. Eva Award by the Canadian Institute of Food Science and Technology[2002 John Clark Award of Canadian Society of Agricultural Engineering, Fellow of the Association of Food Scientists and Technologists (India)[2007 President's Award of Canadian Institute of Food Science and Technology,2014 Marvin A. Tung Achievement Award of Institute for Thermal Processing Specialists,2014 Hind Rattan (translated to English as "Jewel of India") award by Government of India.2015 Life Time Achievement Award of International Association of Engineering and Food. He has published more than 500 research papers in international journal with good impact factor. He is a fellow of IAFoST and National academy of agricultural sciences.

Attachment of recommendations

Keywords: High pressure processing, Pulse light technology, Thermal processing, Pulse electric field and Microwave osmotic dehydration



Academy Executive Council 2024-2026

President, **Dr. Fereidoon Shahidi**, (Canada)

Past President, **Dr. Charles Aworh** (Nigeria)

Incoming President Elect, **Dr. Pingfan Rao** (China)

Dr. Pingfan Rao is a professor and founding Director of CAS.SIBS-Zhejiang Gongshang University Joint Center for Food and Nutrition Research, and a Distinguished Professor of Fuzhou University of China.

International Science Council, and currently a member of the Board. He was a key organizer for the 2008 World Congress of Food Science and Technology in Shanghai and was instrumental in bringing the Chinese Institute of Food Science and Technology (CIFST) - the world's largest food professional community, to become one of the most dynamic players in IUFoST.

A world-renowned scholar in food science and technology, Dr Rao has published more than 180 high quality scholarly papers, two books, and received 17 patents over the past 35 years. His research focuses primarily on expanding knowledge of foods for improving health, specifically identifying and characterizing bioactive proteins and expression and scale production of recombinant enzymes, protein derivatives as the active ingredients of traditional Chinese medicine and food.

His tremendous contributions to food science for the global society have been broadly recognized by numerous awards including the Fellow of the IAFoST and a Fellow of CIFST.

Dr. Pingfan Rao has vast leadership experience. In China, he sits in the National Committee of Future Earth and served in advisory committees in several provincial governments. He has been the vice-president of the Chinese Institute of Food Science and Technology since 2001. At IUFoST, Dr. Pingfan Rao has been playing an active and remarkable leadership role in the past two decades. He was appointed Fellow of the IAFoST (2008); IUFoST's governing

council member (2006-2010), President (2012-2014), IUFoST representative at the International Science Council and currently a member of the IUFoST Board.

Keywords: Bioactive proteins; Leading Scholar in China and well-known globally; Co-Editor-in-Chief Editor of Nature Partner Journal Science of Food and editor of other journals; International Science Council leadership roles.

Incoming Councillor, **Dr. Cesarettin Alasalvar** (Turkey)

Cesarettin Alasalvar (PhD, FIAFoST, ISNFF, FIFT, FRSC) is a Senior Chief Researcher at TÜBİTAK-Marmara Research Center (State Owned) and also a Professor of Food Science and Engineering. He has been active in the Institute of Food Technologists (IFT) for many years and has served as a past chair of its Nutraceuticals and Functional Foods Division. He has also served as a chair of International Society for Nutraceuticals and Functional Foods (ISNFF). He has been very active in Horizon 2020 and Horizon Europe Programmes as Turkish Delegate. Alasalvar was on the Scientific Advisory Board Member (2018-2020) of PRIMA (Partnership for Research and Innovation in the Mediterranean Area - Horizon 2020) and is serving on the Academic Committee and World Forum for Nutrition Research and Dissemination Committee of International Nut and Dried Fruit Council (INC) since 2015. He is the principal founder of Food Innovation Platform of Türkiye (TÜGİP), a member of IUFoST. Alasalvar serves on the International Scientific Advisory Committee for IUFoST 2024 Congress. He has received numerous awards from different societies, including IFT, ISNFF, and INC in recognition of his pioneering achievements and as a leader in food science and technology with emphasis on functional foods and nutraceuticals.

