

General Workshop Information

Workshop Title: Plasmonic Microwave Biosensors: Fundamentals, Design, Modeling, and Emerging Biomedical Applications

Workshop Type: Specialized Workshop of ICBME 2026

Organizer: The 33rd National Conference and the 11th International Conference on Biomedical Engineering

Instructor: Dr. Majid Towhidloo

Date: November 19, 2026

Duration: 2 Hour

Format: In-person

Venue: Isfahan University of Technology

Topics and Course Outline

This specialized workshop introduces participants to the fundamental principles of plasmonic microwave biosensors, with a focus on their design, modeling, and emerging biomedical applications.

The workshop will cover:

- ❖ Introduction to the fundamental principles and working mechanisms of plasmonic microwave biosensors
- ❖ Design principles and key parameters influencing biosensor performance
- ❖ Modeling and simulation approaches for plasmonic microwave biosensors
- ❖ Principles of biosensing, signal detection, and response mechanisms
- ❖ Emerging biomedical applications of plasmonic microwave biosensors
- ❖ Current challenges and future perspectives in the development of advanced biosensing platforms

Registration Fee

General: 6000,000 R

Conference Participant: 4000,000 R

Capacity: Limited