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Introduction

These proceedings are a collection of the selected articles presented at the 14th International Conference on Optical and Electronic Sensors held in Gdańsk, Poland on 19–22 June 2016 (COE 2016). The conference has been held under the scientific patronage of the Polish Association of Sensor Technology and the Committee of Electronics and Telecommunication, Polish Academy of Science and hosted by the Gdańsk University of Technology's Faculty of Electronics, Telecommunications and Informatics. The Polish Association of Theoretical and Applied Electrical Engineering (PTETiS) actively supported organization of the conference. The COE conference series aims to advance interdisciplinary scientific information exchange and discussion on sensor application and development.

The COE 2016 conference took place on Gdańsk-Sobieszewo island, 2 minutes walking distance from the beautiful beach of the Gdańsk Bay. The surroundings and location of the venue guaranteed excellent working and leisure conditions. The three-day conference highlighted invited talks by outstanding scientists working in important areas of sensors development.

The six sessions covered areas in the fields of optical, electronic and electrochemical sensors. The conference attended 90 participants from 12 countries. The schedule involved 12 invited presentations, 13 oral presentations and 50 poster presentations.

The scientific committee awarded the best posters presentations. The ceremony for the granting of awards took place during the gala dinner. The following have benefited:

- First place was awarded to Marta Fiedot and Helena Teterycz for their poster "Chlorine sensing properties of zinc oxide resistive gas sensor doped with platinum";
- Two second places were awarded:
Francesco Ivaldi, Tomasz Bieniek, Piotr Grabiec, Wojciech Majstrzyk, Daniel Kopiec, Teodor Gotszalk for the poster "Innovative multi-cantilever array sensor system with MOEMS read-out";
and to Tadeusz Stacewicz, Zbigniew Bielecki, Jacek Wojtas, Janusz Mikołajczyk, Beata Zakrzewska, Paweł Magryta, Małgorzata Panek, Arkadiusz Tkacz for the poster "Research on application of cavity enhanced and multipass spectroscopy in human breath analyses";
- The third place was awarded to Michał Kowal, Sławomir Kubal, Piotr Piotrowski, Kamil Staniec for the poster "Wireless sensor networks (WSN) for vital parameters measurements".

The General Assembly of Polish Association of Sensor Technology (PTTS) met during the conference and looked into various aspects of the PTTS' activities and the future role of this conference for the scientific community. It was underlined that the iCAN global contest for students interested in micro-nano technology is an important activity supported by the PTTS.

During this meeting the next location of the COE 2018 conference was discussed and it was announced that the 15th International Conference on Optical and Electronic Sensors will be organized by the Warsaw University of Technology (Poland) in June of 2018.

During the meeting new PTTS Officers were elected. Professor Jan Dziuban from Wrocław University of Technology (Poland) has become the President of the PTTS.

This special proceedings volume presents 37 papers selected via peer-review process from the papers submitted for the proceedings of the conference. The volume aims to be an essential reference work for the evolution and development of various aspects of optical, electronic and electrochemical sensors.

The editor of this issue acknowledges all authors and reviewers for their efforts and work to complete this proceedings volume. Members of the Organizing Committee (Aleksander Chrzan, Karolina Cysewska, Katarzyna Dunst, Grzegorz Jasiński, Paweł Kalinowski, Krzysztof Suchocki, Dagmara Szymczewska and Łukasz Woźniak) from Gdańsk University of Technology (Poland) are appreciated for their help and assistance before and during the conference.



The conference would not have been also possible without the generous sponsorship provided by the Chancellor of the Gdańsk University of Technology and by the Dean of the Faculty of Electronics, Telecommunications and Informatics. The organizing committee is very grateful for their support.

Piotr Jasiński

