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Wojtek J. Bock
Jacques Albert
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Introduction

Dear participants and readers,

It is a great honor and pleasure for us to publish the Proceedings of the 21st International Conference on Optical Fiber Sensors (OFS21), on behalf of the OFS International Steering Committee (ISC), the OFS Technical Program Committee (TPC) and the OFS21 Local Organizing Committee. Since 1983 an OFS Conference has been held approximately every eighteen months, rotating between the Americas, Europe, and Asia - Pacific. This year, for the first time in history, OFS21 was held in Canada in its beautiful and friendly capital – Ottawa.

It is important to realize that OFS has never belonged to a large learned society or a professional organization; our Conference series has been able to flourish for the last 28 years thanks to a large group of dedicated volunteers around the world, to our informal structures such as the ISC and the TPC, and in a large part thanks to your continuous excellent progress in your research activities on fiber optic sensors. Being completely independent, OFS is now widely recognized around the world as a unique technical forum of the highest quality. Thanks to your excellent contributions, we are able to offer you this scientifically interesting and inspiring volume.

This volume contains extended summaries of the papers presented at the Conference, including some from two special workshops held on the Sunday preceding the official opening of the conference. The first workshop was dedicated to the history of optical fiber sensors in pioneering institutions from around the world, with presentations by three of the most senior members of our community; the second was devoted to one of the most active current applications: structural sensing, with papers by prominent researchers in companies active in the field.

As for the regular conference papers, notable trends this year include many works dealing with special fibers and coating materials to add functionality and multi-dimensional sensing modalities, sensors devices that rely on micro- and nano-structured fibers for compactness and higher sensitivities, and fiber sensors for biomedical applications, including imaging with fiber probes and fiber interferometers. Also of note is that fiber gratings remain at the heart of many optical sensor interrogation schemes and are constantly being improved by new fabrication techniques and integration with new fibers and coatings. Finally, distributed sensors are continuing to push the limits of distance and resolution, using both time and frequency domain interrogation, and to add more functionality (parameters), especially in the area of dynamic measurements.

We hope you will enjoy reading these papers as much as we had pleasure in putting them together for you all.

Wojtek J. Bock
Jacques Albert
Xiaoyi Bao