

**The following Officers are visiting National Institute of Food Technology  
and Entrepreneurship and Management, Sonapat, Haryana, India  
on 24.01.2019**

- 1. Sri C. Partha Sarathi, IAS,  
APC & Prl.Secretary, Agriculture & Co-operation Dept.**
- 2. Sri Praveen Rao, Vice Chancellor, PJTSAU**
- 3. Sri Venkat Ram Reddy, Director of Horticulture**
- 4. Smt. Lakshmi Bai, Director of Marketing**
- 5. Sri Akhil, Director of Food Processing**
- 6. Sri Jagdishwar, Director of Research, PJTSAU**
- 7. Sri Bhagwan, Director of Research, SKLTSHU**
- 8. Smt. Anitha, Prl.Scientist, Plant Residue Laboratory, PJTSAU**

## **Brief note on National Institute of Food Technology and Entrepreneurship and Management, Sonapat, Haryana, India**

NIFTEM is the brainchild of the Ministry of Food Processing Industries (MoFPI), Government of India. MoFPI in its Vision document-2015, envisaged creation of a world-class institution to cater to the various stakeholders such as entrepreneurs, food processing industry, exporters, policy makers, government and existing institution. NIFTEM will work actively for assisting in setting up food standards, businesses incubation and can also include knowledge sharing. It would also be an apex institution in the field of food technology and management, networking and co-ordinating with other institutions in the same field in India and Abroad.

### **CENTRES OF EXCELLENCE**

International Grain Processing Research & Training Centre  
International Bakery Research & Training Centre  
International Centre of Excellence for Food Safety & Quality  
India Centre of Excellence for Food Convergent Innovation.

### **Mission**

- To produce world-class business leaders, develop globally competitive processes and technologies and international best practices in the area of food technology, entrepreneurship and management.
- To carry out R&D in frontier areas, develop world-class technologies and assist the government in policy making on food processing.
- To be a prime academic institution in the areas of food technology, entrepreneurship and management, NIFTEM would offer courses and training programmes of global standards with optimal mix of inputs on food technology, management and entrepreneurship.

- To offer continual training to the industry to enhance their skill and be updated on global trends in food research and technology by consultation with the stakeholders.

NIFTEM would play a pivotal role in developing food standards, quality, accreditation and certification; keeping a repository of international & national standards and also advising the Government on matters related to international food standards. NIFTEM would be an apex information resource centre on aspects of food processing including information on products, technologies, management practices, food standards, markets etc, NIFTEM would specifically focus on providing comprehensive information to exporters in the food sector. NIFTEM would provide incubator services to enable entrepreneurs to develop sustainable businesses. On the strength of in-depth industry expertise provided by NIFTEM's resources pool, which can in turn catalyze the growth of the food processing sector by nurturing world-class entrepreneurs.

The Vision for NIFTEM is to set up an International centre of excellence which integrates technological, managerial and behavioral aspects of the Indian Food Processing industry with the clear objective of catapulting the sector to the numero uno position in the world. Unlike the existing food science institutes in India, NIFTEM will function as a centre for integrated education, research, enterprise incubation and outreach in the area of food science, technology and business. Experts believe that there will be significant economic gains from incubation and enterprise development, which can in turn catalyze the growth of the Food Processing Sector in the national and international spheres by nurturing world class entrepreneurs.

**"To be an International Center of Excellence which integrates all facets of food technology, entrepreneurship and management and be recognized as the focal point for catalyzing the growth of the food processing industry in India in the global context."**

NIFTEM has a mandate to work as Sector Promotion Organisation/Business Promotion Organisation of the Food Processing Sector. The major objectives of NIFTEM are:

- To work as "**One Stop Solution Provider**" to all the problems of the sector.
- To work for "**Skill Development and Entrepreneurship Development**" for the sector.
- To facilitate "**Business Incubation Services**".
- To conduct Frontier Area Research and foster Innovation for development of the sector.
- To develop World Class Managerial Talent coupled with advanced knowledge in Food Science and Technology.
- To function as a Knowledge Repository.
- To working for up-gradation of SME food processing clusters
- To provide intellectual backing for regulations, governing Food Quality and Safety
- To promote cooperation and networking among existing institutions within India and Abroad.

## **PROGRAMMES**

- **NIFTEM: Addressing the Talent Crunch of the Indian Food Processing Industry**

India in the new millennium has created a significant position for itself in the production of agricultural crops. Its transition from self sustenance to surplus production is remarkable.

- It is no surprise that the food processing sector has emerged as the most promising sector having acquired the unique distinction of being adaptive in terms of embracing latest technologies, cutting edge skills, professionalism and expertise.

