



9TH NATIONAL CONFERENCE ON FOOD SCIENCE AND TECHNOLOGY

Kathmandu, Nepal | June 12-13, 2023



*Food Science and Innovations for Safe, Healthy Diets
and Sustainable Food Systems*

PROGRAM AGENDA

| DAY 1: JUNE 12, 2023 | |
|---|--|
| 8:00-9:00 AM | REGISTRATION <i>Posters Drop-off</i> |
| 9:00-9:10 AM | WELCOME SESSION 9:00-9:05 AM: <i>Welcome Honorable Chief Guest, distinguished keynote speaker and co-organizers to the stage</i> 9:05-9:10AM: <i>National Anthem & Lamp Lighting Ceremony</i> |
| 9:10-9:15 AM | WELCOME REMARKS AND OBJECTIVE OF CONFERENCE Babita Adhikari Dahal <i>Associate Professor, Central Campus of Technology (CCT)</i> <i>Conference Organizing Committee</i> |
| 9:15-9:20 AM | WELCOME REMARKS VIDEO FROM THE CONFERENCE CO-ORGANIZERS |
| 9:20-9:40 AM | KEYNOTE ADDRESS Prof. Dr. Usha Jha <i>Former Member National Planning Commission</i> |
| 9:40-9:45 AM | SPECIAL REMARKS Dr. Matina Joshi Vaidya <i>Director General, Department of Food Technology and Quality Control (DFTQC)</i> <i>Co-Chair, Conference Organizing Committee</i> |
| 9:45-9:50 AM | SPECIAL REMARKS Hon. Dr. Anita Shah Dhungana <i>Member National Planning Commission (NPC)</i> |
| 9:50-9:55 AM | BOOK LAUNCH CEROMONY |
| 9:55-10:05 AM | Hon. Dr. Bedu Ram Bhusal <i>Minister, Agriculture and Livestock Development</i> |
| 10:05-10:15 AM | Dr. Atul Upadhyay <i>President, NEFOSTA</i> <i>Chair, Conference Organizing Committee</i> |
| POSTER SESSION I & TEA BREAK | |
| 10:15-10:30 AM | One minute poster presentation (15 Posters) |
| 10:30-11:00 AM | Poster & Technology Exhibition |

| PANEL SESSION I | |
|-------------------------------------|--|
| 11:00-12:00 PM | <p>SESSION TITLE: National Policies and Priorities for Food Science, Innovations, and Sustainable Food Systems</p> <p>Moderator: Dr. Atul Upadhyay <i>Nepal Food Scientists and Technologists Association (NEFOSTA)</i></p> <p>Panelists:</p> <p>Hon. Ashok Chaudhary <i>Member of Parliament</i></p> <p>Dr. Govinda Prasad Sharma <i>Ministry of Agriculture and Livestock Development (MoALD)</i></p> <p>Mr. Kewal Bhandari <i>Joint Secretary, National Planning Commission (NPC)</i></p> <p>Dr. Matina Joshi Vaidya <i>Director General, Department of Food Technology and Quality Control (DFTQC)</i></p> |
| 12:00-12:15 PM | Registration for Technical Session |
| 12:15-1:15 PM | Lunch |
| TECHNICAL SESSION I & II | |
| 1:15-2:05 PM | <p>SESSION TITLE: Innovations (Technologies, Practices, Processes) In Identification and Management of Malnutrition</p> <p>Chair and Moderator: Pravin Ojha, <i>Nepal Agricultural Research Council (NARC)</i></p> <p>1:15-1:25 PM (Presentation 1): Atoms for Nutrition-how nuclear techniques can contribute to tackling malnutrition?</p> <ul style="list-style-type: none"> • Loechl Cornelia, <i>International Atomic Energy Agency (IAEA)</i> <p>1:25-1:35 PM (Presentation 2): Comparing the Extent and Nature of Unhealthy Food and Drink TV Marketing to Girls and Boys Across Nine Countries in Asia</p> <ul style="list-style-type: none"> • Rishav Pokharel, <i>South Asia Infant Feeding Research Network (SAIFRN)</i> <p>1:35-1:45 PM (Presentation 3): Effectiveness of Nutrition Education for Intentional Change of Behavior of Complementary Feeding Practices among Chepang Mothers</p> <ul style="list-style-type: none"> • Aruna Gyawali, <i>Central Department of Home Science, Tribhuvan University (CDHS, TU)</i> <p>1:45-2:05 PM: Q&A</p> |
| 2:10-3:10 PM | <p>SESSION TITLE: Innovation in Byproduct Utilization and Reduction of Nutrient Loss and Waste from Nutrient-Rich Foods</p> <p>Chair and Moderator: Alok Shrestha <i>Tribhuvan University</i></p> |

