

AICTE-QIP SHORT TERM COURSE ON

**NOVEL TECHNOLOGIES FOR FOOD PRODUCT MANUFACTURING  
AND SHELF LIFE EXTENSION**

**A Continuing Education Program of  
INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR**

**04 – 08 December 2017**

**Principal Coordinator  
Professor H. N. Mishra**



**Food Chemistry & Technology Laboratory  
Agricultural and Food Engineering Department  
Indian Institute of Technology Kharagpur**

**OVERVIEW**

Developments in food processing technology and engineering play an important role in making a wide variety of foods available year round in palatable, nutritious, and aesthetically packaged forms. Therefore, the pressure on food industry for the adoption of novel food processing and preservation technologies will continue to grow in the future. However, there is no denying that the wider acceptance of new food processing and preservation technologies will be ultimately guided by the consumer preference for value added and tasty foods available in variety of forms.

The present short-term course is tailored to disseminate the information on the new developments in food science & technology to the teachers / researchers / food professionals working in universities / colleges / R & D institutions and industry for better understanding of the current and likely to be future trend in food processing technology and engineering.

**COURSE CONTENT**

Principles of food processing and preservation. Emerging trends and recent advances in technology of food products manufacturing & shelf life extension. Preservation of food at low, ambient temperature and modified atmosphere. Non-thermal technologies; Post processing operations including packaging and handling. Shelf-life extension by active and edible packaging. Quality changes and control measures during processing, handling and storage. Industrial processing of selected foods of commercial importance: RTE convenience foods and beverages, fortified energy drinks, food premixes, health foods & nutraceuticals, fruit juice concentrates and powders, Indian traditional foods.

The experts from IIT Kharagpur will be delivering lectures in various sessions followed by interactive sessions on the subject matter. Practical demonstration will also be organized.

**ELIGIBILITY**

Course is opened to food professionals (Teachers / Scientists / Technologists / Engineers) working in AICTE approved Colleges / Universities / R&D Institutes / Industry and NGOs.

## REGISTRATION

Intending participants are requested to send the dully filled-up **Registration Form** signed by their respective Head of the College/Institute /University to the Course Coordinator latest by **30 September 2017**. Participants of category (b) & (c) must also send the prescribed course fee along with the registration form. Advance (scanned copy) of the filled up registration form can also be send as e-mail attachment.

*The course fee for different categories of participants is as under:*

- (a) *Teachers from AICTE approved Collages / Institutions (Max 30)* : Nil  
(b) *Scientists / Technologists / Engineers from*  
*Industry /NGO* : Rs. 30,000/-  
*Academic Institutions* : Rs. 20,000/-  
(c) *Research Scholars / Students* : Rs. 10,000/-

The course fee can be submitted in the form of a **demand draft** drawn in favor of 'CEP-STC, IIT Kharagpur' payable at Kharagpur. It can also be paid through **NEFT** transfer to A/C No. **95562200002955** at Syndicate Bank, SRIC, IIT Campus, Kharagpur; MICR: 721025103, IFSC: SYND0009556.

The course fee will cover lecture notes, refreshment during classes, local transport. Board and lodging charges will have to be borne by the participants.

## ACCOMMODATION

Accommodation will be arranged within the campus on first come first serve basis on payment of usual charges (NGH : Rs. 1000/day single occupancy & 1500/day double occupancy; VGH : AC Rs. 400/day single occupancy, Rs. 600/day double occupancy; Non AC Rs.250/day single occupancy, Rs. 300/day double occupancy).

*The participants of the category (a) shall be provided shared board & lodging in the VGH and travel cost as per the AICTE norms.*

## ENQUIRIES & COMPLETED APPLICATION FORMS SHOULD BE MAILED TO



Professor H N Mishra  
Food Chemistry & Technology Laboratory  
Agricultural & Food Engineering Department  
Indian Institute of Technology Kharagpur  
Kharagpur – 721302, West Bengal  
Email : [hnm@agfe.iitkgp.ernet.in](mailto:hnm@agfe.iitkgp.ernet.in) ; [fctliitkgp@gmail.com](mailto:fctliitkgp@gmail.com)  
Phone : +91 3222 283130, 281323 (O) +91 9434414288 (Cell)  
Fax : +91 – 3222 – 283130, 282244

*Last date for submission of application*  
**30 September 2017**

## GENERAL INFORMATION

IIT Kharagpur is located in a rural environment at a distance of about 5 km from Kharagpur Railway Station (SER). Kharagpur, 150 km from Kolkata airport, is conveniently connected to Howrah (Kolkata) by local and express trains. It has direct rail links with most major cities in India. Those traveling by air may take a taxi to Howrah Station from Kolkata Airport. Direct taxi service from Kolkata airport to IIT Kharagpur is also available. Rickshaw (Rs. 70/-), Autorickshaw (Rs. 100/-) and Taxi (Rs. 150/-) are available from the Kharagpur Railway Station to IIT campus. Weather in Kharagpur during December is pleasant.

