

## MESSAGE FROM THE CONFERENCE CHAIR AGROFOOD 2024



Welcome to the 2024 Global AgroFood Innovation Conference!

We are thrilled to have you join us for this premier gathering of visionaries, innovators, and leaders dedicated to transforming the future of food and agriculture. Held on the 21<sup>st</sup> and 22<sup>nd</sup> of August 2024 in beautiful Colombo, Sri Lanka, this conference will explore the most pressing topics and groundbreaking advancements shaping agriculture and food safety.

This year, our focus is to discuss and propose sustainable practices that ensure the long-term health of our planet. Additionally, we are exploring efficiency-driven innovations such as precision agriculture and advanced supply chain transparency, which aim to streamline operations and minimize waste. As our world continues to evolve, cutting-edge technologies like AI revolutionize decision-making processes and enhance productivity, fostering a more resilient and adaptable agricultural system. Integral to this evolution are progressive policies and regulations that provide a supportive environment for these advancements to flourish. Together, these elements are shaping the present landscape of agriculture and laying the foundation for a future where food systems are more sustainable, equitable, and capable of meeting the growing demands of our global population.

We are excited about the knowledge-sharing, collaborations, and innovative solutions that will emerge from this conference. Your commitment to the future of agriculture and food systems is greatly appreciated. Thank you for being part of this dynamic community. Together, we can drive meaningful change and create a more sustainable, equitable, and resilient world.

Welcome to Colombo, and let's make this conference an inspiring and impactful experience for all!

Dr. Esther Garcia-cela  
Conference Chair, AgroFood 2024  
Senior Lecturer in Applied Mycology,  
School of Life and Medical Sciences (LMS),  
University of Hertfordshire, United Kingdom

## MESSAGE FROM THE ACADEMIC PARTNER AGROFOOD 2024



On behalf of the Department of Agronomy and Horticulture, Faculty of Agriculture, Bogor Agricultural University (IPB), Indonesia, it is our distinct honour and pleasure to welcome you to the 5th International Conference on Agriculture, Food Security, and Safety (AgroFood 2024). We are proud to be the academic partner for this prestigious event, which will be held from 21–22 August 2024 in Colombo, Sri Lanka, in both online and in-person formats.

The theme for this year's conference, "Agrifood 360: Feeding the Future," encapsulates the comprehensive approach needed to address the multifaceted challenges of global food systems. This theme highlights the importance of integrating diverse perspectives and innovative practices across the entire agricultural spectrum—from sustainable farming and advanced biotechnology to food safety and nutrition security. By fostering a 360-degree view of the agrifood sector, we aim to promote holistic solutions that not only enhance productivity but also ensure environmental sustainability and social equity.

AgroFood 2024 brings together participants from all over the world, including distinguished scholars, industry leaders, and dedicated professionals. This gathering provides a unique platform to exchange ideas, share cutting-edge research, and develop strategies that will shape the future of agriculture and food security.

We extend our heartfelt gratitude to all speakers, sponsors, and attendees for their contributions. Your presence and input are invaluable to the success of AgroFood 2024. Together, let us embark on this journey of knowledge-sharing and innovation to create a sustainable and food-secure future. Welcome to AgroFood 2024!

Prof Edi Santosa,  
Academic Partner of AgroFood 2024,  
Head of the Department,  
Department of Agronomy and Horticulture, Faculty of Agriculture,  
Bogor Agricultural University (IPB),  
Indonesia.

## MESSAGE FROM THE ACADEMIC PARTNER AGROFOOD 2024



It is my distinct honour and pleasure to welcome you to the 5th International Conference on Agriculture, Food Security, and Food Safety (Agro Food 2024). As an academic partner, we are thrilled to collaborate on this prestigious platform that gathers eminent scholars, industry leaders, and passionate professionals from around the globe. This conference serves as a pivotal forum for discussing cutting-edge research, innovative solutions, and sustainable practices that address the critical issues facing our global food systems today. In a world where agriculture and food security are paramount to the well-being of societies, Agro Food 2024 offers a unique opportunity to explore the latest advancements and trends in agricultural technology, food production, and safety protocols. The discussions and collaborations that will unfold over the next few days are essential in driving forward-thinking strategies and policies that ensure a resilient and secure food supply chain for future generations.

