# Come see how the pieces fit together!





### **Aseptic Processing and Packaging Technologies Course**

April 30 - May 02, 2024 | Lakeland, FL

The course will be held at the JBT Lakeland, FL Customer Innovation Center.

#### **Contact:**

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Cristin Williams (559) 661-3286 | Cristin D. Williams@jbtc.com for more information.

# Introduction to Continuous-Flow Aseptic Thermal Processing Technologies

- A. Classification of Shelf-Stable Foods
- B. Definition of Terms
- C. Processing Options for Shelf-Stable Foods
- D. Continuous-Flow Processes—Heating Profiles, Direct/Indirect Heating
- E. Basic Concepts in Thermal Process Calculations

#### Aseptic Thermal Process Design and Calculations

- A. Calculations for Homogeneous Products with AseptiCAL®
- B. Filing a UHT Process
- C Concepts/Strategy for Aseptic Particulate Process Design
- D. Calculations for Particulate-Containing Products with AseptiCAL®
- E. Filing a Particulate UHT Process

#### Introduction to Aseptic Filling Technologies

- A. Review of Concepts
- B. Definition of Terms
- C. Configurations of Sterile Product Pathway to Filler
- D. Overview of Aseptic Filler Types
- E. Sterilants and Sterilization Technologies (Equipment and Packaging Material)
- F. Effect of Sterilization Processes on Microorganisms

## Aseptic Standards: Regulatory, Validation, and Verification

- A. Review of Concepts
- B. U.S. Regulatory Agencies and Standards/Other Standards/Requirement for Validation
- C. Validation/Change Management/Verification
- D. What Needs to be Addressed/What to Validate
- E. Targets/Control Measures/Performance Criteria/Critical Factors
- F. Microbiological Validations-Methods, Types
- G. Other Types of Validations

#### Microbiology of Aseptic Systems

- A. Review of Thermal Processes
- B. Spoilage of Aseptic Products
- C. Why Does Aseptic Fail?
- D. Microbiological Testing as Verification Tool
- E. Process Deviations and Microbiology
- F. Trouble Shooting/Spoilage Investigations

#### Location:

JBT

Customer Innovation Center 400 Fairway Ave, Lakeland, FL 33801

#### Dates:

## April 30 - May 02, 2024

#### Course Instructors:

Dr. Paul Gerhardt

#### Course Tuition:

\$ 2,000 per student. Register before April 1st 2024 and receive a \$200 reduction.

Lunches, refreshments and course materials provided.

#### Registration:

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