

Award Winners for MeSSAC 2025

Best Oral Presentations

Yingxin Chai

High-performance reverse iontophoresis-based glucose sensing patch

Jingruo Chen

Investigation on iron particle combustion via simultaneous multi-physics field measurements

Qingwei Duan

Measurement of nonspherical drops and bubbles by their light scattering patterns assisted with machine learning

Xiaoxuan Geng

A novel eddy current method for conductivity measurement immune to lift-off based on closed-loop feedforward controller

Wensong Jiang

Strain impact signal denoising based on MGO - SVM - EDCC - WTD approach

Yandan Jiang

A novel signal focusing approach for contactless electrical impedance tomography

Yanyu Jiang

A highly integrated photoelectric composite fiber optic photoacoustic gas sensor for rapid early warning of battery thermal runaway gas

Hongyu Liu

Operando temperature-pressure-refractive index measurement of Lithium batteries based on a three-cavity fiber optic sensor

Yuanyuan Qin

Measurement of the shear strength parameters of marine soil treated with composite materials by multistage triaxial test

Vishalkumar Rajeshbhai Gohel

Towards the design of orthogonal oxide combinatorial multisensor systems using modern synthesis and printing technologies

Mengxian Shen

Uncertainty assessment of cavity profile measured by outwards-ECT using parameter bootstrap method and CFD-EMF simulation

Naihe Song

High-precision gas velocity measurement in low-speed flow fields based on TDLAS

Shaoqi Sun

A mixing-frequency magnetic particle imaging system for in-vivo 3D imaging

Lijuan Wang

Slurry flow measurement using a Coriolis flowmeter incorporating an acoustic emission sensor

Na Wang

Optimized design of a novel permanent magnet system for the force standard machine traceable to the Planck constant

Wentian Wang

Structural optimization of polyimide-film humidity sensors for new energy vehicles

Ou Wen

Study on void fraction measurement method in gas-liquid two-phase flow with variable liquid-phase permittivity based on ECT

Jing Yang

Comparative study of eddy current and laser thermography for NDT of CFRP-strengthened steel structures

Zhixiang Zhang

SP-Net: a competitive network for outlier detection of Glioma using Raman spectroscopy

Best Poster Awards

Arsalan Ahmad

Advancements in computer vision techniques for precision measurement of surface characteristics in additively manufactured parts

Shuaikang Chen

Ultrasonic wave propagation in honeycomb sandwich composite structures

Fanghao Lu

Eliminating the distortion of a laser intensity signal due to beam steering effect using a co-path reference laser

Peng Suo

Gas-liquid two-phase flow measurement using a throat-extended Venturi meter and deep neural networks

Zihan Xia

Robotic scanning of bearing ball defects with eddy-current sensor