

AGENDA

Monday Afternoon – May 11

ABE B-073

12:30	Registration
1:00	Introduction and Welcome (Dr. Dharmendra Mishra)
2:00	Microbiological Principles in Aseptic Processing (Dr. Haley Oliver)
3:30	Refreshment Break
3:45	Principles of Thermal Processing in Aseptic Processing (Dr. Dharmendra Mishra)
5:30	Dinner

Wednesday Morning – May 13

ABE B-073

8:00	Aseptic Packaging Technology (Dr. Patnarin Benyathiar)		
9:30	Refreshment Break		
9:45	Laboratory Sessions (NLSN)	Room#	Groups
	Packaging – Dr. Benyathiar	NLSN 1137	III
	Chemistry – Dr. Syamala	NLSN 1215	III
	Microbiology – Dr. Sawale	NLSN 1254	IV
	Engineering Concepts – Ms. Budreau and Mr. Paxson	Pilot Plant	I
	Equipment Features – Dr. Chakraborty	NLSN 1195	II
11:45	Lunch (Provided)		

Tuesday Morning – May 12

ABE B-073

8:00	Thermal Process Calculation (Dr. Dharmendra Mishra)		
9:30	Refreshment Break		
9:45	Laboratory Sessions	Room#	Groups
	Packaging – Dr. Benyathiar	NLSN 1137	I
	Chemistry – Dr. Syamala	NLSN 1215	I
	Microbiology – Dr. Sawale	NLSN 1254	II
	Engineering Concepts – Ms. Budreau and Mr. Paxson	Pilot Plant	III
	Equipment Features – Dr. Chakraborty	NLSN 1195	IV
11:45	Lunch (Provided)		

Wednesday Afternoon– May 13

ABE B-073

1:00	Laboratory Sessions (NLSN)	Room#	Groups
	Packaging – Dr. Benyathiar	NLSN 1137	IV
	Chemistry – Dr. Syamala	NLSN 1215	IV
	Microbiology – Dr. Sawale	NLSN 1254	III
	Engineering Concepts – Ms. Budreau and Mr. Paxson	Pilot Plant	II
	Equipment Features – Dr. Chakraborty	NLSN 1195	I
3:00	Refreshment Break		
3:15	Quality Assurance and FDA Regulations (Dr. Glenn Black)		
5:00	Special Dinner (Transportation provided)		

Tuesday Afternoon – May 12

ABE B-073

1:00	Chemical Considerations of Aseptic Processing (Dr. Athira Syamala)		
2:30	Refreshment Break		
2:45	Laboratory Sessions	Room#	Groups
	Packaging – Dr. Benyathiar	NLSN 1137	II
	Chemistry – Dr. Syamala	NLSN 1215	II
	Microbiology – Dr. Sawale	NLSN 1254	I
	Engineering Concepts – Ms. Budreau and Mr. Paxson	Pilot Plant	IV
	Equipment Features – Dr. Chakraborty	NLSN 1195	III
6:00	Dinner on Your Own		

Thursday Morning – May 14

ABE B-073

8:30	Sanitation (Dr. Haley Oliver)
10:15	Refreshment Break
10:30	Problem Solving Exercise (Dr. Dharmendra Mishra)
12:00	Workshop Adjourns

Workshop Faculty and Instructors

Dharmendra Mishra Associate Professor of Food Science and Director, Food Entrepreneurship and Manufacturing Institute (FEMI) at Purdue University. His expertise includes thermal processing, mathematical modeling, aseptic validation, and parameter estimation. He works closely with commercial food manufacturers and provides operational guidance and design training courses for the workforce and has trained over 1800 food industry professionals and government regulatory inspectors.

Glenn Black Associate Director of Research of the Division of Food Processing Science and Technology (DFPST) in the office of Food Safety within CFSAN/FDA. DFPST is jointly located with the Institute for Food Safety and Health at the National Center of Food Safety and Technology (NCFST) and is responsible for providing management, budget oversight, and supporting food safety-related research related to food processing and safety.

Kelsey Budreau Pilot Plant Manager at the Dept. of Food Science, Purdue University. She coordinates daily activities in the department's 9,500 sq. ft. modular space dedicated to food manufacturing research and education. Kelsey supports department research, training for student courses and industry, and pilot scale R&D trials for industry.

Haley Oliver Professor of Food Science at Vice Provost for Graduate Students and Post Doctoral Students. She has over 10 years of food security field experience in low- and middle-income economies. Dr. Oliver's domestic research focuses on foodborne pathogens in emerging food systems (e.g., cellular agriculture) with an emphasis on practical and feasible control strategies. She teaches food safety, sanitation, and related subjects at Purdue.

Patnarin Benyathiar Clinical Assistant Professor of food packaging in Purdue's Department of Food Science. Her packaging program is focused on development of eco-friendly packaging materials from renewable sources, nano-coating and nanotechnology in sustainable packaging, life cycle of packaging in recyclability, biodegradability, compostability, and smart/active packaging.

Ben Paxson Purdue Food Science Academic IT Specialist. He determines short- and long-term goals for the management and expansion of the departmental network and is responsible for the design and implementation of new features of the network and manages the department's servers. Additionally, Ben acts as the IT lead on several projects including aspects related to Computer Integrated Manufacturing in our Pilot Laboratory.

Athira Syamala Research Associate-Senior FEMI Food Science at Purdue University. Dr. Syamala research works focuses on dairy technology, functional characterization of commercial dairy and whey protein, and beverage applications.

Subhashis Chakraborty Extension Research Administrator and Regulatory Specialist at the Dept. of Food Science, Purdue University. His experience spans more than 11+ years in the food and beverage industry through industrial work, training, auditing, and consulting.

Manoj Sawale Thermal Process Authority. Highly motivated and innovative food professional with 5+ years of experience in Food Processing, Microbiology, Aseptic Processing, Aseptic Filler Validation, and ingredient formulation. Proficient in scientific discovery and commercial implementation of technology, adept at leading the team for challenging projects and food industry workshops.

Graduate Student Assistants and Workshop Staff

Phiona Bamukunde, Allison Kingery, George Nyombaire, Amandeep Singh, Audrey Searing Hettel, Halak Mehta, Xiang Cheng, Harneel Kaur, Rahul Kamath, Vinoothna Ramisetty, Isaya Kijpatanasilp, Neeraj Ghanghas, and Dept. of Food Science Undergraduate Assistants.