

Conference Report

Indo Uzbek Meet & the International Conference on Trends & Innovations in Food Technology (TIFT- 2022)

A two-day Indo-Uzbek meet and International Conference on Trends & Innovation in Food Technology from farm to fork TIFT-2022 was jointly organized by Department of Bioengineering, Integral University, Lucknow and Tashkent Chemical Technological Institute, Tashkent, Uzbekistan. This conference with the theme of “Serving Present to secure the Future” discussed challenges for achieving the better prospects in food processing for sustainable development. The International Conference was a two-day (Online/Offline) event that hosted some of the most influential figures in the food sector including researchers, scientists, food technologists, botanists, healthcare professionals, policymakers, government representatives and industry key players to stimulate debate, foster collaborations and expand knowledge base. Developments in the food sector was the key to achieve the sustainable development goals laid down by the United Nations.

The International Conference commenced with welcome address by Dr. Alvina Farooqui, Head, Department of Bioengineering, Integral university, Lucknow, who elaborately emphasized on holistic development of researchers, student teacher along with the exploration for new avenues of joint work for food innovation and technology. She quoted the main aim of this conference **“Serving present to secure future”**. Moreover, she also sensitized the importance of sustainability to serve the cause of humanity. Dr. Syed Nadeem Akhtar, Hon’ble Pro Chancellor, Chief Patron welcomed the esteemed guests and highlighted that this kind of programs should be continued in future. Moreover, he also shared his experiences. Prof. Javed Musarrat, Hon’ble Vice Chancellor, gave captivating information related to growing demands for food and agriculture start-ups, and highlighted national and international issues of food safety and security.

Mr Sanjay Dave, former chairman Codex Alimentarius Commission and former adviser to FSSAI, focused on food laws, food quality and safety, commercialization in the food processing industry and harmonization of domestic food standard. Prof. Botir Usmonov, Rector, TCTI, Uzbekistan laid emphasis on building a good foundation and exchange of ideas between the two universities and establishing scientific collaboration. Prof. Nortoji Ho’jamshukurov, Professor, Tashkent

Chemical Technology Institute, Uzbekistan acknowledged Hon'ble Prof. S.W. Akhtar by presenting the memento. Prof. Ashwani Pareek, Executive Director, National Agri-food Biotechnology Institute, Mohali, Punjab discussed about the problems associated with crop production. Dr. Shridevi Annapurna Singh, Director, CSIR-CFTRI, Mysore highlighted the global concern related to food wastage, packaging of food and accentuated the importance of food for wellbeing. Prof G.N Singh, Advisor to CM, talked about innovations in food that would become driving force for cooperation and coordination with countries abroad. **Chief Guest of the event, Dr. Chindi Vasudevappa, Vice Chancellor, NIFTEM, Haryana briefed about food supply chain management, sustainable food system approach, personalized food, therapeutics food and food enrichment and fortification. He also enlightened about food safety and quality that responsible for the health and wellness of India.** The session was concluded by the blessings and a beautiful quote by Prof. S.W Akhtar, Founder and Honorable Chancellor, Integral University, "*Mai akela hi chala tha janibe manzil magar,log sath aate gaye aur karwa banta gaya*".At the end of session the conference abstract book was released followed by presentation of conference memento and university memento to the dignitaries. A special vote of thanks was delivered by Prof. Iffat Zareen Ahmad who thanked the speakers for their valuable time and sharing their views related to food technology innovation and advancements.







Technical Session

A total of Four oral session were held along with four poster sessions. This was followed by the industry-Academia Panel Discussion. The briefing of the sessions is as follows:

Technical Session 1: Food Engineering, Processing & Packaging

(Day-1): 24th November 2022 (09:30 PM to 12:30 PM)

Dr. H.R.Naik , Prof. Food Technology/Director Planning & Monitoring delivered the lecture on the topic Value addition-a key factor in doubling the farmers' income” The talk of Dr. H. N. Mishra was based on “Food Technology Innovations for Ensuring Nutrition & Health Security” focussing on novel techniques which will play a significant role in ensuring food security. He also discussed the research work going on in his lab. Similarly, Prof. Nortoji delivered a lecture on “Plant Genetic Resources of Uzbekistan and their future prospects”. He talked about different types of medicinal plants on which they are working there. He also focussed on the themes on which he is interested

in collaborating with Integral University. Themes of the project proposal include Indian technologies for the industrial cultivation of useful insects, Daphnia and Microalgae and algae. Invited lectures were followed by Oral presentations by the participants on the mentioned theme. A total of 21 oral presentation were presented in this session followed by rigorous question answer session by the panellists. The Technical Session-1 ended with a major take home message that though Food Production is sufficient, there is a need for preventing its loss during processing, storage and transportation.



