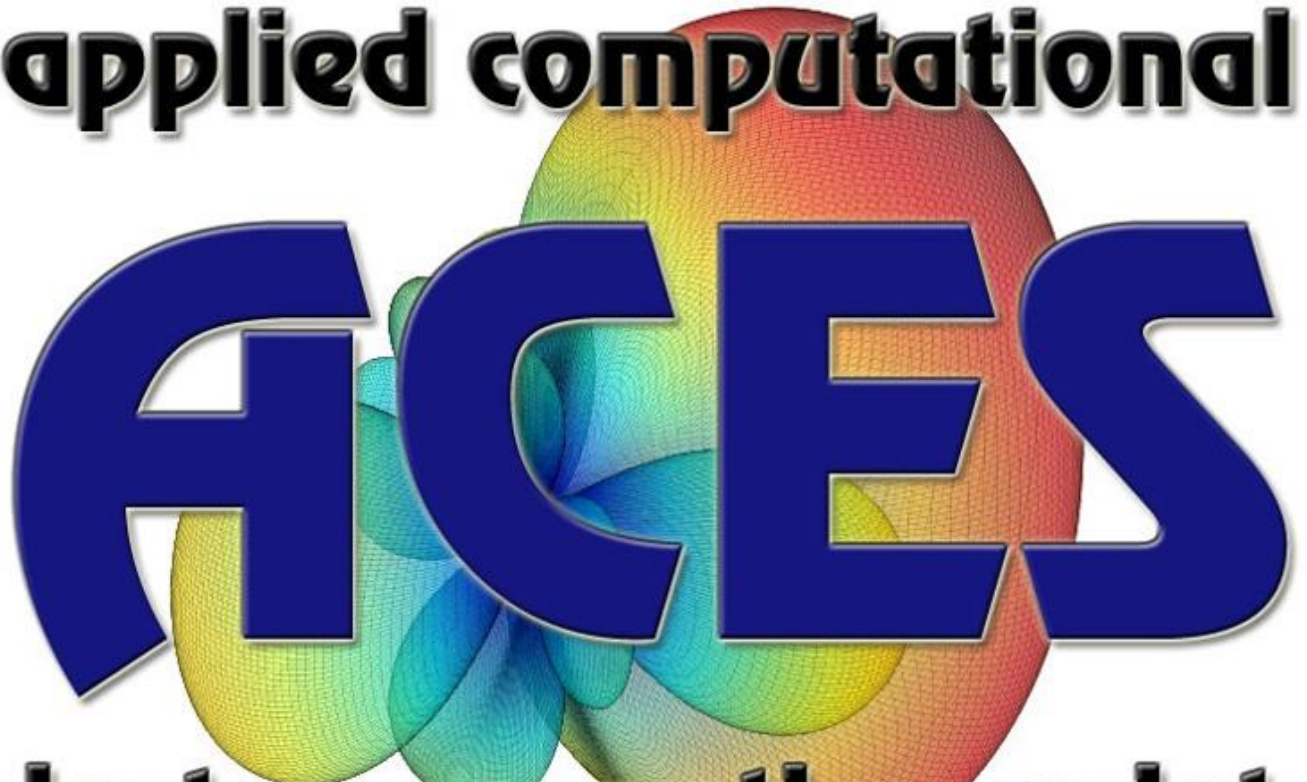


applied computational



ACES

electromagnetics society

Newsletter

June 2016

Applied Computational Electromagnetic Society (ACES)

President's Message



Greetings from Pisa, Italy.

June is generally a “bridge” period in which the works relative to the previous conference are over and we all start working on the new conference. As a matter of fact the IEEE ICWITS – ACES 2016 conference was a success (and its proceedings are already available on [IEEE Xplore](#)) and the highlights of the conference are better described

later in the present newsletter.

The first of the two ACES conferences in 2017 will be held in Firenze (Florence), Italy, so we basically move from a wonderful location to another wonderful location. The whole organizing committee is already hard working to make it another outstanding event for our society.

In the June 2015 Newsletter I was announcing the take-off of the new open access journal of the society, the ACES Express Journal. I am now proud to inform you that the first two issues are already out: you can download them from our website and submit your research results to it.

At the same time our publication activity keeps running smoothly with the well-known ACES Journal whose issues are released perfectly in time.

From now to the end of the year we will all be busy with journals and conference related issues and with the nominations/elections of the new ACES Fellows and Board of Directors: take the chance to be active members taking part in these activities.

