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# Guest editorial: Electromagnetics in electrical engineering

Guest editorial

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This special issue of the *International Journal for Computation and Mathematics in Electrical and Electronic Engineering – COMPEL* gathers 23 peer-reviewed papers that share the subject of electromagnetic fields in mechatronics, electrical and electronic engineering and – not least – computer science, as a common ground.

The collection of papers provides a unique opportunity for scientists, researchers and engineers active in the broad area of electrical engineering to focus on the state of the art and most recent developments in computational electromagnetics and relevant applications. The special issue topics, which have been continuously upgraded in time, cover a wide spectrum of electromagnetic field problems: modelling, simulation, magnetic materials, optimization methods applied in electrical machines, transformers and special devices, coupled field or multiphysics problems, non-destructive testing and measurements and artificial intelligence techniques are just a few of applicable keywords. The applications are very broad and range from low frequency field to high frequency electromagnetics. Special emphasis has been attributed to modelling and simulation problems using advanced numerical methods, without overlooking educational aspects.

In particular, this special issue of COMPEL contains papers selected by the Guest Editors as a result of a two-stage qualification procedure. Firstly, corresponding authors submitted their manuscripts; next, a peer review procedure started under the management of Guest Editors, ensuring at least two independent reviews per manuscript. The final decision to publish considered the results from the blind review procedure as well as the quality of revised manuscripts, so that the list of accepted papers was accordingly agreed. In this respect, we are particularly grateful to all the reviewers for their availability to cooperate and the valuable work done.

As Editors of this special issue we would like to express our thanks to *COMPEL* Journal for providing another important chance to share recent experiences and achievements in applied electromagnetism, so important area in modern science. We hope that readers of this *COMPEL* issue find all these papers both interesting and inspiring in view of their future activity.

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