Technical Session 2: Bioactive Constituents, Micronutrients, Food Additives & Ingredients

(Day-1): 24th November 2022 (02:30 PM to 5:30 PM)

The session witnessed exclusive research and technology oriented insightful lectures from invited speakers namely Dr. Sridevi Annapurna Singh, Director, CSIR -CFTRI, Prof. F. A Masoodi, Dean Academic Affairs, University of Kashmir, J&K; Prof. R.S. Singhal, Head, Department of Food Engineering, ICT Mumbai Dr. Sridevi Annapurna Singh delivered the keynote address on the topic "Current Trends in Food Technology in India" Her talk was focused on research initiatives that have been taken for value addition and increasing shelf life of food. She also talked about personalized foods especially that caters to malnourished children and lactating mothers to address micronutrient deficiency.

Prof. F. A Masoodi delivered a very insightful lecture on the topic "Processing of Himalayan Vegetables: Problems and Prospects". His talk focused on challenges of growing vegetables in

Himalayas and expressed his thoughts on how innovations and technology can help us address these challenges. He emphasized on the need to research on nature-based fermentation processes and prevent post-harvest losses. He talked about how using microwave assisted dryers can preserve the nutritional value of foods. The talk delivered by Prof. R.S. Singhal, Head, Dept. Of Food Engineering at ICT, Mumbai was entitled “Some insights into the interactions among food additives” focussing on chemical interactions among the additives when they are part of a cocktail. She emphasized that more attention needs to be paid on checking toxic reactions. She emphasized on necessity for identifying safe additives to address the problem of toxicity that occurs when a cocktail of additives is used. The interactions lead to formation of metabolites that may turn carcinogenic so checking the presence of products of interactions of food additives should be an active area of research. The invited lectures were followed by Oral presentations by 9 participants on the mentioned theme. The Technical Session-2 ended with a major take home message that we should find innovative methods to improve shelf life of food to ensure food security and fortify food with safe additives to improve its nutritional value.



Technical Session 3: Food Innovation Technology & Waste Valorization

(Day-2): 25th November 2022 (09:30 PM to 12:30 PM)

The third technical session in the Indo Uzbek Meet & the International Conference on Trends & Innovations in Food Technology (TIFT- 2022) was successfully conducted under the theme Food Innovation Technology & Waste Valorization. Dr. Komal Chauhan delivered a detailed lecture on “Valorisation of anthocyanins extracted from *Prunus nepalensis* for potential food application as Bio Colourant” and discussed the latent use of bioactive compounds as proper food additives in

the form of colourants. The talk of Dr. Harinder Singh was based on “Clean label starch development using novel processing methods” focusing on the characteristics and manufacturing methods of clean label starch, which is free from any chemical modification and scaling it up for its improved viscosity, glossiness and stability as a proper food additive. Similarly, Dr. Belkis Muca Yigit delivered the lecture on “The plants and a different view at functional foods” highlighting the growing connects between the plants and functional foods products primarily in Turkiye flora that have a relevant effect on well-being and health and reducing the risk of diseases. The invited lectures were followed by Oral presentations by 20 participants on the mentioned theme. Some the participants also presented their work in in Online mode connected from Uzbekistan. The brainstorming Technical Session-3 ended with a major take home message on the pressing needs on use of more of a bioactive compound as food additives, increased waste valorization and scale up of its related technologies; avoiding use of harsh chemicals or processing techniques which may destroy vital nutrients in food or may adversely increase its possible undesired effects.