- **NIFTEM: Brings in Global Excellence**

In order to enhance the availability of talent in the industry and to harness the full potential of the Indian food processing industry, the Ministry of Food Processing Industries (MOFPI) has taken a path breaking initiative to set up the "**National Institute of Food Technology Entrepreneurship and Management at Kundli in Sonipat (Haryana)**", as an apex world-class institute to cater the needs of various stakeholders, including exporters, entrepreneurs and policy makers.

- **NIFTEM: Curriculum Development Initiative**

NIFTEM will attempt to seamlessly blend various facets of the food industry from production to retail, to ensure that all those involved in these activities reap the maximum possible benefits. It envisages being the focal point for catalyzing the growth of the food processing industries. The institution offers B.Tech., M.Tech. and Ph.D. programmes in Food Technology and Management. NIFTEM has also undertaken research and extension activities. For this a '**Task Force**' of subject experts was constituted which discussed the course curriculum structure and design, eligibility criteria for admission and prepared a detailed syllabus which was sent for an extensive review to about 250 distinguished professionals in the area of Food Science and Technology both at the national as well as the international level. The result of the same has now been compiled

and inducted as per the suggestions and comments proposed by the reviewers from the food processing industry as well academic institutes.

**Research activities at NIFTEM:**

- The institute has established a ‘Research Cell’ for starting research activities in the relevant areas of food technology entrepreneurship & management.
- The priority areas of research are identified as given below.

**NIFTEM’s priority areas of research:**

1. Novel food processing technologies
2. Nutraceutical and health foods.
3. Nano-Science in food preservation and food quality.
4. Development of value added food products.
5. Role of microorganisms in food chain in transfer of antibiotic resistance.
6. Study of microbiological status of food in different parts of the country (to be developed as network project).
7. Food structure and functionality
8. Basic bioscience underpinning health.
9. Food waste and by-product utilizations.
10. Food safety and traceability.
11. Food bio-technology.
12. Design, modeling, and simulation of food processes.
13. Food supply chain and retail management.
14. Harmonization of standards.
15. Regulatory and policy research for food safety.
16. Risk identification, assessment and characterization.

## On-going Projects at NIFTEM

S. No.	Title of the Research Project
1.	Biochar from food industry waste.
2.	Interpretation of mixed milk (buffalo and cow) coagulation process and assessment of the product quality.
3.	Development and storage of fortified food products with cereal grasses and evaluation of their therapeutic characteristics.
4.	Natural antimicrobial film for preservation of fresh produce: Starch-protein film with antimicrobial agents from nature.
5.	Development of safe fruit & vegetable products retaining higher nutrients using High Pressure Processing.
6.	Effect of micro fluidization on the quality of fruit flavoured & low fat yoghurt.
7.	Studies on quality & effect on frying on constituents of street fried foods available in and around Delhi.

During the same time the institute has received a research project from an external agency, i.e. Indian Council of Medical Research (ICMR) in collaboration with NDRI, Karnal, as mentioned below:

### **Role of NIFTEM in providing technical support to industries:**

Food processing sector in India is still in a nascent stage and deserves better attention from the government in enhancing the capacity in this sector in coming years. NIFTEM will be an initiative in that direction giving boost to this

sector by means of technological and scientific interventions and by enhancing capacity through its traditional and non-traditional educational and research programs relating to food sciences and allied disciplines. Based on the intensive interaction with food industry professionals, a clear need was felt to produce leaders/managers in this emerging sector as there is clear shortfall in the number of food science and food technology professionals. Taking cognizance of incremental need of managers and early career professionals, new focus on food science and technology research in public system, need for professionals for regulatory management, outreach etc. NIFTEM will try to fill the demand supply gap. NIFTEM will be the first national research centre in food science and food technology that will provide experiential learning with strong industry linkages.

It is estimated that NIFTEM will produce approximately 1000 students and entrepreneurs, incubate about 250 businesses, undertake 300 research projects, 550 short term courses and 450 projects related to food standards setting and testing and will have about 12000 annual subscriptions for its journals by 2015. In addition, industry will benefit through Continuing Education initiatives, access to patents that are generated within NIFTEM, and market intelligence provided by NIFTEM. The institute will be generating over 100 patents cumulatively over next five years benefiting small and medium scale food industry and food processing clusters in rural India.

In order to cater to the needs of the food industry (large scale, medium, small & micro scale enterprises) NIFTEM is in the process of setting up four Pilot Plants within its campus covering the following sectors:

- Pilot Plant for Fruits and Vegetable Processing.
- Pilot Plant for Meat and Poultry Processing.
- Pilot Plant for Milk and Dairy Products.

- Pilot Plant for RTE and Traditional Food.

The Pilot Plants will serve as incubation centres for the existing food industries as well as the new entrepreneurs to incubate their ideas and also to facilitate in providing 'Hands on Training' to students, progressive farmers as well as the potential entrepreneurs. The efforts would be towards developing new technologies and ultimately to commercialise them.