Keywords: Functional Foods, Bioactives, Leading Scholar in Turkey, Senior Editor of Food Chemistry, Well-Known Globally, Fellow of IAFoST

Incoming Councillor, **Dr. Cristina Silva** (Portugal)

As an Associate Professor at Universidade Católica Portuguesa – College of Biotechnology (ESB, Cristina leads the Laboratory of Food Engineering and Packaging at the CBQF research center.

scientific excellence and the global respect given her as an innovative leader in food science education by her peers and students demonstrates the benefits of her dedication, vision, expertise and leadership to IAFoST. She founded the ISEKI Food network, a global initiative connecting institutions across Europe and beyond, and currently serves as the assistant director for Internationalization and Coordinator of 3rd cycle degrees and the Master on Food Engineering at ESB.

Keywords: Food Studies Higher Education, Food Engineering, Innovation and Sustainability of Food Systems, Responsible Food Chains, Fellow of IAFoST.

Finance and Administration Term Report 2022-2024

Digital (CIBC Smart) Banking

IUFoST Accounts are now fully connected to Smart Banking through the Canadian Bank of Commerce (CIBC), IUFoST's Bank. This service, with no additional monthly charges, allows for electronic funds transfer to send or receive funds, and allows for payments to be sent in most major currencies at a small percentage of the cost of international wire transfers. In addition, the smart banking accounts can be linked directly to QuickBooks (our accounting software) and the bookkeepers. Managing the cash flow, tracking financials, and facilitating seamless future access to and by IUFoST financial representatives are some of the benefits of this system.

IUFoST Bank:

IUFoST has consolidated its banking back in the area of its incorporation with the CIBC in Ontario, Canada. These IUFoST accounts can be maintained at the location indefinitely, regardless of the residence of the Treasurer, while still offering the Treasurer and designated Finance Committee members the ability to administer/view the accounts when and as necessary. Both IUFoST US\$ and IUFoST Canadian \$ accounts are held in these accounts. An IUFoST credit card (Visa) has been added to the accounts for business transactions requiring credit cards. At the moment, the only monthly payments for Visa are the costs for use of the business ZOOM platform and related internet fees. The credit card balance is paid in full each month. The credit card account is also linked to the bookkeepers for accounting.

IUFoST Investment Account:

The decision was made by the Board to approve an investment account to provide growth for a portion of IUFoST funds not needed for operations but that have not been earning any interest. After extensive consultation with the IUFoST banking senior executives, Finance Committee members and the Board, it was agreed to place US\$70,000, in a CIBC Mutual Fund Account, CIBC

Securities US\$ Managed Balanced Portfolio. Since the time we opened the Mutual Fund Account, the investment initially lost some of its value, as the global markets have been squeezed. The Fund has now recovered and is showing a US\$5000 increase in value. We will keep you apprised over the next year.

IUFoST Credit Card Payment System:

The agreement has been reached with *GlobalPay* (through the IUFoST bank) for credit card payments/dues, etc. to be made by members and others through invoicing attached to verification systems for Visa, Mastercard, Discover by *Authorise.net*. The advantage of having such a system is to enable Adhering Bodies (who have been asking) to pay dues through credit cards and to facilitate other payments and activities of IUFoST and IAFoST. The cost to IUFoST for using this system will be in the region of 3.5% per amount of credit card transaction.

Bookkeepers:

IUFoST bookkeepers, part of the *RLB Chartered Professional Accountants* Company and based in Guelph, Ontario, Canada began working for IUFoST in August 2020. the RLB bookkeeping costs are approx. Cdn \$5400/year, roughly half of the cost of the previous bookkeepers. These new bookkeepers have proven to be both accessible and professional.

Chartered Accountants:

As you may recall, with General Assembly approval in August 2020, IUFoST formally changed its Accountants.

The IUFoST Chartered Accountants have an excellent reputation and are located in Burlington, Ontario, close to Guelph, Ontario and therefore providing a hub in that area for IUFoST financial affairs. This Chartered Accountancy company, *SB Partners LLP*, has provided the reports you receive and approve, and they received the bookkeeping accounts to analyse and prepare the reports for 2023. The cost for their services in preparation of last year's (2023) statements was Cdn\$ \$3729.00 including the corporate income tax return (representing nil tax to be paid) submitted to the Cdn Government. This contrasts with the previous CA firm, whose charges were more than Cdn\$10,000 per annum. The level of review is the same as agreed by the General Assembly since 2018.

IUFoST/Government Record Keeping:

As mentioned, The Chartered Accountants sent the required financial information to the Canadian Government to record nil taxed owed as in all previous years and this has been acknowledged as successfully received and noted by the Canadian Government agencies overseeing Not for Profit organizations. IUFoST paid (approx..Cdn\$21.00) and filed the Annual Return due to Corporations Canada in early December for 2023 (required to do so between 15 October and 15 December). The Annual Return was filed for 2023 in June. Directors' Insurance was renewed from September 2023–September 2024.