Technical Session 4: Food Toxicology and Food Microbiology (Day-2): 25th November 2022 (09:30 PM to 12:30 PM)

The session witnessed exclusive research and technology oriented high impact lectures from invited speakers namely Prabodh S Halde, (Regulatory head Marico Ltd and Ex-President AFST India; Prof. Subash C Chauhan, Chairman, Dept. of Immunology and Microbiology, School of Microbiology, University of Texas Grande Valley, USA. Dr. Prabodh Halde delivered an interactive lecture on Food Startups which revolved around the Concept of Start-ups- Idea-market/need, finance, supply chain, and regulatory compliance in terms of national and

international regulatory bodies. Key Personal Attributes for Start-ups- Self-confidence, Self-Sacrifice, Mentor. He also laid emphasis on the present day Start Up Ideas like Personal Nutrition and Cloud Kitchen. He concluded with concept Future Industry of Innovation which can be compiled with the collaboration of Academia and Industry. The talk of Prof. Subhash C. Chauhan was based on the utilization of food as the medicine and especially for the chronic disorders. He also gave the glimpses of his research in the treatment of various cancers. He deliberated on prevention aspects of cancer through food and the changing food habits and the targeted approach of cancer therapy. Invited lectures were followed by Oral presentations by 15 participants. Technical Session-4 ended with a major message on the pressing need of toxicological and microbiological based approach for determining safety aspects of food products.

Poster Sessions

The poster sessions in the Indo-Uzbek Meet & International Conference on Trends & Innovations in Food Technology, from farm to fork was successfully conducted on all four themes on second day, 25 Nov 2022

Poster session Evaluators:

- Professor Farooq Ahmed Masoodi, Dean Academics Affairs, University of Kashmir Jammu and Kashmir.
- Professor H.R Naik, Director Strategic Planning and Monitoring, Sher-e-Kashmir University of Agriculture Science and Technology (SKAUST), J&K

The number of posters presented in theme 1 was 6, 8 in theme 2, 10 in theme 3 and 14 in theme 4. The judges were very enthusiastic and motivated the students with their experience and knowledge. Participants presented the posters very well on different aspect of food technology. In each theme, two awards (Rank 1st & 2nd) were awarded. The evaluation was conducted on the basis of research equality, knowledge of subject and on skill presentation of the participants. The session was ended by presenting the memento as a token of gratitude to judges.



Panel Discussion: Industry-Academia Panel Discussion

The panel discussion on the topic of industry Academia interface to identify in the skill gap was graced by speaker professor Ashok Kumar Pandey, distinguish scientist IITR Lucknow, Mr. Dinesh C. Choudhary, Plant Head AMUL, Lucknow. Dr. Priyanka Singh, Founder, Director Bioquest Research Solution Allahabad, Professor A.K Saxena Dean, Faculty of Commerce & Management IU, and Dr. Nilanjan Mukherjee, director CCG & D, IU. The speakers in the panel raised a very important point to keep out students in identifying the skill gap to become employable. Professor Ashok Pandey give advice to students to remain modest, simple, and Well behaved to be successful in life. Mr. Chaudhary said students when they become professional, they lack sincerity and loyalty to the organisation. There is a dire need to indicate good behavioural and interpersonal skill to the successful in a career. Professor Saxsena and Dr. Nilanjan pinpointed to remain positive and carry the right attitude and aptitude. Dr. Priyanka identified the skill which make students opting for food tech to upgrade themselves as per the need of current scenario.

Later on, an interactive session named Industry-Academia Panel Discussion was hosted by Dr. Sufia Rehman, CCG&D focused on a question “Bridging the gap between Academia and Industry”. A team of distinguished speakers put forth their views throwing light on this topic. Dr. Nilanjan Mukherjee, Director, CCG&D focused on three main aspects of building a successful career which was knowledge, skill & attitude in quest of acquiring excellence. Prof. A.K. Saxena, Dean, Faculty of Commerce and Business Management raised his concern regarding employment opportunities through establishment of digital and skill-based universities and promotion of student start-ups through entrepreneurship. He also laid stress on making our University “a skill-hub” to attract more of foreign investors. Mr. Dinesh C. Chaudhary, Plant Head, AMUL briefed about the problems associated with field work faced by the youths and implementation of skill development strategies. Besides, he also laid the main mantra for becoming a successful human being by adopting ethical values and spirit, attitude of learning, digitalization, upgrading oneself according to market demand, in addition to acquiring the theoretical knowledge. Dr. Priyanka Singh, Bioquest Research Solutions highlighted the research & development activities for innovation and commercialization of food products, and insisted for designing a curriculum having practical approach related to industry work. Last, but not the least Prof. Ashok Pandey,

Distinguished Scientist, IITR, Lucknow concluded the session with giving more preference to skill performance beyond theoretical knowledge, developing attitude to learn new things, solving complex problems through critical thinking, vigilant in tools of digital world which would be helpful for bridging the gap and would open new ways for employability for the students.