| | |
|------------------------------|--|
| | <p>2:10-2:20 PM (Presentation 1): Technology and Policy Interventions in Food Loss and Waste</p> <ul style="list-style-type: none"> • Dilip Subba, <i>Tribhuvan University (TU)</i> <p>2:20-2:30 PM (Presentation 2): Extraction, Partial Purification and Characterization of Protease Isolated from Kinema</p> <ul style="list-style-type: none"> • Dambar Khadka, <i>Central Campus of Technology (CCT)</i> <p>2:30-2:40 PM (Presentation 3): Food loss and waste from Food Security and Food Safety Perspective</p> <ul style="list-style-type: none"> • Arun G.C., <i>Food and Agriculture Organization (FAO)</i> <p>2:40-2:50 PM (Presentation 4): Internet of Things for Capacitate Food Value Chain Actors</p> <ul style="list-style-type: none"> • Raman Pradhananga and Suraj Neupane, <i>Vertex Special Technology (VST)</i> <p>2:50-3:10 PM: Q&A</p> |
| 3:10-3:25 PM | One minute poster presentation (15 Posters) |
| 3:25-3:45 PM | Tea Break, Technology and Poster Exhibition |
| TECHNICAL SESSION III | |
| 3:45-5:00 PM | <p>SESSION TITLE: Food Contaminants and Toxins – Challenges, Opportunities, and Innovations</p> <p>Chair and Moderator: Santosh Dhakal <i>Food Technology and Quality Control, Division Office</i></p> <p>3:45- 3:55 PM (Presentation 1): Pesticide residue analysis in the vegetable products available in Kathmandu Valley by using gas chromatography mass spectrometry</p> <ul style="list-style-type: none"> • Hareram Pradhan, <i>Department of Food Technology and Quality Control</i> <p>3:55-4:05 PM (Presentation 2): Development and validation of multi-pesticide residues in tea using gas chromatography mass spectrometry</p> <ul style="list-style-type: none"> • Vivek Banjara, <i>Department of Food Technology and Quality Control</i> <p>4:05-4:15 PM (Presentation 3): Understanding physiological Responses of <i>Listeria monocytogenes</i> to Stress Enables Better Choices in Commercial and Domestic Kitchens</p> <ul style="list-style-type: none"> • Anushuya Guragain, <i>Food Microbiology Academy</i> <p>4:15-4:25 PM (Presentation 4): Addressing the burden of antimicrobial resistance in food chain: A call for multisector collaboration for food safety</p> <ul style="list-style-type: none"> • Hari Shankhar Joshi, <i>FHI 360</i> <p>4:25-4:35 PM (Presentation 5): Importance of Integrated Pest Management and Food Safety</p> <ul style="list-style-type: none"> • Rajkumar Gupta, <i>Orient Pest Solution Pvt. Ltd.</i> <p>4:35-4:55 PM: Q&A</p> |

END OF DAY 1

DAY 2: JUNE 13, 2023

8:00-9:00 AM

REGISTRATION AND BREAKFAST

Posters Drop-off

9:10-9:30 AM

KEYNOTE ADDRESS: Food science and Innovations for Safe, Healthy Diets and Sustainable Food Systems

Patrick Webb

Alexander McFarlane Professor, Tufts University

Director, Feed the Future Food Systems for Nutrition Innovation Lab, Tufts University

TECHNICAL SESSION IV

9:30-10:20 AM

SESSION TITLE: Systems Approach in Innovating Food Processing, Packaging, and Storage of Nutrient-Rich Foods

Chair and Moderator: S M Kamrul Hassan

Hajee Mohammad Danesh Science and Technology University

Department of Food Processing and Preservation

9:30-9:40 AM (Presentation 1): A unique ternary approach to secure and nourish Food System in Nepal: The Poshan Mantra

- Chetana Panthi and Atul Upadhyay, *Baliyo Nepal Nutrition Initiative (BNNI)*

9:40-9:50 AM (Presentation 2): Transformation of Nepal's Food System through Postharvest Innovations at the Farm Level

- Sunita Nhemaphuki, *SUN Business Network (SBN)*

9:50-10:00 AM (Presentation 3): CARE's practices around sustainable food system

- Jib Sharma, *CARE Nepal*

10:00-10:20 AM: Q&A

10:20-10:35 AM

Tea Break

TECHNICAL SESSION V

10:35-11:25AM

SESSION TITLE: Food Safety Management in Nutrient-Rich Perishable Foods

Chair and Moderator: Basanta Rai

Central Campus of Technology

10:35-10:45 AM (Presentation 1): One Health Approach for Food Safety in Nepal: Opportunities and Challenges

- Krishna Prasad Rai, *Department of Food Technology and Quality Control (DFTQC)*

