# GO2S 26 Fiber Optic Sensing CONFERENCE

## LYON- March 9-10 2026

*Don't miss your chance to present at GO2S 26! We're now accepting abstracts for technical presentations. Learn more and submit here: https://go2s2026.sciencesconf.org/*

*A dynamic conference and exhibition striking the perfect balance between Research and Industry—bringing together users, decision-makers, scientists, and businesses to explore and exchange on the emerging uses of optical fiber as a sensor.*

***"Fiber with a sixth sense".***


ARUFOG Fiber optic expertise since 1986 — LABORATOIRE HUBERT CURIEN — MINALOGIC Auvergne-Rhône-Alpes — La Région Auvergne-Rhône-Alpes

The **GO2S**® (Guided Optics & Sensor Systems) conferences bring together key players in fiber optics, particularly sensor applications. Following the success of the Paris (2019), Lyon (2020), Bordeaux (2022) , Lyon (2024), the 2026 edition will be held again in Lyon, at the Hôtel de Région, co-organized by the Hubert Curien Laboratory and the ARUFOG association.

The **GO2S initiative** created in **2008** by André Champavere, then president of the **ARUFOG** Association (Association for the Research and Uses of Fiber Optics and Guided optics) focuses on the use of **optical fiber as sensor or sensor network.** Whether deployed in smart buildings, the city of the future or in smart territories or even embedded in mobile systems, fiber optics can extend its use by exploiting the multiple possibilities in sensor mode.

The synergies at the technology level and the deployment of these technologies between the field of **Telecom data transmission and the field of Sensors** are at the origin of the GO2S® initiative. Fiber optic cables laid across cities, regions, countries, and under the sea are getting a lot of attention because they can be used as sensors—for example, to detect earthquakes or improve network security.

They strongly contribute to the specificity of these conferences. Since its creation in 1986, ARUFOG maintains within the association a balance between the academic world and the industrial world in order to bring out new uses of optical fiber, as in the case of the GO2S® project.

GO2S® conferences are an opportunity for exchanges between laboratories, suppliers of fiber optic technologies and systems and current or potential users of these optical fiber sensor systems. The GO2S® conferences are also the occasion of an exhibition of materials and demonstration.

Contributions are solicited reporting on original research (both experimental and theoretical) in the following areas:

## GO2S 2026 Scientific Conference Session Topics

## *(Preliminary)*

### 1- Integrating Fiber Optic Sensing into Telecom Infrastructure

**Chair:** **Gabriel PAPAIZ**, Research & Innovation **SNCF**

This session explores how existing and future telecom networks can serve as distributed fiber optic sensing platforms, enhancing network resilience and environmental monitoring.

### 2- Data Processing and Management for Fiber Optic Sensing

**Chair:** **Élie AWWAD**, Associate Professor in Optical Communications, **TELECOM PARIS**

Focusing on advanced methodologies for handling large data volumes from fiber optic sensors, this session examines techniques for efficient information extraction, visualization, and analysis.

### 3- Fiber Optic Sensing in Transportation and Harsh Environments

**Chair:** **Sy Dat Le**, Fiber Optics System Specialist at **AIRBUS**

Examining the deployment of fiber optic sensors in mobility and extreme conditions, this session addresses their robustness, real-time monitoring capabilities, and adaptation to physical and environmental stressors.

### 4- Economic Potential of Fiber Optic Monitoring

**Chair:** **Christophe CAUCHETEUR**, Professor at **UMONS** and **F.R.S.-FNRS**

Exploring the transition of fiber networks into sensing platforms, this session highlights emerging business opportunities, smart applications, and the economic value of real-time data acquisition.

### 5- Innovative Fibers and Cables for Sensing

**Chair: Adriana MORANA** Associate Professor at Jean Monnet University **UJM**

This session showcases advancements in novel fiber types—Multi-Core, Hollow-Core, and Few-Mode Fibers—enhancing sensitivity, resolution, and multiplexing for next-generation sensing applications.

### 6- Advancements in Fiber Optic Sensing Systems

**Chair: Pascal EDME**, Senior Research Scientist at **ETH Zürich**

Focusing on new components and equipment, this session explores innovations in laser sources, detectors, instruments, and systems that improve detection performance and versatility.

### 7- Fiber Optic Sensing in Health, Energy, and Industry

**Chair: Jean-Charles BEUGNOT** CNRS Research in Photonics at **FEMTO-ST** Institute

Highlighting diverse applications, this session covers fiber optic sensors in health monitoring, energy, medical diagnostics, and industrial automation, demonstrating their role in optimizing safety and efficiency.