The session was well coordinated by Dr. Asma Farooque, Deptt. of Commerce & Business Management and Dr. Sufia Rehman, Centre for Career Guidance and Development, Integral University, Lucknow.



TIFT EXPO-2022

An expo, TIFT EXPO-2022 was organised as the part of the conference which was inaugurated after the inaugural function of the conference by the dignitaries. A total of 25 stalls from various government and private organisations showcased their products and technology. The Students of Food Technology course displayed various products which were developed by them in the departmental labs. The products developed were based on the various themes of like new product development, food waste valorisations and new innovation in food processing. These products were the eye catchers of the event. Besides various organisations like CSIR-IITR, various food start-ups like Nutty village, Flavin Labs, Academic Monk also showcased their products. This Expo was open to the students and the general public for two days of the conference.





CULTURAL EVENING

Day one of the conference ended with a cultural evening embraced by the performances of the High Note Music Society, and the Ghazals by Ustad Ilyas Khan. All the dignitaries and the participants enjoyed the evening with real zeal and fervour. This was followed by the Gala Dinner.





Valedictory 25.11.2022

The valedictory function was graced by **Prof. Rajendra Khimani**, Hon'ble Vice Chancellor, Gujarat Vidyapith, Ahmedabad as Chief Guest, **Dr. Syed Nadeem Akhtar**, Hon'ble Pro Chancellor, the Chief Patron, **Prof. Javed Musarrat**, Hon'ble Vice Chancellor, the Patron **Prof Nortoji Abdikholikovich**, Professor of Biotechnology, Tashkent Chemical Technological Institute Tashkent Uzbekistan, Guest of Honour, **Prof. Ashok Pandey**, Distinguished scientist, IITR Lucknow, Guest of Honour **Prof. FA Masoodi**, Dean Academic affairs, University of Kashmir, Guest of Honour and **Prof. Mohd Haris Siddiqui**, Registrar, **Integral University**.

Addresses by the Dignitaries was followed by Prize distribution for the Oral and Poster sessions, presentation of mementoes





Winners of Poster Presentation

Theme 1: Food Engineering, Processing & Packaging

1. Nuzhat Bashir
(Integral University, Lucknow)
2. Gaurav Yadav
(Integral University, Lucknow)

Theme 2: Bioactive Constituents, Micronutrients, Food Additives & Ingredients

1. Priyanka Sharma
(CSIR-Central Institute of Medicinal & Aromatic Plants, Lucknow)
2. Swati Saxena
(Integral University, Lucknow)

Theme 3: Food Innovation Technology & Waste Valorization

1. Sharfa Naaz
(University of Lucknow, Lucknow)
2. Altaaf Shah
(Integral University, Lucknow)

Theme 4: Food Toxicology, Safety, Security and Hygiene

1. Sana Sarkar
(CSIR-Indian Institute of Toxicological Research, Lucknow)
2. Mohd. Afzal Khan
(CSIR-National Botanical Research Institute, Lucknow)

Oral Presentation Winners

Theme 1: Food Engineering, Processing & Packaging

1. Alisha Ahman
(Integral University, Lucknow)

2. Fayzullaev AZ
(TCTI, Uzbekistan)

Theme 2: Bioactive Constituents, Micronutrients, Food Additives & Ingredients

1. Sadiyah Samreen
(Integral University, Lucknow)
2. Dr. Mohd. Ashfaque
(Integral University, Lucknow)

Theme 3: Food Innovation Technology & Waste Valorization

1. Kulsum Jan
(Jamia Hamdard, Delhi)
2. Sukhvinder Singh
(Chandigarh University, Chandigarh)

Theme 4: Food Toxicology, Safety, Security and Hygiene

1. Gayendra Tripathi
(Integral University, Lucknow)
2. Rushna Jamal
(Integral University, Lucknow)



The valedictory function ended by the vote of thanks by the Convener TIFT 2022, **Dr. Alvina Farooqui** who emphasized the importance of team work for the success of any event and quoted

“The strength of the team is each individual member. The strength of each member is the team.”