IUFoST Nominations/Elections/Congress Bid Procedures

Procedures, according to the By-Laws, were followed under the guidance of the Nominations and Elections Advisory Committee, a standing committee of IUFoST. For each nomination, election or bid process, reminders were issued and results were verified as per previously agreed review.

Update on Dues, Income and Expenditure:

Membership dues form an important part of the IUFoST operating income and contribute to the livelihood and success of IUFoST. The Union has remained secure because of careful accounting, including a severe reduction in expenditure for lawyers and accountants and consultants and despite loss in income from all sources due to the pandemic situation and previous internal IUFoST issues. A review of accounts receivable for outstanding dues and other expenses will be made in 2024, 2025.

IUFoST income will increase at least by US\$100,00 for 2024, following the world congress in Italy and with residue income from the Singapore congress. Additional income is being received through the

curricula assessment programmes , partnerships with other organizations such ICOFF this year and as demonstrated with the 2023 partnership with Hohhot, Mongolia with more income-generating programmes underway. The Board sub-committee on non-voting associations with IUFOST has completed its comprehensive assessment of the needs and categories of association with range of costs. This has already boosted alternative sources of incomes for IUFOST through the association with Hohhot, for example.

Board Sub-Committee on Associates/Affiliates

The Board of Directors struck a sub-committee to establish the categories and nomenclature for the By-laws approved Affiliates relationship with IUFOST (IUFOST By-laws – non-voting membership Item 3D). “Upon decision by the Board and ratified by the General Assembly, IUFOST may admit affiliates, (associate) organizations of the following types: non-profit scientific organizations as institutional affiliates and commodity and commercial enterprises as corporate affiliates. In deciding whether to admit an affiliate, the Board must consider the demonstrated level of commitment of the applicant to the purposes of IUFOST and to high ethical and scientific standards related to FS&T.” Excerpted from By-Laws. “Affiliates shall pay annually a fee and have privileges as defined by the Board”.

The sub-committee has received Board approval for the following nomenclature and categories of Affiliates/associates of IUFOST: **Association Affiliate Member** - Associations are voluntary, non-governmental, non-profit organizations composed of personal or institutional members. . Associations are formed for a particular purpose or to advance a common cause, especially of a public nature. Those related to Food Science and Technology are eligible to be considered for Associate Affiliate Membership. These organizations should have Bylaws and ethical standards conforming with IUFOST. Terms of reference, rules of procedure should be made available to IUFOST. Examples: national societies and associations - Nutrition Society, Nutraceutical Association, Food Engineering Associations, Packaging Associations, Global Associations like Climate change related Associations). **Institutional Affiliate Member** - An institute is an organizational body created for a certain purpose. They are often Academic or research organizations (research institutes) created to do research on specific topics, or can also be a professional body. Those related to Food Science and Technology are eligible for membership in this category. **Commodity/ Trade Affiliate** - Commodity Organization means an organization that brings a wide spectrum of interest groups related to a particular commodity with which the Department may collaborate with to advance agrarian transformation. **Corporate Associate/Affiliate** - A Corporate Associate shall be a business entity that is engaged in the manufacture, distribution, and/or sale of equipment and/or supplies or services that complement the organizing and/or productivity industry. Small-scale industries (SMEs) include start-ups, small industries.

Congress Sponsor Affiliates – Those industries and organizations that have sponsored IUFOST congresses and/or held booths and continue as sponsors

Affiliates and Associates are not eligible for IUFOST governances and do not have voting rights. The fee (minimum 3-year relationship) allows further promotion of international cooperation and information exchange, promotion of education and training and promotion of professionalism and professional organization and networking opportunities at all levels to further the needs of FS&T and those who benefit from this expertise.

Fee structure (reviewed on a case-by-case basis around set parameters):

Associate Affiliate Fee - from US\$1500 (for a three-year term)

Institutional Affiliate Fee – from US\$1000 (for a three-year term)

Commodity/trade organization - from \$10,000 (for a three-year term)

Congress Sponsor Affiliates –for those who have sponsored congresses and/or had booths (three-year term) one-time special 3-year offer)

Corporate Associate Fee – Tiered membership: Tier 1 : \$20,000, Tier 2: 10,000, Tier 3 \$5000.Tier 4: SMEs US\$2500

This new nomenclature for associates/affiliates and terms and conditions has been put in place effective 2024. All contracts are subject to review by IUFOST lawyers.

