

Advances in Sustainable Disruptive Technology in Food Processing

Overview

Over the last decade, consumer demand has progressively required processed foods to have a more natural color, flavor and nutrients with a shelf life that is ample for distribution and a reasonable period of home storage before consumption. Agri-food sector is currently facing huge pressure to produce quality food to feed billions with dwindling resources and reduce environmental impact of current food systems. This is achieved by embracing disruptive technologies that safeguard foods and also retain to a greater point their sensory quality and nutritional characteristics by dropping the reliance on heat as the main preservative action.

The module 'Sustainable disruptive processing technologies' will provide an insight into the application of key enabling technologies for agri-food sector. These technologies can meet the demand for fresh, healthy, convenient and safe foods which has prompted the development of novel technologies. A large number of disruptive technologies including non-thermal processing techniques, such as electro-technologies, mechanical processing, pressure-based technologies, emerging thermal processing techniques, and chemical based will be covered. The exploration and development of alternatives to conventional food processing technologies, not only to improve food processing & preservation, but also to add value to food processing streams while maintaining product safety, quality and sustainability will be covered.

The course intends to provide knowledge and application of these technologies which are considered as sustainable, have lower environmental impacts and can produce food with minimal impact on climate without compromising safety, quality and nutritional profile of foods.

Modules	Sustainable disruptive processing technologies: April 20 – April 24 Number of participants for the course will be limited to fifty.
You Should Attend If...	<ul style="list-style-type: none">• Executives, Food engineers and researchers from manufacturing, service and government organizations including R&D laboratories.• Faculty from reputed academic institutions and technical institutions.• Students at all levels (BTech/MSc/MTech/PhD)
Fees	The participation fees for taking the course is as follows: Participants from abroad: \$ 250 Industry/ Research Organizations: Rs 5,000 Academic Institutions (Students): Rs 1500 Faculty/Scientist: Rs 2500 The above fee include all instructional materials, computer use for tutorials and assignments, laboratory equipment usage charges, 24 hr free internet facility. The participants will be provided with accommodation on payment basis.

The Faculty



Professor B K Tiwari is a Principal Research Officer at TEAGASC and Adjunct Professor at UCD School of Biosystems and Food Engineering. His research interests relate to novel food processing, extraction and preservation technologies, with a strong focus on investigation of biochemical and microbial kinetics in food and food products.



Dr. Madhuresh Dwivedi is Assistant Professor in Department of Food Process Engineering of NIT Rourkela. His research area focusses on new product development and process analytical technology application in food (PAT).



Dr. Sushil Kumar Singh is Assistant Professor in Department of Food Process Engineering of NIT Rourkela. His research interest includes modelling & simulation, ready-to-eat foods, thermal and non-thermal processing of foods.

Course Co-ordinator

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