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Przemysław Struk
Tadeusz Pustelny
Editors

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Introduction

The Conference on Intergrated Optics: Sensors, Sensing Structures, and Methods (IOS) is the international scientific forum of photonics and modern nanotechnology. IOS has been organized every year since 2004 and in 2018 it was held for the thirteenth time.

IOS18 took place from 26 February to 2 March 2018 in Szczyrk, Poland in the META Hotel in the Beskidy Mountains in southern Poland, during a real winter scenery.

The conference was attended by 80 scientists, mainly from Poland but also from Germany, Australia, Qatar, and Slovakia.

The main organizer of the 13th IOS was the Photonics Society of Poland. The technical co-organizers of the conference were the Upper Silesian Division of the Polish Acoustical Society, and the Optoelectronic Department at the Silesian University of Technology in Gliwice (Poland).

The honorary patronage of the conference has been taken over by Professor Wiesław L. Woliński, a full Member of the Polish Academy of Sciences.

During the IOS18 conference thirty-eight oral lectures were held in 8 scientific sessions. In addition, twenty-one posters presented during the poster session.

The main aim of the conference was an exchange of knowledge in the scope of practical applications of photonics, integrated optics, and related scientific areas. The objectives of the conference were also presentations of experiences in the field of technology and theoretical analysis of optoelectronic sensors and practical applications of sensing structures and systems, as well as new methods in the field of modern metrology.

The IOS18 conference has contributed to the extension of relations between scientific groups and has enabled the intensification of common cooperation for the development of photonics and integrated optics.

The papers in this volume were part of the international scientific conference cited on the cover and title page.

All conference papers were initially checked by the editors and Conference Program Committee and selected of them were subjected to reviews before their publications.

All published papers obtained the positive reviews and recommendations for publications.

(Some conference presentations did not send by their authors for publication.)

The papers reflect the work and thoughts of the authors and are published herein in form accepted by reviewers.

**Tadeusz Pustelny
Przemyslaw Struk**