We are particularly excited about the diverse range of topics that will be covered, from sustainable farming practices and biotechnology to food safety standards and nutrition security. The insights gained from these discussions will not only contribute to academic knowledge but will also have practical implications for policymakers, practitioners, and communities worldwide. Furthermore, the networking opportunities provided by this conference will foster valuable connections and collaborations that will extend beyond these sessions, enhancing our collective capacity to tackle the complex challenges in agriculture and food security.

We extend our heartfelt gratitude to all the speakers, sponsors, and attendees for their contributions and participation. Your presence and input are invaluable to the success of Agro Food 2024. Together, let us embark on this journey of knowledge-sharing and innovation to pave the way for a sustainable and food-secure future.

Welcome to Agro Food 2024!

Dr Muhammad Azhar Ali,  
Academic Partner AgroFood 2024,  
Department of Food Engineering,  
University of Agriculture Faisalabad Pakistan of Agriculture,  
Pakistan.

## MESSAGE FROM THE ACADEMIC PARTNER AGROFOOD 2024



With great pleasure, I am composing the foreword for the 5th international conference on Agriculture, Food Security and Food Safety (AgroFood 2024) organised by iConferences, Sri Lanka on 21-22 August 2024. This is the 4<sup>th</sup> time the Department of Food Science and Nutrition, University of Mysore, India is associated with iConferences as an academic partner.

Food and nutrition are the foundation for good health, this encompasses good and safe practices of food safety and security too, along with agricultural practices. Hunger and malnutrition among children and vulnerable populations are prevailing health problems in the world particularly in developing countries. Despite adequate agricultural produce, many strata of society are not secure in terms of food and nutrition. According to the report "The State of Food Security and Nutrition in the World" two billion of the global population are experiencing moderate to severe food insecurity.

I appreciate the organisers for choosing an appropriate team to address the issues prevailing globally and in particular the developing countries. The organizers have received many abstracts which indicated the interest of all participant to find solutions to synergize research and progress toward achieving food and nutritional security.

I extend a warm welcome to all the participants

Dr. Asna Urooj,  
Academic Partner AgroFood 2024,  
Professor & Chairperson,  
Department of Studies in Food Science & Nutrition,  
University of Mysore, India.

## TECHNICAL PROGRAM

### DAY 01 – WEDNESDAY, 21<sup>ST</sup> AUGUST 2024

#### INAUGURATION SESSION

Wednesday, 21<sup>st</sup> August 2024 | 08.30 IST to 09.45 IST | Galle Face 7

08.30 – 09.00 **Morning Refreshments**

09.10 – 09.20

**Welcome Address by the Conference Convener**



**Ms. Thulakshana Dilrukshi**

*(Director, iConferences, Sri Lanka)*

09.20 – 09.30

**Welcome Address by the Conference Chair**



**Dr. Esther Gracia-Cela**

*(Senior Lecturer in Apply Mycology, School of Life and Medical Sciences, University of Hertfordshire, United Kingdom)*

09.30 – 09.33

**Welcome Address by Academic Partner**

*University of Mysore, India*

09.33 – 09.36

**Welcome Address by Academic Partner**

*University of Agriculture Faisalabad, Pakistan*

09.36 – 09.40

**Welcome Address by Academic Partner**

*Bogor Agricultural University (IPB), Indonesia*

#### KEYNOTE FORUM

Wednesday, 21<sup>st</sup> August 2024 | 09.40 IST to 10.10 IST | Galle Face 7

09.40 – 10.10

**Emeritus Prof. Upali Samarajeewa**



*(Emeritus Professor, Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya, Sri Lanka)*

**"Food Safety along the Agri-chain"**

Emeritus Professor Upali Samarajeewa has over 30 years of experience in Food Science and Technology at the University of Peradeniya, Sri Lanka, where he founded the Department of Food Science & Technology. He has played a key role in strengthening the agro-food sector and has held leadership positions in various scientific organizations in Sri Lanka. Prof. Samarajeewa has served as an international consultant on food safety in 35 countries, working with organizations like UNIDO, FAO, and the World Bank. He has published over 225 research papers and continues his work in food safety globally, currently engaged in projects in Uzbekistan.

