

Room B (Grand Ballroom 2), 2F

Chair: Kwanil Lee (KIST)

**Mo2B**

Acousto-Optic Sensing

June 29 (Mon), 2026

14:45-16:15

**Mo2B-1 Tutorial 14:45-15:45**



### **Measurement and Sensing Techniques Through Acousto optic and Photo acoustic Effects**

Kentaro Nakamura

Institute of Science Tokyo, Japan

This tutorial overviews several examples of measurement technique utilizing the interaction between ultrasound and light. First, acousto-optic measurements of ultrasound in air are explained. Second, photoacoustic measurement technique aiming at thin blood vessels is discussed.

**Mo2B-2 Invited 15:45-16:15**

### **Towards a Global Sensing Network: New Advances in Distributed Acoustic Sensing**

María R. Fernández-Ruiz<sup>1</sup>, Yan Ren<sup>1</sup>, Julia Mateu-Comas<sup>1</sup>, Alonso Romero-Barrueco<sup>1</sup>, Miguel Soriano-Amat<sup>2</sup>, Sonia Martín-López<sup>2</sup>, Miguel González-Herráez<sup>1</sup>

<sup>1</sup>Universidad de Alcalá, <sup>2</sup>Institute of Optics "Daza de Valdés" IO-CSIC

We discuss the main challenges of DAS technology for becoming a ubiquitous sensing system incorporated in current telecom fiber networks, along with recent advances and future research directions towards this goal.