Review of 2023 Financial Statements

The 2023 Financial Statements are circulated to the General Assembly for comment/acceptance before the congress so they may be to be submitted in good time to the Canadian Government. The Statements were prepared by the Bookkeepers and assessed by the Auditors according to the General Assembly approved standard.

IUFoST Lawyers

The Law Firm of Ross & McBride LLP, based in Hamilton, Ontario, Canada, retained to handle IUFoST legal affairs has more than 30 years' experience in the not-for-profit sector, both national and international. They have guided us through the recent IUFoST By-Laws Amendments and numerous contract reviews in the past several years.. These legal fees including review of potential MoUs and contracts for 2023-2024 so far have amounted to Cdn\$ 1867.57.

Respectfully Submitted- Dr. Pingfan Rao, Treasurer and Judith Meech, Secretary-General



**22nd World Congress of
Food Science and Technology
Rimini, Italy 8 – 12 September 2024**

We know we must all work together to create sustainable and resilient food systems. Food and agriculture represent the largest traded commodity of some 1.2 trillion dollars annually and the Food Industry is one of the largest drivers for the economies of developing countries. The congress aims to outline the new challenges that the food sector will face under the theme 'The Future of Food is Now: Development, Functionality and Sustainability.'

A congress focus will be on the role of healthy nutritious diets in increasing the immune system to combat pandemics such as Covid 19, as it boosted the trade of functional foods. The focus will be on the importance of food processing in the safety and sustainability of our food and in the promotion of a healthy diet. With the challenges of climate change and instability all nations, aligning our shared purpose is becoming increasingly urgent. The IUFoST World Congress in Rimini recognizes leaders who address IUFoST's commitment to fight hunger and work for the improvement of food safety and food security worldwide.

Against the backdrop of the seaside town of Rimini and under the famed Italian sun, we all gather around these challenges and also to meet old friends and new, to bring the community of Food Science and Technology together. See you in September!

IUFoST Distinguished Lecturer

Dr. Steve Wearne, Chair of the Codex Alimentarius Commission (Codex) has accepted our invitation to deliver the Distinguished Lecture to delegates of the IUFoST world Congress in Rimini, Italy.

Dr. Steve Wearne has a career spanning over 30 years in food regulation in the UK government and internationally, including over 20 years in the UK Food Standards Agency (FSA). During this time he has worked on issues across food policy and science, from additives and sweeteners to veterinary food policy and other contaminants in food, to modernization of regulatory practice. For the past 20 years Dr. Wearne has been a senior civil servant leading teams within the FSA. His roles have included Director Policy and Science from 2013 to 2019 and, most recently, Director, Global Affairs.

Elected by Codex member countries to the position of Chair of the Codex Alimentarius Commission (Codex) in November 2021, Dr. Wearne had served for the previous four years as Vice-Chair for this global food safety and quality standards setting body.

The Distinguished Lecturer is chosen by IUFoST in recognition of world leaders who address IUFoST's commitment to fight hunger and work for the improvement of food safety, food security and sustainability of food systems worldwide. We are deeply honoured to have Dr. Wearne give the Distinguished Lecturer Address to the 22ndth World Congress of Food Science and Technology.

IUFoST Invited Plenary Speakers, Special Sessions

IUFoST is honoured to welcome the distinguished Plenary Speakers and the IUFoST organisers of many special sessions featuring work within the Union. We thank you all for your great efforts in ensuring this will be an outstanding programme that enhances our profession and delivers tangible global outcomes.

Young Scientists present to the global scientific community in Rimini

Throughout the four days of the Congress, delegates will be hearing from the foremost scientists internationally in plenaries and in sessions. Intermingled with these plenaries will be a group of Young Scientists who warrant special attention. These are the nine Young Scientists who have been selected by international juries as representative of the best of young science and who will be providing their research highlights to the Congress delegates. In short, with more detail following the congress, here are the chosen Young Scientists.