**KEYNOTE FORUM** **Wednesday, 21<sup>st</sup> August 2024 | 10.10 IST to 10.40 IST | Galle Face 7**

10.10 – 10.40

**Dr. Esther Gracia-Cela**

*(Senior Lecturer in Apply Mycology, School of Life and Medical Sciences, University of Hertfordshire, United Kingdom)*

**"Biocontrol Strategies to Mitigate Mycotoxins in Food"**

Dr. Esther Garcia-Cela is an expert in Mycology and Food Safety, teaching and leading modules at both undergraduate and postgraduate levels. She also serves as a tutor for international and MSc Medical Microbiology students and collaborates with institutions like the University of Brighton. Her research focuses on integrating Agri-engineering and biology to address mycotoxin challenges, ensuring food safety and reducing waste. As the research lead of the Mycolab group, she supervises students and consults for agrifood industries. Dr. Garcia-Cela's work is widely published in peer-reviewed journals, magazines, and book chapters, and she is involved in national and international projects.

**FOOD SECURITY AND FOOD PROCESSING I**

Wednesday, 21<sup>st</sup> August 2024 | 10.40 IST to 11.40 IST | Galle Face 7

Chaired by Dr. Esther Gracia-Cela

(Senior Lecturer in Apply Mycology, School of Life and Medical Sciences, University of Hertfordshire, United Kingdom)

TECHNICAL SESSION 01

10.40 - 10.55

A1



**Shan, S**

(Department of Sociology, Zhejiang University, Hangzhou, China)

"Assessing the Roles of Climate Change and Human Behavior in Global Food Resilience"

10.55 - 11.10

A2



**Abeyasuriya, A.P.H.I.<sup>1</sup>, Bulugahapitiya, V.P.<sup>2</sup>, Jayatissa, L.P.<sup>3</sup>**

(<sup>1</sup>Department of Food Science and Technology, Faculty of Agriculture, University of Ruhuna, Sri Lanka, <sup>2</sup>Department of Chemistry, Faculty of Science, University of Ruhuna, Sri Lanka, <sup>3</sup>Department of Botany, Faculty of Science, University of Ruhuna, Sri Lanka)

"Changing Rates of Antioxidant Properties in Fresh Fruits during Storage"

11.10 - 11.25

A3



**Marasinghe, M.A.G.M.**

(University of Sri Jayewardenepura, Sri Lanka)

"Development of a Novel Confectionary Product using Selected Locally Available Ingredients"

11.25 - 11.40

A4



**Chong, K.H.<sup>1</sup>, Payal, S.P.<sup>2</sup>, Astina, J.<sup>2</sup>, Nor-Azmiraah, A.J.<sup>3</sup>, Jiang, S.<sup>1</sup>, Madhavan, K.<sup>1,4</sup>, Lee, E.<sup>3</sup>, Ismail-Fitri, M.R.<sup>1</sup>, Hasanah, N.N.<sup>1</sup>, Nor-Khaizura, M.R.<sup>3</sup>**

(<sup>1</sup>Department of Food Science, Faculty of Food Science and Technology, Universiti Putra Malaysia, <sup>2</sup>Indonesia International Institute for Life Sciences, Indonesia, <sup>3</sup>Laboratory of Food Safety and Food Integrity, Institute of Tropical Agriculture and Food Security, Universiti Putra Malaysia, <sup>4</sup>Department of Biotechnology, School of Biotechnology, Mila University, Malaysia)

"Effect of Ultrasound-Assisted Sample-to-solvent Ratio of Clove (*Syzygium Aromaticum*) Ethanolic Extracts on Antioxidant and Antimicrobial Properties"



**KEYNOTE FORUM** **Wednesday, 21<sup>st</sup> August 2024 | 11.40 IST to 12.10 IST | Galle Face 7**

11.40 – 12.10

**Dr. M. Karthikeyan**



*(Associate Professor (Plant Pathology), Adjunct Professor (University of Southern Queensland, Australia) Department of Plant Pathology, Agricultural College and Research Institute, Tamil Nadu Agricultural University, India)*

**“Recent Advances in Biological Control of Plant Pathogens under Changing Climatic Conditions”**

Dr. M. Karthikeyan is an Associate Professor in Plant Pathology with over 20 years of research experience in conventional and molecular plant pathology, focusing on mycotoxins. He has earned a Ph.D. from Tamil Nadu Agricultural University and completed post-doctoral work in Italy, Australia, and the USA. Dr. Karthikeyan has published over 90 research papers, 50 book chapters, and 40 books, and he has secured 15 externally funded projects. He has received numerous awards, including the Dr. P.C. Sundarababu Prize and the Professor M.S. Swaminathan Best Scientist Award. His international collaborations span countries like Singapore, China, and Australia.

