







an Open Access Journal by MDPI

# New Developments in Guided Waves (GW) Based Structural Health Monitoring (SHM) Using Optical Fiber Sensors

Guest Editors:

#### Dr. Rohan Soman

Institute of Fluid Flow Machinery, Polish Academy of Sciences.

#### **Prof. Kara Peters**

North Carolina State University

### Prof. Dr. Zahra Sharif Khodaei

Department of Aeronautics, Imperial College London, South Kensington Campus, Exhibition Road, London SW7 2AZ, UK

Deadline for manuscript submissions:

31 August 2024

## **Message from the Guest Editors**

This proposed Special Issue aims gather recent developments in the use of optical fiber sensors for guided wave (GW)-based structural health monitoring (SHM). GW-based SHM has remained one of the most used SHM strategies for composites in long pipe-like and large plate-like structures. Optical fiber sensors offer several advantages over conventional sensors, but until recently the sensitivity of the sensors for GW measurement restricted their use.

Thanks to the rapid developments in sensor technology and signal processing, this area has received renewed interest. The use of Fabry–Perot interferometers and fiber Bragg grating (FBG)-based sensors in the remote-bonding configuration, etc. have improved the sensitivity of the optical fiber sensors for GW measurements. Therefore, the goal of this Special Issue is to bring together the ongoing research in the field to improve GW-based SHM using optical fiber sensors.













an Open Access Journal by MDPI

## **Editor-in-Chief**

## Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

## **Message from the Editor-in-Chief**

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases. **Journal Rank:** JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1

(Instrumentation)

#### **Contact Us**