## ABOUT THE COURSE COORDINATOR



Professor H N Mishra has over 30 years of professional experience in teaching and research. Professor Mishra teaches Food Science & Technology, Food Product & Process Technology and Food Chemistry & Microbiology. His research interests include RTE Health Foods & Nutraceuticals, Novel Food Products & Process Development, Extension of Shelf-Life of Perishables, High Pressure Processing, Algal Food Technology, Food Safety & Quality Control. The past President of AFST (I), Dr. Mishra has many laurels and awards to his credit.

Professor Mishra has published more than 310 research papers popular articles, 3 books, 4 e-books, several book chapters and has 7 Indian patents to his credit. Besides, he is on the editorial boards of several reputed national & international journals. He has supervised more than 210 student research projects including 9 Post Doctoral and 30 PhD research scholars. He has handled several international and national sponsored research & industrial consultancy projects.

Dr. Mishra has worked in different capacities on various academic and administrative committees of IIT Kharagpur and many other institutions within the country and abroad. He has been member of several committees of the different ministries & departments of the Govt. of India such as MoFPI, DBT, ICAR, CSIR, ICMR, FSSAI, BIS, ICDS, MWCD etc. Professor Mishra has been on the RAC, Academic Council, Senate, BOS of several Institutions and Universities such as CFTRI, NDRI, NIFTEM, BHU, Allahabad University, Tezpur University, NABI, CIAB, IBSD to name a few.

Professional details including research publications of Professor Mishra can be seen at: <http://www.agri.iitkgp.ernet.in/faculty-details/hari-niwas-mishra> OR <http://www.fctliitkgp.in>

The collage features a central circular diagram with the FCTL logo and the motto 'अन्नं दत्तं भवन्ति कुसानि'. The diagram is surrounded by various food products and research results:

- RTE Health Foods & Snacks**: RTE Health Foods & Snacks, Natural Antioxidants & Bioactives.
- Probiotic Vegetable Beverage**: Probiotic Vegetable Beverage, RTS Spirulina Beverage.
- Dahi Powder & Non-Dairy Yoghurt**: Dahi Powder & Non-Dairy Yoghurt, Fortified Yoghurt & Oil Powder.
- Low Cholesterol Dairy Cream**: Low Cholesterol Dairy Cream, Oat milk & Ice cream.
- Shelf Life Extension AP & EC CAS / MAP**: Shelf Life Extension AP & EC CAS / MAP, Gluten Free Pasta/Bread.
- Iron Fortified Rice & Nutri-Dal**: Iron Fortified Rice & Nutri-Dal, Instant (Soluble) Tea Powder & Tablet.
- Cholesterol Reduced Cream Powder (After 20%)**: Cholesterol Reduced Cream Powder (After 20%).
- Other products**: RTE Health Foods & Snacks, Natural Antioxidants & Bioactives, Probiotic Vegetable Beverage, RTS Spirulina Beverage, Dahi Powder & Non-Dairy Yoghurt, Fortified Yoghurt & Oil Powder, Low Cholesterol Dairy Cream, Oat milk & Ice cream, Shelf Life Extension AP & EC CAS / MAP, Gluten Free Pasta/Bread, Iron Fortified Rice & Nutri-Dal, Instant (Soluble) Tea Powder & Tablet, Cholesterol Reduced Cream Powder (After 20%), Bitter gourd juice, Carrot juice, Bottle gourd juice.

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**FCTL, AgFE, IIT Kharagpur**

**REGISTRATION FORM**

1. Name :
2. Designation :
3. Address :
4. Phone (Office) :
- Phone (Resi) :
- E-mail :
5. Date of birth :
6. Highest academic qualification :
7. Requirement of accommodation :

**For QIP Sponsored Candidates [Category (a)]**

Recommended and Forwarded

Date:

Signature and Seal of  
Head of the Organization

**For others [Category (b) and (c)]**

1. Draft No. \_\_\_\_\_ dt. \_\_\_\_\_ amounting Rs. \_\_\_\_\_  
drawn on \_\_\_\_\_ Bank.
- OR
- NEFT Transaction No : \_\_\_\_\_ dt. \_\_\_\_\_ for Rs. \_\_\_\_\_ through  
\_\_\_\_\_ Bank.
2. Recommendation and forwarding from the organization where working (Optional).

Date:

Place:

Signature of the Applicant