12.10 – 12.15

**Conference Photograph**

12.15 – 13.00

**Networking Lunch**

**KEYNOTE FORUM** **Wednesday, 21<sup>st</sup> August 2024 | 13.00 IST to 13.30 IST | Galle Face 7**

13.00 – 13.30

**Prof. Vasilis Valdramidis**



*(Associate Professor, Department of Chemistry, National and Kapodistrian University of Athens, Greece)*

**“Climate Change and Its Impact on Food Safety and Spoilage: A Farm to Table and an Energy to Sustainability Journey”**

Dr. Vasilis Valdramidis is an Associate Professor at the National and Kapodistrian University of Athens and a visiting Associate Professor at the University of Malta. With a Ph.D. in Chemical Engineering from the Catholic University of Leuven, Belgium, and a degree in Agriculture (Food Science and Technology) from Aristotle University of Thessaloniki, Greece, he has conducted research across multiple European institutions in food safety, predictive microbiology, and non-thermal technologies. Dr. Valdramidis has coordinated several EU-funded projects and serves on editorial boards of prominent food safety journals. He is also a member of international committees on



**CLIMATE CHANGE AND AGRICULTURE TECHNOLOGY**

Wednesday, 21st August 2024 | 13.30 IST to 15.15 IST | Galle Face 7

Chaired by Dr. Dulani Somendrika

(Department of Food Science and Technology, Faculty of Applied Sciences,  
 University of Sri Jayewardenepura, Sri Lanka)

TECHNICAL SESSION 02

13.30 - 13.45

B1



**Wijebandara, K.G.C.B<sup>1</sup>, Silva, G.L.L.P<sup>2</sup>**

(<sup>1</sup>Postgraduate Institute of Agriculture, University of Peradeniya, Sri Lanka, <sup>2</sup>Department of Animal Science, Faculty of Agriculture, University of Peradeniya, Sri Lanka)

"Enteric Methane Emission in Dairy Cattle Under Varying Management and Climatic Conditions"

13.45 - 14.00

B2



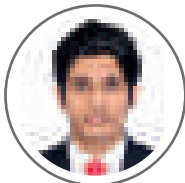
**Fernando, S.N.S., Abey Siriwardana, P.C., Jayasinghe-Mudalige, U.K.**

(Department of Agribusiness Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Sri Lanka, Research and Innovation Division, Ministry of Education, Sri Lanka)

"The Role of Key Performance Indicators (KPIs) to Drive the Performance of Firms in the Plantation Sector in Sri Lanka"

14.00 - 14.15

B3



**Wanigasundara, W.W.M.S.G., Jayasinghe, G.Y.**

(Department of Agricultural Engineering and Environmental Technology, Faculty of Agriculture, University of Ruhuna, Sri Lanka)

"UAV-Supported Seed Sowing (UavSS) and Post-Planting Analysis in forest Regeneration for Sustainable forest Ecosystem: A Systematic Literature Review"

14.15 - 14.30

B4



**Sudeep K.H.<sup>1</sup>, Saiprathik K.M.<sup>1</sup>, Chirag V.<sup>1</sup>, Karian Y.<sup>1</sup>, Chaudhary H.<sup>2</sup>, Kumar P.<sup>2</sup>, Bhowmick K.<sup>1</sup>**

(<sup>1</sup>PES University, India, <sup>2</sup>Malaviya National Institute of Technology Jaipur, India)

"Advanced Crop Safety: Multi-Frequency Avian Repellent Device for Agriculture"

14.30 - 14.45

B5



**Al-Aani, F.S.<sup>1</sup>, Omran, N.A.<sup>2</sup>, Luaibi, H.H.<sup>3</sup>, Hoffiz, B.<sup>4</sup>**

(<sup>1</sup>College of Agricultural Engineering Sciences, University of Baghdad, Iraq, <sup>2</sup>Technical Mechanic Department, Al-Furat Al-Awsat Technical University, Iraq, <sup>3</sup>Technical Mechanic Department, Middle Technical University, Iraq, <sup>4</sup>College of Arts & Sciences, American University in Iraq)

"Studying the Effectiveness of Spraying Operations in Greenhouses by Changing the Type of Nozzle Under Different Pressures and Speeds"

TECHNICAL SESSION 02

14.45 - 15.00

B6



**Dissanayake, M.P.M. & Jayasinghe, M.A.**

*(University of Sri Jayewardenepura, Sri Lanka)*

"The Influence of Blade Types and Forward Speed on the Performance of the MURRAY-15.5hp Lawn Mower"

