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Special Issue on Computational Electromagnetics (CEM) -
 Selected papers from the International Conference on
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Editorial

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This Special Issue of IET Science, Measurement & Technology reports on the International Conference on Computation in Electromagnetics, CEM 2014, held at the Imperial College in London.

The CEM is one of the flagship events of the IET Electromagnetics Professional Network. IET President Barry Brooks opened the conference, which was chaired by Professor Jan Sykulski from the University of Southampton. CEM 2014 was technically co-sponsored by the Magnetics Society of the IEEE, UK Magnetics Society, ACES and International Compumag Society.

CEM 2014 hosted more than 100 participants from 24 countries. Researchers engaged in methods and techniques of computational electromagnetics, engineers faced the challenges of hazards and EMC/EMI and designers presented low frequency, as well as high frequency devices, and presented their work at CEM 2014. The conference is particularly designed to stimulate scientific discussion. Therefore, interactive poster sessions were organised and each interactive session was preceded by “one-minute, one-slide” presentations allowing authors to highlight their work. As an introduction to such interactive sessions, the CEM tradition of keynote lectures and invited “scene setting” introductory talks on selected themes was kept again this year. This tradition and particular concept of CEM was very well received by all delegates and made

CEM 2014 an excellent event to establish and maintain international scientific networks. Next to the exchange of scientific results, the networking represents an additional benefit of CEM. In particular, young researchers used this opportunity to create new scientific contacts.

For this Special Issue of IET’s Science, Measurement & Technology journal, a small team has chosen a limited number of the best CEM 2014 presentations. One of the criteria used was the quality of the presentation and scientific discussion of the presenters. The selected papers, chosen based on the two page conference abstract, had to be significantly extended and underwent the IET’s peer review process.

I believe that this Special Issue of the selected extended contributions of CEM 2014 represents an important contribution to excellence in the methods and techniques of computational electromagnetics, the challenges of hazards, EMC/EMI and of low frequency as well as high frequency problems. We hope that you enjoy, and are stimulated by, this material.

We are indebted to the authors for their cooperation and for their excellent contributions. Finally, but most importantly, the assistance of the reviewers is greatly appreciated in ensuring the rigour of the selection process and the quality of the published papers.

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