



“Gheorghe Asachi” Technical University of Iasi, Romania



Editorial

***EPE 2010, SPECIAL SECTION OF
THE INTERNATIONAL WORKSHOP ON ELECTROMAGNETIC
COMPATIBILITY & ENGINEERING IN MEDICINE AND BIOLOGY***

In October 2010, the Faculty of Electrical Engineering from the Technical University of Iasi, Romania, celebrated its 100th anniversary, an event which is a first for Eastern Europe. Within the framework of this centennial, we organized our regular and well-acknowledged international scientific events: the sixth edition of *EPE-International Conference on Electrical and Power Engineering*, the third edition of the *International Symposium on the History of Electrical Engineering* and the second *International Student Scientific Symposium, ELStudiS*. The *Workshop on Electromagnetic Compatibility & Engineering in Medicine and Biology (EMC&EMB)* was organized based on our experience with previous such events from within our professional community. Due to the increasing interest in the research associated with the fields of EMC and EMB, as well as to the quality and quantity of the papers we've received, we anticipate that this workshop will become a regularly-held event which will complement all future EPE conferences.

The workshop took place on October 28-30 2010, and benefited from the involvement and guidance of Professor Michel Ianoz, an IEEE member affiliated with the Ecole Polytechnique Federale de Lausanne, Switzerland. The event gathered many specialists from Romania and abroad, who have submitted and presented 33 scientific papers. Due to such significant participation, the workshop could also constitute a venue for the meeting of the IEEE-EMC and IEEE-EMB Romanian Chapters.

The main topics of the workshop were focused on the characterization of electromagnetic

environment, associated with its influence on technical or biological systems. Following the workshop, many participants have submitted extended versions of their manuscripts and newly written papers to the *Environmental Engineering and Management Journal*.

The papers selected for publication cover a diversity of topics mainly related to the characterization of electromagnetic (EM) environment, both in residential and hospital areas, in order to estimate its influence on sensitive devices or humans. Many papers deal with the determination of the currents or fields in the human body, the computation of the specific absorption rate (SAR) and the alteration of biological signals when they interfere with EM fields.

We would like to extend our gratitude to Prof. Matei Macoveanu, Editor-in-Chief and to Prof. Maria Gavrilescu, Managing Editor of the *Environmental Engineering and Management Journal*, for their professional involvement in this quasi-novel domain and, subsequently, for having afforded to all of us the chance of publishing this Special Section on Electromagnetic Compatibility & Engineering in Medicine and Biology. We would also like to thank the external reviewers, who have provided their comments and expertise throughout the various stages of the review process, thus contributing to the improvement of the scientific value of the published papers. Last but not least, to all submitting authors, we offer our sincere admiration and appreciation of their unceasing efforts and research results.

*Professor Alexandru Sălceanu,
Dean of Faculty of Electrical Engineering, EPE Conference Chairman*

*Professor Valeriu David,
EMC and EMB Workshop Chairman*

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