15.00 - 15.15

B7



**Bango, A<sup>1</sup> & Piccioli, F.C.<sup>2</sup>**

*(<sup>1</sup>Walter Sisulu University, South Africa, <sup>2</sup>Universita Cattolica del Sacro Cuore, Italy)*

"Scaling the Extent of Land Use Conversion in the Arable Lands of South Africa Using Remote Sensing: A Case of Port St Johns"

**NUTRITIONAL STRATEGIES**

**Wednesday, 21<sup>st</sup> August 2024 | 15.15 IST to 17.15 IST | Galle Face 7**

Chaired by Prof. Marina Venturini Copetti

(Department of Food Science and Technology, Federal University of Santa Maria, Brazil)

**TECHNICAL SESSION 03**

15.15 - 15.30

C1



**Bhaskaracharya, R.K & Abdulazeez, A.**

(Department of Food Science, College of Agriculture and Veterinary Medicine, United Arab Emirates University, UAE)

"Physico-Chemical and Microbial Population Kinetics for Probiotic Drinking Yoghurt Made Using Cow Milk or Camel Milk"

15.30 - 15.45

C2



**Dissanayake, M.P.M. & Jayasinghe, M.A.**

(University of Sri Jayewardenepura, Sri Lanka)

"Development of a Fermented Coconut-based Dessert as a Fine Alternative for Dairy-based Yoghurts"

15.45 - 16.00

C3



**Nanayakkara, N.T., Subodinee, A.A.M., Abeysuriya, A.P.H.I.**

(Department of Food Science and Technology, Faculty of Agriculture, University of Ruhuna, Mapalana, Sri Lanka)

"Functional and Nutritional Properties of *Musa paradisiaca* (Ash Plantain) Flour (Peel And Flesh) and Development of Ready-to-serve Flakes from *Musa paradisiaca* Flesh Flour"

16.00 - 16.15

C4



**Siddiqi, S., & Urooj, A.**

(DOS in Food Science and Nutrition, University of Mysore, Mysuru, Karnataka, India)

"Suitability of Composite Flour as a Functional Food for Dietary Diversity among Autism Children"

16.15 - 16.30

C5



**Perera, H.P.V.V.**

(University of Sri Jayewardenepura, Sri Lanka)

"Innovative Proteinous Bread for Improved Nutritional Function and Market Appeal"

TECHNICAL SESSION 03

16.30 - 16.45

C6

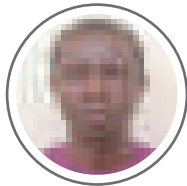


**Shivanna, M.L.<sup>1</sup>, Siddiqi, S.<sup>1</sup>, Jiang, J.<sup>2</sup>, Bilaver, L.<sup>3</sup>, Gupta, R.<sup>3</sup>, Urooj, A.<sup>1</sup>**  
 (<sup>1</sup>Department of Studies in Food Science and Nutrition, Manasagangotri, University of Mysore, India, <sup>2</sup>Center for Food Allergy & Asthma Research, Northwestern Feinberg School of Medicine, Northwestern University, USA, <sup>3</sup>Department of Pediatrics, Northwestern Feinberg School of Medicine, Northwestern University, USA)

"Diet as a Risk Factor for Asthma among Children- A Pilot Study in Mysuru Region"

16.45 - 17.00

C7



**Babatunde, O.**  
 (Osun State University, Nigeria)

"Principal Component Analysis of Egg Parameters in Yoruba Ecotype, Sussex and their Cross-Bred Chickens"

17.00 - 17.15

C8



**Parvathy, S., Anjaly, J., Kanagaraj. S.T., Srinivasan, M.**  
 (Sustainable Food Systems, Council of Energy, Environment and Water, India)

"Diet Quality Assessment: Evidence from Rural Andhra Pradesh"

17.15 - 17.45

**Evening Refreshments**

**DAY 02—THURSDAY, 22<sup>ND</sup> AUGUST 2024**

08.35 – 09.05 **Morning Refreshments**

**KEYNOTE FORUM Thursday, 22<sup>nd</sup> August 2024 | 09.05 IST to 09.35 IST | Galle Face 7**

09.05 – 09.35 **Dr. Asna Urooj**



*(Professor & Chairperson, Department of Studies in Food Science & Nutrition, University of Mysore, India)*

**“Towards achieving Food and Nutritional security: Efforts and Challenges”**

Prof. Asna Urooj is a Senior Professor in Food Science & Nutrition at the University of Mysore, India, specializing in diabetes, glycemic responses, natural antioxidants, and medicinal plants. She has completed 15 research projects and published 224 papers, with 5607 citations, an h-index of 37, and i10-index of 93. She has guided 23 PhD candidates and received numerous awards, including the Dr. Kalpana Chawla State Award. Prof. Urooj has served in various capacities, including as President of the Indian Dietetic Association (Mysore) and as a member of FSSAI panels, contributing to national food safety and nutritional policies.

