

International Conference on Applied Sciences ICAS2016



Hunedoara, Romania, May 25-27, 2016

Organizer:



Politehnica University of Timișoara

in cooperation with

Military Economics Academy of Wuhan

"Henri Coanda" Air Force Academy of Brasov

Academy of Romanian Scientists

Academy of Technical Sciences of Romania - Timisoara Branch

General Association of Romanian Engineers - Hunedoara Branch

The **International Conference on Applied Sciences ICAS2016** took place in Hunedoara, Romania, in the period May 25–27, 2016 at the Engineering Faculty of Hunedoara, with the aims to serve as a platform for exchange of information between various areas of applied sciences, and to promote the communication between the scientists of different nations, countries and continents.

Topics of the conference covers a comprehensive spectrum of issues from:

>*Fundamental Sciences*: Numerical approximation and analysis, Interdisciplinary applications of mathematics and physics, Modeling and Simulation, and others...

>*Materials Science*: Metallic Materials, Composite Materials, Metal Alloys, Metallurgy, Heat Transfer, Mechanical Engineering, Mechatronics, Reliability, and others...

>*Electrical Engineering*: Circuits and Systems, Signal Processing, Computational Methods in Engineering, Software Engineering, Data Bases, and others...

The conference gathered qualified researchers whose expertise can be used to develop new engineering knowledge that has applicability potential in Industry. The number of participants was almost 190 from 6 countries (China, Romania, Germany, Denmark, Italy and Republic of Serbia, Bosnia and Herzegovina). During the three days of the conference, 3 invited speakers and 81 oral talks were delivered.



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Based on the works presented at the conference, 53 selected papers have been included in this volume of *IOP Conference Series: Materials Science and Engineering*. These papers present new researches in the various fields of Materials Engineering, Mechanical Engineering, Computers Engineering, and Electrical Engineering. It's our great pleasure to present this volume of *IOP Conference Series: Materials Science and Engineering* to the scientific community to promote further researches in these areas. We sincerely hope that the papers published in this volume will contribute to the advancement of knowledge in the respective fields.

Special thanks should be directed to the **Organizing Committee** for its tremendous efforts in organizing the conference:

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The members of the **Scientific Committee** who reviewed and selected the papers included in the Proceedings of ICAS2016 are:

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Ludovic Dan Lemle and Yiwon Jiang
Editors of the Proceedings of ICAS2016