

FOUR WEEKS INTERNSHIP COURSE ON EMERGING TRENDS & INNOVATIVE FOOD PACKAGING TECHNOLOGIES IN FOOD INDUSTRIAL PRACTICES 19th June – 11th July, 2021

Organised by:

Department of Food Technology (NBA Accredited), Haldia Institute of Technology (An Autonomous Institute) (NAAC Accredited 'A' grade Institute)

> *In collaboration with:* Indian Institute of Packaging

Supported by: Food Safety and Standards Authority of India

Creative Partner(s):



Course Trainer(s)



Dr. Tanweer Alam Director Incharge, Indian Institute of Packaging

Bidhan Das Deputy Director & Regional Head, Indian Institute of Packaging, Kolkata





Shubhabrata Basu Head Packaging and Quality, East India Pharmaceutical Works Limited

> **Payel Maji (Guest Speaker)** Assistant Director (Technical), FSSAI (Eastern Region), Kolkata



Course Coordinator(s)



Prof. Gourab Chatterjee,

Head, Dept. of Food Technology, Haldia Institute of Technology President, AFST(I) Haldia Chapter

Prof. Sumita Das Professor, Dept. of Food Technology, Haldia Institute of Technology Hon. Secretary, AFST(I) Haldia Chapter





Course Objective:

То the enable and engage students and professionals to be aware of the food packaging and its related guidelines, standards and emerging trends in process both nationally and globally. Under this severe pandemic with the restriction in mobility non-feasibility real-time Internship and of opportunities, this virtual training shall mitigate the gap of academia and industry for having better understanding on food packaging and labeling principles and its relevance to food industrial practices.

Course Structure:

Module 1: Definition and Functions of packaging; Type of packaging materials (Plastic, Paper & Paper Board) Selection of packaging material for different foods; Methods of packaging and packaging equipment.

Course Trainer(s): Col. Pramod Dahitule, Bidhan Das & Payel Maji Date: June 19, Time: 10.30 am-1.30 pm

Module 2: Mechanical strength of different packaging materials; Printing of packages; Barcodes & other marking; Interactions between packaging material and foods; Environmental and cost consideration in selecting Packaging materials.

Course Trainer: Bidhan Das Date: June 20, Time: 10.30 am-1.30 pm

Module 3: Quality control testing of packaging materials (PM) in food industries as per compliance; Rigid and semi rigid containers; Flexible containers; Sealing equipment; Aseptic and shrink packaging; Secondary and transport packaging. Live Demonstration Session for WVTR & OTR, UTM, Bursting Strength Tester, Vibration Tester, Climatic Chamber, Compression Tester, Drop Tester

Course Trainer: Bidhan Das Date: June 26, Time: 10.30 am-1.30 pm Module 4: The physical and chemical properties of the packaging materials used for foods in relation to polymer processing, properties of food and processing. Principles and practices for the testing of packaging materials and package designs.

Course Trainer: Bidhan Das Date: June 27, Time: 10.30 am-1.30 pm

Module 5: Manufacture of packaging materials; Potential bio-composite Materials for food packaging; Packaging & Labelling Regulations in Food Industry as per FSSAI; Labelling requirements, Labelling and symbols used in packaging products; restriction on advertisement,

Course Trainer: Dr. Tanweer Alam Date: July 03 Time: 10.30 am-1.30 pm

Module 6: Advances in Packaging Technologies: Box, Bottle, Tetra, Pouch, Vacuum, MAP, CAP, Active packaging, Intelligent packaging, Nano-packaging, Irradiated food packaging, Smart packaging, Sustainable packaging and Ancillary packaging.

Course Trainer: Shubhabrata Basu Date: July 04, Time: 10.30 am-1.30 pm

Module 7: Packaging requirements and their selection for raw and processed foods including Meat, Fish, Poultry, Eggs, Edible Oil, Milk and Dairy Products, Fruits and Vegetables, Cereal Grains and Baked Food Products, Beverages, Snacks & RTE Products,

Course Trainer: Shubhabrata Basu Date: July 10, Time: 10.30 am-1.30 pm

Module 8: Safety Considerations in Food Packaging, Food Packaging & Environment, Recycling, Composting, Thermal Treatment & Land Fill, Innovation in packaging materials in the light of COVID-19. Shelf-life evaluation of packaged food products.

Course Trainer: Shubhabrata Basu & Payel Maji Date: July 11, Time: 10.30 am-1.30 pm

Course Specific Objective:

- To develop the knowledge about the innovative Packaging Technology that exists in society.
- To make the students equipped with understanding of criteria required for designing a successful packaging system for any food product
- To identify the risks associated from the packaging materials in relation to overall food process and implementation.
- To acquire updated knowledge about the new technologies that are developing in packaging industries

Course Outcome (COs):

After completion of this internship the students will be able to:

1.

2.

CO1: To define, understand, and relate basic packaging technologies with respect to manufacturing methodologies, potential material development to address substantiated solutions to practical food preservation and transportation problems.

CO2: Recognize the need, and to have the preparation for independent, life-long learning in the emerging areas of packaging technology in synergy with other technological applications.

CO3: Interpret and demonstrate as a professional, who has comprehensive knowledge on regulatory requirements for food packaging and allied areas to meet societal needs within realistic constraints such as economic, environmental, ethical, legal, cultural, health and safety, feasibility, and sustainability

CO4: Examine and analyze quality problems associated with difficulties related to packaging material, methodologies and food components to be packaged.

CO5: Create, develop and formulate appropriate packaging technologies with the aid of various tools with a view to work in real life situations and as independent entrepreneurs.

CO6: Communicate to defend effectively on professional activities in order to estimate and support societal awareness and need on packaging technology.

Salient Features of the Course:

- Total Twenty Four (24) hours lecture modules for the entire course
- Nationally recognized course trainer(s) from IIP
- Live demonstration session for quality testing in packaging
 - An opportunity to get Four-Weeks Internship Certificate by IIP
- Food Industry specific Case Study/Assignment.
- Internal & External Assessment as part of continual evaluation by IIP
- Classes are scheduled primarily on Saturdays and Sundays from 10.30 am-1.30 pm (Morning classes)
 Detailed course materials would be provided as per requirements

Who can enroll for the Course?

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- B.Tech/ M.Tech/ B.Sc/ B.Voc/ M.Sc Students/ Research Scholars from Food Technology/ Food Science/ Nutrition/ Biochemical Engg./Biotechnology/ Chemical Engg.
- Professionals from different Food Industries/ Biochemical Industries/ Allied Industries
- Faculties From Academia/ Research Organizations
- Entrepreneurs/ Start-up Planers/ Food Industry Consultants

For Registration Please Contact :



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Indian Students/Professionals Click here to register

Foreign Students/Professionals Click here register Limited Seats

Certificate

from IIP