**KEYNOTE FORUM Thursday, 22<sup>nd</sup> August 2024 | 09.35 IST to 10.05 IST | Galle Face 7**

09.35 – 10.05 **Dr. Amna Sahar**



*(University of Agriculture Faisalabad, Pakistan)*

**“Rapid & Non-Destructive Methods to Monitor Food Safety & Quality”**

Dr. Amna Sahar is a leading academic in food science and technology, with a focus on meat technology, food analysis, and non-destructive analysis techniques. She holds a Ph.D. from Agrocampus Ovest Rennes, France, and has advanced her career at the University of Agriculture, Faisalabad, from Assistant to Associate Professor. Dr. Sahar has published over 60 peer-reviewed papers, mentored numerous MS and Ph.D. students, and earned prestigious awards, including the Best Research Paper Award from Pakistan's Higher Education Commission. Her international contributions include roles as a visiting professor and research fellow in France and Malaysia, reflecting her global impact in the field.

**FOOD SECURITY AND FOOD PROCESSING II**

Thursday, 22<sup>nd</sup> August 2024 | 10.05 IST to 11.05 IST | Galle Face 7

Chaired by Dr. Asna Urooj

(Professor & Chairperson, Department of Studies in Food Science & Nutrition, University of Mysore, India)

**TECHNICAL SESSION 04**

10.05 - 10.20

A5



**Farha, S.S.<sup>1,2</sup> & Urooj, A.<sup>1</sup>,**

(<sup>1</sup>Department of Studies in Food Science and Nutrition, University of Mysore, Mysuru, India, <sup>2</sup>Department of Nutrition and Dietetics, JSS Academy of Higher Education and Research, Mysuru, India)

"Food Security and Thyroid Health: Nutritional Strategies for Pregnant Women"

10.20 - 10.35

A6



**Gowthaman S., Rajapakse R.P.N.P., Mendis B.E.P., Harischandra T**

(Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya, Sri Lanka)

"Decolouration of Piperine Powder Extracted from Black Pepper Using Activated Carbon"

10.35 - 10.50

A7



**Al-Marzooqi, N.A., Bahi, A., & Bhaskaracharya, R.K.**

(Department of Food Science, College of Agriculture and Veterinary Medicine, United Arab Emirates University, Al-Ain, United Arab Emirates)

"Practices and Perceptions of UAE Residents: Food Safety in Handling, and Preparation of Fish, Consumption, and Nutrition from Fish"

10.50 - 11.05

A8



**Yobe, C.L., Muchara, B.**

(University of South Africa, South Africa)

"Exploring Sustainable Food Consumption Research Agenda in South Africa: Possibilities for Circular Economy based Approaches"

**ADVANCES IN SUSTAINABLE AGRICULTURAL PRACTICES**

Thursday, 22<sup>nd</sup> August 2024 | 11.05 IST to 11.55 IST | Galle Face 7

Chaired by Dr. M. Karthikeyan

(Associate Professor, Department of Plant Pathology,  
 Agricultural College and Research Institute, Tamil Nadu Agricultural University, India)

POSTER SESSION

11.05 - 11.15

P1



**Dadi, R.B.**

(Food Security and Development Studies, College of Development Studies, Addis Ababa University, Ethiopia)

"Integrated Agro-Industrial Park Contributions for Agricultural Transformation and Implications on Smallholder Farmers' Food Security and Food Safety"

11.15 - 11.25

P2



**Nagasinghe, P.K., Mendis, B.E.P., Rajapakse, R.P.N.P., Nissanka, N.A.A.S.P**

(University of Peradeniya, Sri Lanka)

"Effect of Nitrogen Fertilization on Potato (*Solanum Tuberosum* L.) Tuber Quality: Composition, Physico-Chemical Properties and Functional Properties"