Riccardo De Flaviis, Italy. **Presentation title:** Prospecting the effect of global warming on wheat beer quality by a multi-omic approach

Dachuan Zhang, Switzerland. **Presentation title:** AI-driven Enzyme Discovery: Transforming the fight against food contaminants

Tianzi Yang, Canada. **Presentation title:** Advancing food safety and sustainability using innovations in analytical techniques and nanomaterials

Dyuh Wulandari, Indonesia. **Presentation title:** Synthetic biology platform of pet plastic degrading enzyme (PET-ase)

Raya Vijayakumar, India. **Presentation title:** Understanding food oral destructuring dynamics to develop structured food for dysphagia patients using food 3D printing

Linzi Jing, Singapore. **Presentation title:** Prolamin-based microcarriers for culturing cell-based meat

Rifna Elenjikkal Jerome, Ireland. **Presentation:** Machine learning techniques for optimising chitin extraction from crab shells

Thomas Do, New Zealand. **Presentation title:** Effects of heat treatment on the microstructure and trypsin hydrolysis of protein bodies from hempseeds.

Lingjun Ma, China. **Presentation Title:** From Polyphenol to o-quinone: occurrence, significance, safety and health implications

And 2023 Young Researcher Award Winner **Dr. Lutz Grossman** from University of Massachusetts, USA.

Workshops and Scientific Sessions

This congress begins with several pre-congress programmes on Sunday, September 8th including the Early Career Scientists session that has a confirmed attendance already of over 100.

The IUFoST Board would like to welcome everyone in the IUFoST community first informally as you make your way to the opening reception as often it becomes difficult to talk to all old and new

friends and colleagues in IUFoST in the larger settings. We will be circulating the room details (near to the opening reception at the convention centre) and we will be there to greet you from 17.00 to 18.00 when the reception begins on Sunday, September 8.

Global Food Regulatory Science Society (GFoRSS) The International Society of Food Engineering (ISFE) the International Society of Nutraceuticals and Functional Foods (ISNFF), ISFANS – the International Society of Food Applications Nanoscale Sciences , Latin American Food Science and Technology, Western African Association of Food Science and Technology, FIFSTA representing the ASEAN, Early Career Scientist and Young Scientist forums, Education sessions, an Academy Session, and many others are in the IUFoST invited sessions forming part of the outstanding programme.

The Congress Competitions will be wrapped up at the Closing and Awards Ceremony on September 12th. Don't miss the excitement as the Teams get their awards. Hear about Congress 2026 and what is in store for you there.

Directly following the Closing /Awards Ceremony, the IUFoST General Assembly will begin in a nearby room. Delegates and Invitees may go directly there where a light lunch will be served.

Thank you to our Board of Directors, Committees and Working Groups

We wish to thank all members of the IUFoST Board of Directors who gave their time and consideration to IUFoST selflessly and who were available for IUFoST throughout this past Term of Office. At the General Assembly we will be honouring outgoing Board members Dr. Vish Prakash and Dr. Pingfan Rao for their outstanding leadership over many years to preserve the mission and vision of IUFoST and to balance the scales that allowed it to grow stronger in its global presence each year.

Our appreciation is expressed too to all members of the IUFoST Committees and Working Groups, Task Forces and Commissions. if anyone reading is interested in being more involved in any of the IUFoST activities, please do let us know.

Remembering Gerald (Gerry) Moy

Dr. Gerald Moy was one of our active Board members of IUFoST during 2018-2020, an active Fellow of IAFoST and an active writer for IUFoST on many topics. His major focus was always on food safety, food and hygiene & public health. He worked tirelessly to his last days when we were receiving still the latest news from him as he championed the cause of food safety and nutritious diets. His contribution in putting IUFoST in a healthy situation in times of need will never be forgotten. He was with the World Health Organization (WHO) at Geneva for a long period of time. His extensive travels to developing and less developed countries took him to nearly 120 countries. He was the co-editor of the 'Encyclopaedia of Food Safety.' He was also responsible for initiating a Think Tank at WHO to advance Food safety management at a global level.

His rich contribution to the agenda of Food Safety globally was commendable and for many years he advanced IUFoST work in that mission area and contributed to every part of IUFoST life. *Daisy*

Lanoi, Early Career Scientist from Kenya: "His absence will be deeply felt, and his contributions will be cherished and remembered forever."

We take this moment to remember all our colleagues who died during this Term of Office. All were outstanding in their achievements and in the benefits they brought to our discipline and towards improving the safety and security of the world's food supply.

**We look forward to seeing you in Rimini, Italy soon for the
22nd World Congress of Food Science and Technology**

