



## NTHRYS WORKSHOPS

# Advanced Techniques In Impedance Microbiology

### **8:45 AM - 10:15 AM: Session 1: Impedance Techniques for Rapid Detection of Pathogens**

Hands-on workshop on using impedance for rapid pathogen detection. Protocols for optimizing impedance assays for detecting bacterial and fungal pathogens in clinical and environmental samples.

### **10:15 AM - 10:30 AM: Coffee / Tea / Snacks Break**

Networking and refreshments.

### **10:30 AM - 12:00 PM: Session 2: Impedance Sensors for Food Safety Testing**

Practical session on using impedance sensors in food safety. Protocols for detecting microbial contamination in food products using impedance microbiology techniques.

### **12:00 PM - 1:00 PM: Lunch Break**

Catered lunch and networking opportunity.

### **1:00 PM - 2:30 PM: Session 3: Electrochemical Impedance Spectroscopy in Microbiology**

Hands-on training on electrochemical impedance spectroscopy (EIS).  
Protocols for using EIS to study microbial biofilms, cell membranes, and metabolic activity.

### **2:30 PM - 2:45 PM: Short Break**

Time for a stretch and informal discussions.

### **2:45 PM - 4:15 PM: Session 4: Optimization of Impedance Sensors for Specific Microbial Targets**

Practical session on optimizing impedance sensors for detecting specific microbial species.  
Protocols for sensor design, functionalization, and validation against microbial targets.

### **4:15 PM - 4:30 PM: Coffee / Tea / Snacks Break**

Last networking opportunity with snacks.

### **4:30 PM - 5:30 PM: Closing Session: Implementing Changes and Technology Adoption**

Group discussions on implementing new techniques learned today.  
Dialogue on overcoming challenges in adopting new technologies in similar sectors.  
Feedback session and closing remarks.

**Certificate Issue**

### **5:30 PM: Workshop Concludes**