11.25 - 11.35

P3



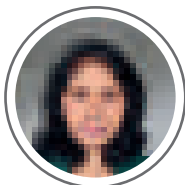
**Kaur, N.<sup>1</sup>, Francis, D.V.<sup>1</sup>, Abdalla, M.A.K.<sup>2</sup>, Zienab, F.R.A.<sup>1</sup>**

(<sup>1</sup>Department of Integrative Agriculture, College of Agriculture and Veterinary Medicine, United Arab Emirates University, <sup>2</sup>Faculty of Medicine, Assiut University, Egypt)

"Interaction of Plants and Metal Nanoparticles: Exploring Its Molecular Mechanisms for Sustainable Application"

11.35 - 11.45

P4



**Herath, H.M.I.K.<sup>1</sup>, Lakshani, M.K.P.A.<sup>1</sup>, Dewage, P.B.<sup>2</sup>, Swarnathilake, D.S.G.G.C.<sup>1</sup>**

(<sup>1</sup>Department of Plantation Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, <sup>2</sup>School of Food Technology and Natural Sciences, Massey University, Palmerston North, New Zealand)

"Minimize Nitrogen Leaching Losses from Sandy Regosols using Different Fertilizer Management Techniques"

11.45 - 11.55

P5



**Leong, C.Y., Ng W.P.V., Patrick, B., Ng, S.B.**

(Singapore Institute of Food and Biotechnology Innovation (SIFBI), Agency for Science, Technology and Research (A\*STAR), Singapore)

"Tailored Biofertilizer for Sustainable Crop Farming"



11.55 – 12.00 **Conference Photograph**

12.00 – 12.45 **Networking Lunch**

**KEYNOTE FORUM** **Thursday, 22<sup>nd</sup> August 2024 | 12.45 IST to 13.15 IST | Galle Face 7**

12.45 – 13.15 **Prof. Admir Giachini**

*(Professor (Assistant) at Federal University of Santa Catarina, Brazil)*



**"Microorganisms that can help feed the world"**

Professor Admir Giachini holds a Ph.D. in Microbiology from Oregon State University and a degree in Agronomy from the Federal University of Santa Catarina (UFSC), Brazil. His work spans Biotechnology, Environmental Remediation, and Microbiology, offering solutions for industry, agriculture, and environmental sectors. He has served as a consultant for the U.S. Bureau of Land Management and managed SBW International's industrial lab in Brazil. Currently, he is an associate professor at UFSC, coordinates the Ressacada Environmental Research Center, and consults for W2S3 Sustainable Technologies, focusing on sustainable production methods.

**PLANT AND CROP SCIENCES**

Thursday, 22<sup>nd</sup> August 2024 | 13.15 IST to 14.30 IST | Galle Face 7

Dr. Tee Tuan Poy

(Faculty of Agriculture, Universiti Putra Malaysia, Malaysia)

**TECHNICAL SESSION 05**

13.15 - 13.30

D1



**Umutoni, C.<sup>1</sup>, Esse, M.<sup>1</sup>, Ayantunde, A.A.<sup>2</sup>, Ibrahima, A.<sup>1</sup>, and Mayo, M.<sup>3</sup>**

(<sup>1</sup>The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Niger, <sup>2</sup>Wageningen Livestock Research, Wageningen University & Research (WUR), Netherlands, <sup>3</sup>The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Zimbabwe)

"Optimizing Feed Quality of Local and Improved Dual-Purpose Pearl Millet Straw Through Urea Treatment in the West African Sahel"

13.30 - 13.45

D2



**Swarnathilake, D.S.G.G.C., Herath, H.M.I.K.**

(Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka)

"Loss of Nutrients From intensive Red onion Cultivation in Kalpitiya Peninsula"

13.45 - 14.00

D3



**Aieme, G.V.N., De Silva, C.S., Thuvaraha, R., Fernando, S.P.**

(Hector Kobbekaduwa Agrarian Research and Training Institute, Colombo, Sri Lanka, The Open University of Sri Lanka)

"Effect of Soil Conservation Practices, Constraints, and Awareness on Upcountry Vegetable Productivity"

14.00 - 14.15

D4



**Askri, A., Ahmed, Z.F.**

(United Arab Emirates University, UAE)

"Study of the Effect of Natural Polymers on Soil Water Retention and Plant Growth"