You can be constantly informed on the ACES society by looking at our website or through the ACES LinkedIn group (where most of the important news are posted).

On behalf of the Society I wish you all a nice summer with, possibly, some relaxing vacations.

Sami Barmada
President, ACES
The University of Pisa, Italy

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Become ACES Member

ACES membership offers many advantages that include access to ACES Journal and discounted registration fees for ACES conferences.

Member:
Basic:\$40/year
Student/Retired:\$25/year
Life:\$400/year

Institutional Member:
Basic (US):\$360/year
Basic (Intl):\$540/year
Expanded (US):\$535/year
Expanded (Intl):\$715/year

Become ACES member by signing up [here](#).

Join ACES Group on
LinkedIn



ACES 2017 in Italy



The first of the two ACES conferences will take place in Firenze, Italy, during March 26-30, 2017.

Firenze is known in the world as the cradle of the renaissance: its monuments, architecture, museums, food and entertainment will be an astonishing added value to our conference activities.

As usual the conference will offer regular sessions with technical contributions, top level plenary speakers, exhibitions and tutorials.

Conference news are constantly posted on the society's website and some info about Florence, about the venue and about the organized sessions (so far) are already posted. Prof. Levent Gurel will be one of the plenary speakers at the conference.



“(Heterogeneous) Parallel Solutions of Billion-- Unknown Problems: Applications and Big--Data Aspects”

Prof. Levent Gürel ABAKUS Computing Technologies, Turkey University of Illinois at Urbana--Champaign, USA

There is still time to organize a session: if you are interested please contact the general chairman (sami.barmada@unipi.it).

The submission deadline this year is October 15th: please try to submit your contribution in time to let us organize a successful conference!!

ICWITS-ACES 2016 Conference

ICWITS/ACES 2016 was held successfully during March 13-17, 2016. Highlights of the conference includes, plenary talks, technical papers, tutorials and student paper competition. Prof. Magdy



Iskander was the General Chair of the conference and Prof. Atef Elsherbeni was the ACES Co-Chair of the conference. Prof. Michael Jensen was the IEEE APS Co-Chair. Dr. Zhengqing Yun and Dr. Sami Barmada were the Technical Program Chairs. The IEEE Antennas and Propagation Society (APS) was the Technical Co-Sponsors of ICWITS-ACES 2016 conference. The conference was attended by approximately 200 attendees representing various countries around the world.

Apart from regular technical sessions with contributed papers, there were plenary talks and tutorials during the conference. Following were the plenary talks at the conference:

- Prof. Yahya Rahmat-Samii: Two Recent Grand Challenges in Engineering: (i) Bio-Telemetry in Modern Healthcare Systems and (ii) Nanostructures for Solar Cell Energy Absorption Enhancement
- Prof. Ronald Marhefka: NEC-BSC Past, Present and Future
- Dr. Mahbub Hoque: Antenna Array Technologies and Applications in Directional Communications Networks
- Edmund Miller: Using Model-Based Parameter Estimation to Increase the Efficiency and Effectiveness of Computational Electromagnetics
- Prof. Wolfgang Hoefer: Time Reversal - A Frontier in Electromagnetic Field Synthesis
- Dr. Jun Fan: Application of Computational Electromagnetics in High Speed Designs

- Dr. Mahbub Hoque: Challenges in Army Network for Sustained Communication

A student paper competition was held at ICWITS-ACES 2016 conference. Out of the papers submitted to the student paper competition, 10 were selected as finalists. Prof. Ozlem Kilic of Catholic University chaired the competition. The following 5 papers were chosen for awards:

- First Prize: Su Yan and Jian-Ming Jin, "A Dynamic p -Adaptation Algorithm for the DGTD Simulation of Nonlinear EM-Plasma Interaction", University of Illinois at Urbana-Champaign
- Second Prize: Miaomiao Ma and Dan Jiao, "HSS-Matrix Based Fast Direct Volume Integral Equation Solver for Electrodynamics Analysis", Purdue University
- Third Prize: Kamallesh Sainath and Fernando L. Teixeira, "Robust Numerical Modeling of Currents Radiating in Non-Birefringent Anisotropic Medium Layers", The Ohio State University
- Fourth Prize: Ismail E. Uysal, H. Arda Ulku, and Hakan Bagci, "Quantum-Corrected Plasmonic Field Analysis Using a Time Domain PMCHWT Integral Equation", King Abdullah University of Science and Technology (KAUST)
- Fifth Prize: Ying S. Cao, Li Jun Jiang, and Albert E. Ruehli, "The Derived Equivalent Circuit Model for Non-Magnetized and Magnetized Graphene", The University of Hong Kong



The conference banquet was held on Wednesday, March 16, 2016. At the Banquet, the 2016 class of ACES Fellows has been announced, with four members elevated to the Fellow grade.

