



ICEM19 - the 19th International Conference on Experimental Mechanics

2022-08-25

ICEM19 - the 19th International Conference on Experimental Mechanics - was held on July 17-21, 2022 in Krakow, for the first time in Poland. ICEM conferences are organized under the auspices of the European Society of Experimental Mechanics EuraSEM and gather internationally recognized experts and young researchers to exchange experiences, serve to establish connections between different research teams and stimulate the development of scientific cooperation.

ICEM conferences are held in various places in Europe and have a long tradition; they were initiated in 1959 in Delft and then continued in various countries. In 2018 ICEM18 took place in Brussels.

The ICEM19 conference was organized by the Institute of Fundamental Technological Research of the Polish Academy of Sciences (IPPT PAN) with the support of the Polish Society of Theoretical and Applied Mechanics PTMTS and EuraSEM. The chairpersons and organizers of the conference were prof. Zbigniew L. Kowalewski and prof. Elżbieta A. Pieczyska from the Department of Experimental Mechanics, IPPT PAN.

The Conference was focused on experimental and measuring techniques for thorough study of the mechanical properties of different materials, engineering structures and systems which are necessary to create the physical bases and provide verification of analytical or numerical methods in engineering design. The presentations were delivered within 11 Special Sessions (e.g. Additive Manufacturing Materials, Composites and Adhesives, Dynamic Response, Micro/Nano-Mechanical Testing, Smart Materials and Structures; 3 Thematic Sessions (Experimental Solid Mechanics, Experimental Fluid Mechanics, Computational Mechanics) and Symposium "Novel Applications in Experimental Mechanics". The innovative subjects of the Invited Plenary Lectures (8), for example, "New Challenges on Developing Experimental Methods for Innovative Metal Forming", or "Full-field Optical Methods in Experimental Mechanics: Past, Present and Future", attracted great attention.

For the ICEM19 conference 339 extended abstracts were submitted, from which 161 were delivered. Due to the COVID19 pandemic and the war in Ukraine, 174 presentations were cancelled. Despite all the obstacles and difficulties, the conference was smoothly prepared and held thanks to the great effort and consistent activities of the members of the Organizing Committee and the great support of public institutions, including the Ministry of Education and Science, the Municipal Office of Krakow, UMK and the Marshal's Office of Małopolska UMM, as well as many sponsoring companies.

The scientific program of ICEM19 included 8 plenary lectures, 14 keynote lectures and 139 presentations delivered by participants from 27 different countries around the world. The total number of participants in the event exceeded 200, which should be considered as a significant success in the current situation. There was also a poster session during which MSc. Adam Brodecki from IPPT received the 3rd degree award for the best poster presentation.

The invited plenary lectures were delivered by specialists in the field of experimental mechanics and computation mechanics from universities and research units around the world - well-known and respected professors, including prof. Jianguo Lin from Imperial College London, Prof. Raj Das from RMIT University Australia, prof. Christian Hellmich from Vienna University of



**Magiczny
Kraków**

Technology, prof. Małgorzata Kujawińska from the Warsaw University of Technology, prof. Błażej Skoczeń from the Cracow University of Technology, prof. George Z. Voyiadjis from Louisiana State University, prof. Marek Stankiewicz from the Jagiellonian University, prof. Paul Wood from the University of Derby.

The aim of the Organizers, as well as the wishes of the supporting Institutions, was to organize the ICEM19 Conference at a high scientific level, supplemented by additional programs, where the participants would have the opportunity to learn of history, culture, art, cuisine of our country, that will remember it for a long time, and hopefully, leading to their return in a near future to Poland in the company of families and friends.

During the conference, meetings of the Main Board of EuraSEM were held. At the General Meeting of EuraSEM, new authorities were elected, as a result of which Prof. Zbigniew Kowalewski was elected president of this organization for a period of three years, and Dr. Mateusz Kopeć was elected a new member of the Main Board.

More information on 19 ICEM 2022, including a book of abstracts of accepted lectures can be found at: <https://icem19.org/en>

The next, 20th ICEM conference will be held in Porto in 2023 <https://paginas.fe.up.pt/~icem20/>

[Photo Galery](#)