14.15 - 14.30

D5



**Rodrigo, K.M.D.N.<sup>1,2</sup>, Kumara, U.M.A.<sup>1</sup>, Daranagama, D.A.D.A.<sup>3</sup>**

(<sup>1</sup>Department of Agricultural Technology, Faculty of Technology, University of Colombo, Sri Lanka, <sup>2</sup>Department of Indigenous Medical Resources, Faculty of Indigenous Health Sciences and Technology, Gampaha Wickramarachchi University of Indigenous Medicine, Sri Lanka, <sup>3</sup>Department of Plant and Molecular Biology, Faculty of Science, University of Kelaniya, Sri Lanka)

"Effect of Integrated Treatment of Hot Water Dipping and Jasmonic Acid on Anthracnose of Banana Cultivar Kolikuttu"

**SUSTAINABLE AGRICULTURE**

Thursday, 22<sup>nd</sup> August 2024 | 14.45 IST to 16.00 IST | Galle Face 7

Chaired by Dr. M. Karthikeyan

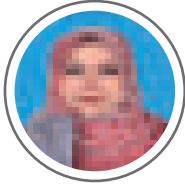
(Associate Professor, Department of Plant Pathology,

Agricultural College and Research Institute, Tamil Nadu Agricultural University, India)

**TECHNICAL SESSION 06**

14.45 - 15.00

E1



**Sofi, A.A.**, Jabeen, Z., Lone, M.A., Khurshid, F.

(National Institute of Technology, India)

"Preventing Saffron Counterfeiting: A Blockchain-Based Framework"

15.00 - 15.15

E2



**Chung, F.R.**

(Graduate Institute of Information Management, National Taipei University, Taiwan, (Province of China))

"Impact Study of Food Resource Matching Platforms: A Case Study of Efood Social innovation Co., Ltd."

15.15 - 15.30

E3



**Ketakumbura, K.H.M.L.S.**<sup>1</sup>, Samarakoon, E.R.J.<sup>1</sup>, Pathirage, K.P.D.A.<sup>2</sup>

(<sup>1</sup>Department of Food Science and Technology, Faculty of Agriculture, University of Peradeniya, Sri Lanka, <sup>2</sup>Tropical Health Food (Pvt) Limited, (A DIMO Group Company), Heraliyawala Industrial Park, Malkaduwwa, Kurunegala, Sri Lanka)

"Investigation of Physicochemical and Sensory Properties of A Natural Carbohydrate-Electrolyte Drink"

15.30 - 15.45

E4



**Gautam, N.**<sup>1</sup>, Borah, S.<sup>1</sup>, Pradhan, R.<sup>2</sup>, Sharma, K.<sup>1</sup>

(<sup>1</sup>Sikkim Manipal Institute of Technology, Majhitar, India, <sup>2</sup>Sikkim University, A Central University, Samdur, India)

"Bear Conservation and Agricultural Sustainability: A Strategy of Strategic Fruit Planting"

15.45 - 16.00

E5



**Barratt, J.D.**, Kath, J., Collins, B., Mushtaq, S., Chenu, K., Christopher, J., An-Vo, D.

(University of Southern Queensland, Australia)

"Parametric Insurance based on the Phenology of the Plant Can Help to Reduce the Volatility of A Farmers income"

**KEYNOTE FORUM** **Thursday, 22<sup>nd</sup> August 2024 | 16.00 IST to 16.30 IST | Galle Face 7**

16.00 – 16.30 **Dr. Jason C. White**



*(Director, The Connecticut Agricultural Experiment Station, Connecticut, USA)*

**"Nano-enabled Agriculture: A Path to Global Food Security in a Changing Climate"**

Dr. Jason C. White is the Director of the Connecticut Agricultural Experiment Station, managing a \$14 million budget and 110 scientific staff. His research program, funded by \$5.1 million in competitive grants, focuses on food safety and security, particularly the impact of nanomaterials on agriculture. He has published approximately 300 papers with an h-index of 87 and 26,981 citations. Dr. White is the Immediate Past President of the International Phytotechnology Society and a Clarivate Web of Science Highly Cited Researcher (2020-2023). He holds secondary appointments at Yale School of Public Health and the University of Massachusetts Stockbridge School of Agriculture.

16.30 – 17.10 **Evening Refreshments**

**CONFERENCE CLOSURE** **Thursday, 22<sup>nd</sup> August 2024 | 16.50 IST to 17.20 IST | Galle Face 7**

16.30 – 17.10 **Conference Concluding and Awarding Ceremony**

17.10 – 17.20 **Vote of Thanks**

AgroFood 2024 Conference Secretariat, iConferences, Sri Lanka