

## Editorial

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# Optimization and Inverse Problems in Electromagnetism (OIPE 2012)

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On behalf of the Editorial Board, we are pleased to present a selection of papers related to the 12<sup>th</sup> International Workshop on ‘Optimization and Inverse Problems in Electromagnetism (OIPE 2012)’, held in Ghent, Belgium, on September 19–21, 2012.

The aim of the OIPE workshop is to discuss recent developments in optimization and inverse methodologies and their applications to the design and operation of electromagnetic devices. It is intended to establish an occasion when experts in electromagnetism and other areas (in e.g. engineering, mathematics, physics), involved in research or industrial activities, can discuss on the theoretical aspects and on the technical relevance of optimization and inverse problems, in the general framework of the innovation in electromagnetic methods and applications.

The 12<sup>th</sup> edition was organized by the Department of Electrical Energy, Systems and Automation within the Faculty of Engineering and Architecture of Ghent University. Among the 107 presentations in the Conference program, 65 manuscripts were submitted for peer review. 17 papers were selected for publication in the present volume. The high scientific and technical quality of the Workshop is well reflected in the quality of the manuscripts contained in this special issue of *International Journal of Applied Electromagnetics and Mechanics*.

We wish to express our gratitude to the members of the editorial board – Hartmut Brauer, Jean-Louis Coulomb, Paolo Di Barba, Alessandro Formisano, Laurent Gerbaud, Aleš Gottvald, Jens Haueisen, Laurent Krähenbühl, David Lowther, Christian Magele, Iliana Marinova, Raffaele Martone, Maurizio Repetto, Marek Rudnicki, Bruno Sareni, Antonio Savini, Slawomir Wiak, Frédéric Wurtz, Ivan Yatchev – as well as to all reviewers, who provided the necessary volunteer time and expertise to conduct a fair and detailed review, ensuring high publication standards for the selected manuscripts.

We would also like to thank Professor Toshiyuki Takagi, Editor-in-Chief of *International Journal of Applied Electromagnetics and Mechanics*, for his kind support during the whole process of preparation of this special issue.