

*FIPS helps USTM, Meghalaya to organize a knowledge share webinar on food packaging*

## **Advancements in food packaging could help boost Indian North East economy**

The Department of Applied Biology, University of Science & Technology (USTM), Meghalaya invited the Foundation for Innovative Packaging and Sustainability (FIPS) to host a webinar on Feb 15, 2021. The aim of the webinar was to highlight state-of-art technological advancements of food packaging for the benefit of students, staff and local industry members.

Prof. Dr .GD Sharma, VC of USTM was the Chief Guest at the webinar and spoke at length about the role of packaging in modern life as well as the new challenge of making packaging less wasteful and sustainable. He emphasized the need to make products safer and hygienic by packaging and also to prevent wastage of fresh natural produce by packaging near cultivation centers. The importance of learning new skills and creating opportunities for new business by packaging was also highlighted.

At the end of Dr GD Sharma's talk, a Vote of Thanks was proposed by the Academic Registrar, Dr AH Barbhuiya. He said that the University was looking forward to more opportunities for collaboration with FIPS in the areas of research and training.

The first technical session of the webinar was presented by Mr Subhas Bhattacharjee, Chief Consultant, FIPS. He spoke about the *Potential for Packaging and Marketing of Food Products from the North East Region*. During his talk, he highlighted with examples, the potential opportunities for value addition of NE horticultural products. He pointed out several natural fruits and vegetables cultivated in the region that could be eligible for Geographical Indication (GI) tag and Organic Certified, with proper packaging and certification. He illustrated the need for creation of a Value Chain Process by means of which food losses and wastage could be minimized for the benefit of better business and economy of the Region. In the end he highlighted the role of FIPS as a potential partner for knowledge sharing and a

complete solution provider for marketing and design as well as research, skill development and technology.

During the following technical session, Dr NS Saha, Chairman-Founder FIPS presented the role of packaging not only as a means of containment and logistics but also as a process to increase the shelf-life of a product. His presentation was titled *Concept of Food Packaging and Innovative Technology to Enhance Shelf-Life of Food Products*. During his talk he said packaging does not add cost to a product but instead adds value that makes the product more desirable and marketable. He illustrated the point by showing the example of packaging for Nalen Gur that had been developed by him, as originator, in IIP to increase the shelf-life of palm sugar gur from 5 hours to 180 days, without compromising the organoleptic properties of the product. By this innovative new packaging, he explained, it became possible to achieve wider distribution of a traditional product so as to benefit the local economy by significant value addition. In the end Dr Saha explained the concepts of Canning, Retort, Aseptic and Vacuum packaging as well as Gas Flushing. He discussed several new methods of modern packaging, such as active and intelligent packaging; CAP/MAP, breathable films and Leno bags for the preservation and packaging of fresh produce.

In the next technical session, Mr MK Banerjee, Director – Innovation & Sustainability, FIPS brought up the topic of *Advancements in Plastic Packaging Materials for Food Products*. He explained how the barrier properties of common plastics can be enhanced to provide moisture and oxygen barrier for food products. By this means it becomes possible to extend the shelf-life of solid foods with oxygen and moisture sensitivity. Addition of very thin EVOH barrier layers in multi-layer rigid, semi-rigid or flexible packs also helps to dramatically increase shelf-life. With several examples of condiments and foods packaged attractively in plastic squeeze tubes, Mr Banerjee highlighted how tube packaging helps to make product dispensing convenient for all age-groups of consumers – from children to the elderly.

The last technical session of the webinar was on the vital topic of *Food Safety & Regulatory Aspects*. It was presented by Mr. Rahul Bhargava, Chief Consultant – Innovation at FIPS. During this presentation Mr Bhargava gave an overview of the

Packaging Regulatory aspects and the role of Food Safety & Standards Authority of India in ensuring packaged product safety. He pointed out that FSSAI stipulated limits of the migration that could be allowed to take place between packaging and product and the limits were governed by BIS Standards, such as the Global Migration Test IS 9845 and the Heavy Metal Content Standard IS 2771. He explained the potential role of FIPS to develop packaging for convenience, stability, distribution, safety, sustainability and cost effectiveness and productivity.

The webinar was very ably Moderated by Dr Madhusmita Borthakur, Assistant Professor, USTM and at the end, a Vote of Thanks was proposed by Dr Deboja Sharma, Associate Professor, USTM.

The Foundation for Innovative Packaging and Sustainability is the brainchild of eminent packaging industry stalwart, Prof. Dr NC Saha, Former Director, Indian Institute of Packaging and Founder-Chairman, FIPS. He is partnered by Prof. Dr. Anup Ghosh, of IIT Delhi and Director – Training & Research, FIPS as well as Mr Mrinal Kanti Banerjee, Former Creativity & Innovation Director, EPL Limited (earlier Essel Propack Ltd.) as Director – Innovation and Finance.

Several reputed organisations have announced their collaboration with FIPS to promote packaging research, innovation and training. These collaborative institutions, in addition to USTM, are: NECTAR; NI-MSME; MGU; FITT and NERIST. Details about the activities and objectives of FIPS can be found at [www.f-ips.org](http://www.f-ips.org)