- James Rautio, Sonnet Software
- Ozlem Kilic, Catholic University
- William O'Keefe Coburn, The US Army Research Lab
- Ronald Marhefka, The Ohio State University



James Rautio
Sonnet Software



Ozlem Kilic
Catholic University



**William O'Keefe
Coburn**
The US Army
Research Lab



Ronald Marhefka
The Ohio State
University

Congratulations to the 2016 Class of ACES Fellows!! A complete list of ACES Fellows can be found at <http://www.aces-society.org/fellows.php>.

Also the following ACES awards for 2016 were presented at the banquet:



ACES Computational Electromagnetics Award: *Prof. Jianming Jin* of the University of Illinois at Urbana-Champaign, for his pioneering work in the development of finite elements in electromagnetics.



ACES Technical Achievement Award: *Prof. Randy Haupt* of the Colorado School of Mines, for his pioneering application of numerical and signal processing techniques to the analysis and design of antenna arrays.



ACES Outstanding Service Award: *Prof. Andrew F. Peterson* of Georgia Tech, for his sustained and exceptional leadership and service to all aspects of ACES for more than 25 years.



ACES Early Career Award: *Dr. Mohamed Swillam* of the American University in Cairo, for utilization of computational methods to propose novel designs and devices for wide range of applications

New ACES BoD Members Elected

Following members of ACES are elected to Board of Directors (BoD) for a term of 3 years starting this year:

- *Prof. Daniel Weil*, University of Delaware
- *Prof. Branislav Notaros*, Colorado State University
- *Dr. William O'Keefe Coburn*, The US Army Research Lab

Congratulations to the newly elected board members!!

ACES Express Journal

The objective of ACES Express Journal is to allow for a rapid submission-to-publication timeline for the on-line publication of important findings, new approaches, investigations and results in the field of computational electromagnetics. ACES realizes the significance of timely dissemination of new findings, and has created this journal to satisfy this need.

ACES Express Online Journal is subject to the same rigorous peer-review process as the ACES Journal, but provides authors a faster way of disseminating their findings in a concise format. The papers submitted as ACES Express Online papers are limited to a minimum of three and maximum of four printed pages in a double column format, with a publication fee of \$200 for ACES members, and \$300 for non-members. All submissions are reviewed within two months, and all contributions are published online within 90 days of the acceptance date.

The ACES Express Journal Editor, Dr. Ozlem Kilic, can be reached at kilic@cua.edu for questions about the journal. Submissions can be made at ACES web-site: aces-society.org by choosing Express Journal menu.

Following Current Special Issues Available For Submission:

[Special Issue of the ACES Express Journal on: Electromagnetic Compatibility in High Frequency Communication / High Voltage Engineering \(PDF Information\)](#)

[Special Issue of the ACES Express Journal on: Antennas, Propagation in Radar and Wireless Communication \(PDF Information\)](#)

[Special Issue of the ACES Express Journal on: Integral Equation Methods \(PDF Information\)](#)

[Special Issue of the ACES Express Journal on: New Developments in Time Domain Integral Equation \(TDIE\) Methods \(PDF Information\)](#)

[Special Issue of the ACES Express Journal on: Integration of Bio-Electromagnetic Modeling and Applications with Intelligent Electronic Devices \(PDF Information\)](#)

[Special Issue of the ACES Express Journal on: Advanced FDTD Methods \(PDF Information\)](#)

[Special Issue of the ACES Express Journal on: Computational Electromagnetics and Measurements \(PDF Information\)](#)

[ACES Journal](#)

The ACES Journal is devoted to the exchange of information in computational electromagnetics, to the advancement of the state of the art, and to the promotion of related technical activities. The ACES Journal welcomes original, previously unpublished papers, relating to applied computational electromagnetics. All papers are refereed. ACES members can access all issues of ACES Journal [online](#).

[Read the Latest Issue \(August 2016\)](#)

ACES is looking forward to your contributions to the ACES Journal and the Express Journal as well as your participation in the 2017 Conference. We look forward to your feedback and involvement in ACES activities.

Sincerely,

C.J. Reddy
Kubilay Sertel
Khaled EIMahgoub
Editors - ACES Newsletter

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