INNOVATIVE MANUFACTURING ENGINEERING & ENERGY INTERNATIONAL CONFERENCE
„50 Years of Higher Technical Education at the University of Pitesti“
IManEE 2019

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Selected, peer reviewed papers from
the 23rd edition of Innovative Manufacturing Engineering & Energy International Conference
(„50 Years of Higher Technical Education at the University of Pitesti“ - IManEE 2019)

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Foreword

The 23rd edition of Innovative Manufacturing Engineering & Energy International Conference (IManEE 2019) is the result of a collaboration between the Department of Manufacturing and Industrial Management of the University of Piteşti (Romania) and the Department of Manufacturing Engineering of the “Gheorghe Asachi” Technical University of Iaşi (Romania).

The first conference was organized in May 1996 at Iaşi and, since 1999, the conferences have been organized alternately, in Iaşi and Chişinău, by the collaboration of the Machine Manufacturing Departments from the “Gheorghe Asachi” Technical University of Iaşi (Romania) and from the Technical University of Moldova from Chisinau (Republic of Moldova). By considering the new trends and requests valid in the field of manufacturing engineering from the entire world, starting from 2013, the name of the conference was changed in „Innovative Manufacturing Engineering” and later in „Innovative Manufacturing Engineering and Energy”. Over the last few years, other departments from universities in Romania (Braşov, Bucureşti, Cluj, Galaţi and Piteşti) or other countries (Serbia, Greece) have been involved in organizing the conference.

It is the first time this conference is hosted by University of Piteşti, being for the fifth time when the Manufacturing and Industrial Management Department is involved in organizing this conference. This event takes place in the year when Faculty of Mechanics and Technology of the University of Piteşti celebrate 50 years from its foundation, representing a recognition of her prestige. The prestige enjoyed by the Faculty of Mechanics and Technology is the result of the didactical and scientific research activities carried out by competent teachers who, together with the graduates, managed to make known on a national and international level the existence of a technical faculty in Piteşti, closely related to the automotive industry.

The process of submitting and reviewing of the conference papers has been managed using the EasyChair platform (https://easychair.org). The conference has benefited of support of 86 reviewers, from 10 countries, each paper being reviewed by two or three reviewers. Finally, 140 papers were selected by the Scientific Committee of the over 210 papers proposed to be presented at the IManEE 2019 International Conference. The authors of the accepted papers come from Universities and Research Institutes from 14 countries such as Algeria, Bulgaria, France, Germany, Greece, Iraq, Israel, Moldova, Norway, Poland, Romania, Russia, Slovakia and Ukraine.

The IManEE 2019 International Conference is structured in ten sections: Advanced Machining and Surface Engineering; Assembling Technologies, Forming Technologies, Additive Manufacturing; Non-Convention Technologies in Manufacturing, Welding Technologies; Advanced Materials; Design and Analysis, CAD/CAM/CAE/CAX Technologies; Flexible Manufacturing, Automation and Robotics in Technological Processes; Mechanical and Manufacturing Equipment, Devices and Instrumentation; Innovation, Creativity, Learning and Education in Engineering; Industrial and Product Management, Quality and Evaluation; Automotive & Transport Engineering; Smart Grids, Energy Efficiency in Buildings, Energy systems and energy management, Energy policies, Environmental technologies and studies, Renewable energy technologies and energy saving materials. These sections cover most of the manufacturing engineering domains, but also some areas specific to automobile and transport engineering and energy.

We hope the IManEE 2019 Conference will be a good opportunity to change information of mutual interest in the above-mentioned fields and for new collaborations among participants to develop that will lead to joint research projects for the benefit of all.

The organizing committee wishes all the participants to be successful and expresses conviction that we will have the opportunity to meet again at University of Piteşti at other future IManE&E conference editions.

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KEYNOTE SPEAKERS

- Elizabeth BAUER GROSSE, Université de Lorraine, Institut Jean Lamour, France
  Study on the diamond’s role in manufacturing engineering and in energy
- Alexandru SOVER, Hochschule Ansbach, University of Applied Sciences, Germany
  Paint Removal Technologies from Thermoplastic Materials
- Birgit Kjerside STORM, Embla/Aalborg University, Denmark
  Recycling of Plastics – a case story about circular economy
- Arik SADEH, Technology Management Faculty - HIT Holon Institute of Technology, Israel
  Optimal Dynamic Pricing of Quality Based Products under Stochastic Preferences
- Toufik BOUDOUH, University Bourgogne Franche-Comté, UTBM, France
  Reengineering of the design process: An industrial case
- Gilles SCIBERRAS, Director of vehicle production engineering Romania, Renault-Nissan-Mitsubishi, Romania
  Digitization of production engineering
- Liviu BIDIAN, Manager Supply Chain Global Leoni WSD, Romania
  Nowadays supply chaining
- Céline MORIN, ENSIAME - University of Valenciennes, France
  Multi-physics and multi-scale characterization of a biomass micro-CHP unit
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