10:45-10:55AM (Presentation 2): Food Safety and Growing Food Businesses in Nepal

- Phaindra Pandey/Russ Webster, *Food Enterprise Solutions*

| | |
|---------------------------------------|---|
| | <p>10:55AM-11:05AM (Presentation 3): Consumers Concerns about Food Safety and Quality: Findings from Rural Bangladesh</p> <ul style="list-style-type: none"> • Saiful Islam, <i>Bangladesh Agricultural University, Mymensingh</i> <p>11:05-11:25AM: Q&A</p> |
| PANEL SESSION II | |
| 11:25-12:25 PM | <p>SESSION TITLE: Transformation of Food Systems for Healthy, Sustainable Diets and Nutrition in South Asia</p> <p>Chair and Moderator: Patrick Webb/Robin Shrestha <i>Tufts University</i></p> <p>Panelists: Ashek Mahfuz <i>GAIN Bangladesh</i></p> <p>Atul Upadhyay <i>Baliyo Nepal</i></p> <p>Tim Krupnik (Virtual Presentation) <i>CIMMYT</i></p> <p>12:05-12:25 AM: Q&A</p> |
| POSTER SESSION II | |
| 12:30-12:45 PM | <p>One minute poster presentation (10 Posters) Technology Exhibition</p> |
| 12:45-1:45 PM | Lunch |
| TECHNICAL SESSION VI & VII | |
| 1:45-2:55 PM | <p>SESSION TITLE: Food Systems Innovations to Support Resilient Food Security, Health, and Nutrition</p> <p>Chair and Moderator: Balkumari Sharma <i>Department of Food Technology and Quality Control</i></p> <p>1:45-1:55 PM (Presentation I): Innovation for Food System Transformation in Nepal</p> <ul style="list-style-type: none"> • Devendra Gauchan, <i>Bioversity</i> <p>1:55-2:05 PM (Presentation 2): WHH's best practices on strengthening food systems for nutrition security</p> <ul style="list-style-type: none"> • Sushil Ghimire, <i>Welthungerhilfe (WHH)</i> <p>2:05-2:15 PM (Presentation 3): Food Systems Innovations to Support Health and Nutrition</p> <ul style="list-style-type: none"> • Lila Bikram Thapa, <i>Ministry of Health and Population</i> <p>2:15-2:25 PM (Presentation 4): Can NARC's R&D and Innovations Support the Sustainable Food System in Nepal?</p> <ul style="list-style-type: none"> • Roman Karki, <i>Nepal Agricultural Research Council</i> |

| | |
|--------------------------|---|
| | <p>2:25-2:35 PM (Presentation 5): Climate Change and Environmental Impact on Food Production</p> <ul style="list-style-type: none"> Prabhakar Mansingh Pradhan, <i>Leadership Academy Nepal</i> <p>2:35-2:55 PM: Q&A</p> |
| 3:00-4:00 PM | <p>SESSION TITLE: Science, Technology and Innovations in Food System Processing</p> <p>Chair and Moderator: Anunaya Bastola <i>National Planning Commission (NPC)</i></p> <p>3:00-3:10 PM (Presentation 1): Optimization of three phase partitioning system for the purification of actinidin from kiwifruit (<i>Actinidia deliciosa</i>) using response surface methodology</p> <ul style="list-style-type: none"> Bunty Maskey, <i>Central Campus of Technology (CCT)</i> <p>3:10-3:20 PM (Presentation 2): Optimization of High-Pressure Processing to Develop Quality and Healthy Juices and Beverages</p> <ul style="list-style-type: none"> Santosh Dhakal, <i>Food Technology and Quality Control, Division Office</i> <p>3:20-3:30 PM (Presentation 3): Application of Nanomaterial and Bio-nanocomposites in Food Industries</p> <ul style="list-style-type: none"> Pratiksha Shrestha, <i>Department of Food Technology and Quality Control (DFTQC)</i> <p>3:30-3:40 PM (Presentation 4): Application of Fermentation in Sustaining Food Systems in Nepal</p> <ul style="list-style-type: none"> Sumit Saha, <i>Chr. Hansen (India) Pvt Ltd</i> <p>3:40-4:00 PM: Q&A</p> |
| 4:00-4:20 PM | Tea Break |
| PANEL SESSION III | |
| 4:20-5:15 PM | <p>SESSION TITLE: Call for Actions for Sustainable Food Systems in Nepal</p> <p>Chair and Moderator: Kiran Rupakheti <i>National Planning Commission (NPC)</i></p> <p>Panelists:</p> <p>Niranjana Shrestha <i>Laxmi Group (Private Sector)</i></p> <p>Patrick Webb <i>Tufts University (Academia)</i></p> <p>Jiwan Prabha Lama <i>NEFOSTA (Professional Body)</i></p> <p>Shakeb Nabi <i>WHH (Development Partner)</i></p> |

| | |
|-------------------|---|
| | Somkanta Rijal <i>DFTQC (Government Body)</i> |
| 5:15-5:45 PM | RESOLUTION DRAFTING SESSION Chair and Moderator: Suman Dhital <i>DFTQC</i> Pravin Ojha <i>NEFOSTA</i> Robin Shrestha <i>Tufts University</i> |
| 5:45-6:00 PM | SPECIAL REMARKS USAID |
| 6:00-6:15 PM | CLOSING REMARKS AND VOTE OF THANKS NEFOSTA |
| END OF CONFERENCE | |