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CEFC 2010 Secretariat

Email: CEFC@CEFC2010.org

Web Site: <http://www.cefc2010.org>

The Fourteenth Biennial IEEE Conference on Electromagnetic Field Computation CEFC 2010 will be held in Chicago, Illinois USA, May 9-12, 2010. The official conference website will be used for all conference activities including digest and paper submission, registration, accommodation and the review process. The website is <http://www.cefc2010.org>. The conference venue is the Hyatt Regency Hotel O'Hare.

It is our great pleasure to announce the Fourteenth Biennial IEEE Conference on Electromagnetic Field Computation (CEFC 2010), which is sponsored by IEEE Magnetics Society. We welcome you to participate in one of the most important biennial scientific and technical events. The aims of the IEEE CEFC are to present the latest developments in modeling and simulation methodologies for the analysis of electromagnetic fields and wave interactions, with the application emphasis being on the computer-aided design of low and high frequency devices, components and systems. Scientists and engineers worldwide are invited to submit original contributions in the areas of Static and Quasi-static Fields, Wave Propagation, Material Modeling, Coupled Problems, Numerical Techniques, Optimization and Design, Software Methodology, Nanomagnetism, Nanophotonics, Bioelectric Field Computation as well as Devices and Applications.

The authors are encouraged to submit:

A One-page Digest due by January 15, 2010 to the secretariat. On-line submission is required and facilities are provided on the web site, <http://www.cefc2010.org>. The digest should be submitted with the corresponding author's information including full mailing address, fax number, and e-mail address. The conference will feature oral and poster presentations. Authors interested in submitting their papers for review for publication in the IEEE Transactions on Magnetics are asked to submit their manuscripts in final form via IEEE Manuscript Central. All contributed papers will undergo peer review to determine their suitability for publication.

Exhibition

Exhibits of commercial products related to the conference topics will be held concurrently. We are expecting a good number of vendors and conference registrants.

<http://www.cefc2010.org>

IMPORTANT DATES

One-page Digest Due: January 15, 2010
Notification of Acceptance: February 26, 2010
Early Registration Due: March 26, 2010
Final (Extended) Paper Due: April 23, 2010



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Keyword List for CEFC 2010

Authors of papers should select one or two keywords from the following keyword list (for example, primary: 3(d), secondary: 1(b)):

1. Static and Quasi-static Fields

(a) Electrostatics, (b) Magnetostatics, (c) Eddy Currents, (d) Numerical Methods, (e) Others

2. Wave Propagation

(a) Scattering, (b) Radiation, (c) Time and Frequency Domain, (d) Microwaves, (e) Antennas, (f) Numerical Methods, (g) Radiative Transfer, (h) Others

3. Material Modeling

(a) Superconducting Materials, (b) Composite Materials, (c) Hysteresis and Anisotropy, (d) Permanent Magnets, (e) Magnetostrictive or Piezoceramic Materials, (e) Microwave Absorbing Materials, (g) Ab-initio Quantum Mechanical Modeling, (h) Others

4. Coupled Problems (Electromagnetic Field Problems Coupled to):

(a) Mechanical Problems, (b) Electric Circuits, (c) Thermal Problems, (d) Micromagnetics, (h) Others

5. Numerical Techniques

(a) Mesh Generation and Adaptive Meshing, (b) Solving Linear Systems of Equations, (c) Eigenvalue Problems, (d) Nonlinear Problems, (e) Parallel and Vector Computations, (f) Others

6. Optimization and Design

(a) Sensitivity Analysis, (b) Deterministic Methods, (c) Stochastic Methods, (d) Neural Networks, (e) Artificial Intelligence and Expert Systems, (f) Others

7. Software Methodology

(a) Software Design, (b) Software Engineering and Software Quality, (c) Computer Graphics and Data Representation, (d) Man-machine Interfaces, (e) Computer Aided Engineering in Classroom, (f) Others

8. Nanomagnetism

(a) Spintronics, (b) MEMS/NEMS, (c) Magnetic Recording, (d) MRAM, (e) Micromagnetics Modeling, (f) Ab-initio Magnetic Paraneitics Calculating, (g) others

9. Nanophotonics

(a) Adaptive optics, (b) Optical Detectors, (c) Electro-optics, (d) Near Field Modeling, (e) Others

10. Bioelectric Field Computation

(a) Numerical Approximation, (b) Biomedical Signal Processing, (c) Three-dimensional Geometric Modeling, (d) Constrained Optimization, (e) Large Scale Computing, (f) Scientific Visualization, (g) Integrated Software Environments, (h) Others

11. Devices and Applications

(a) Electric Machines and Drives, (b) Nondestructive Testing, (c) Induction Heating, (d) Power Electronics Devices, (e) Wave Guides, (f) Microwaves Resonators, (g) Magnetic Recording, (h) Microsystems, (i) Biomedical Applications, (j) Charged Particles Trajectories, (k) Accelerators, (l) Electromagnetic Launchers, (m) Fusion Machines, (n) Electromagnetic Compatibility, (o) Others



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