

# Cleaning In Place (CIP)

and its Applications  
in Microbreweries

**Date** 11 February 2021

**Location** Online

**Required** Computer access and  
good WIFI/Broadband  
for participation

**Booking** [bit.ly/CIP-T4Success](https://bit.ly/CIP-T4Success)



University College Cork, Ireland  
Coláiste na hOllscoile Corcaigh

Taste 4  
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Skills  
CONNECT  
Reskilling Through Enterprise

# Cleaning In Place (CIP)

## Applications in Microbreweries

**DATE:** 11 February 2021

**A fundamental course in CIP will cover:**

- What is CIP?
- Why is CIP Important ?
- What do I need to know?

**Who should attend / will benefit?**

Operations, Technical, Project Managers, Quality Assurance, Quality Control and other relevant personnel who operate micro brewing and beverage plants. This course would be also useful for R&D and NPD staff who develop new products or are planning new investments in plant equipment.

**Cost**

As part of the Skills Connect offering, places are free.

### Benefits of attendance

#### Cleaning In Place

- Safety and environmental aspects of CIP
- What are the 4 T's?
- How each of the T's affect the outcome of your CIP
- Mechanical action (turbulence)
- Chemical force (turbidity/titration)
- Time
- Temperature
- Technology

#### CIP Delivery Systems

- Components of a CIP system
- The CIP station
- Single and multiple delivery systems
- CIP system safety
- Control and data acquisition systems
- Water quality and its effects on CIP
- Verification and validation
- Post-CIP testing (chemical/microbiological)

## Detergents

- Detergents and acids
- Concentrations and the effect on a successful CIP
- Base caustics and acids vs blended chemicals
- In-line measurement of concentration/temperature
- Environmental considerations

## Common Issues with CIP Systems

- What constitutes a successful CIP?
- What should I look for during CIP to ensure success?
- Preventative maintenance items that affect CIP systems
- How can I optimise a CIP system to increase plant availability?
- How can I save money & time on my current system?
- Capital investment justifications
- What are the problems that I have experienced?

## Trainer Biographies

Nial Mullane is a UCC graduate of Dairy Science and has 35 years' experience across a number of blue chip companies in both the UK and Ireland in soft drinks manufacture with Coca Cola, Aseptic packaging of juices, milk and sauces with Tetra Pak and both liquid UHT and powdered infant formula manufacture with Wyeth Nutrition. He has held project management, validation and senior operation management roles in these companies. Nial has been a CIP champion for many years and frequently lectures in University College Cork.

John Creedon has over 33 years' experience in the Irish food and drinks industry in brewing, dairy spreads, milk powders, confectionary and infant formula. Having graduated from UCC with a BSc (Food Business) and later from TUDublin with a M.Sc. (Environmental Health Risk Management), he has worked in various quality, manufacturing, operational excellence and training roles with Heineken, Glanbia, Danone, Pfizer and Wyeth (now Nestle). He is currently responsible for training and learning including the development of subject matter experts in areas such as wet processing, drying, cleaning in place, filling and packaging of infant formula across the five dimensions of safety, environment, quality, operational and financial performance.