Applied Computational Electromagnetics Society

Publications update

Another very successful ACES conference has passed and we are looking forward to 2009. The contents of the most recent couple of issues of the Journal are presented: remember, you can access the papers through the ACES website.

The ACES Conference 2008

This year, the Conference was held at Niagara Falls. Your intrepid Newsletter Editor was unable to attend this year (not so intrepid after all!). However, all the conversations I have had with people who did go confirm how successful it was with a good blend of technical papers and both technical and social networking. If you did not manage to go either, please check out the ACES website or the March issue of the Newsletter for a list of papers; also, you will find the welcome message from Natalia and Mohamed interesting.

See you in Monterey next March?



Message from the General Chairmen

On behalf of the ACES 2008 Organizing Committee, we welcome you all to the 2008 Applied Computational Electromagnetic Society (ACES) Conference in Niagara Falls, Canada.

ACES originated from a Computer *Modeling/Electromagnetics* Workshop. which was held at the Lawrence Livermore National Laboratory on March 19-22, 1985, with the title "First Annual Review of Numerical Electromagnetics Code (NEC) Applications." The primary goal of the Workshop was to initiate a forum for exchange of information about computer modeling tools like the Numerical Electromagnetics Code (NEC).

ACES was officially launched on March 19, 1986. Since then ACES has grown rapidly and now offers high quality services to its members: the Newsletter, the ACES Journal (cited in ISI), and the annual Conference, providing the means to exchange information about electromagnetic computational codes and their performance in real-world applications.

The annual ACES Conference is increasing the number and level of participants every year, becoming the best recognized international symposium on computational methods in electromagnetics. Until 2003, the ACES Conference was held in California (mostly at the Naval Postgraduate School). Since 2004, the conference has been held in different locations in the United States. In 2007, for the first time in ACES history, the Conference took place in Europe, in the charming city of Verona, Italy. This year, the Conference takes place in Niagara Falls, Canada, one of the most beautiful and attractive places in the world.

The ACES 2008 Conference features invited keynote lectures from university and industrial research centers. These talks address the present challenges and the future trends in applications of computational electromagnetics which range from industrial electronics, antenna and communication system design to medical applications and the design of novel materials of unusual properties. The conference is organized in three and a half days of parallel sessions and a day of short courses. For the first time this year, the ACES Conference organizes a day of Vendor Training Sessions where representatives of the computational-electromagnetics software industry offer parallel training sessions to conference attendees. It is our hope that these sessions will benefit greatly all users of commercial electromagnetic software and will provide a forum for discussion among experts.

We would like to recognize the people whose efforts made ACES 2008 a success. We express special thanks to the Technical Program Chair, Prof. Atef Elsherbeni, and to Prof. Osama Mohammed, the Chair of the Local Arrangements and Social Program. We recognize the efforts of Dr. C.J. Reddy and Prof. Amir Zaghloul who solicited contributions to the short-course program, to the vendor training program and who promoted the ACES Conference through publicity and a network of contacts. Our thanks go to Prof. Erdem Topsakal and his team of reviewers for the Student Paper Competition, who had exceptionally hard task this year. Many thanks go to our five administrative assistants-they volunteered their time to take care of numerous technical and administrative jobs which make a Conference run smoothly.

The ACES Conference has traditionally relied on the efforts of dedicated professionals and experts to organize sessions and invite high-quality contributions. This year, we have more than 30 session organizers to whom we extend our greatest thanks—your efforts made ACES 2008 possible and brought contributions of the highest quality!

Much appreciation goes to the ACES 2008 sponsors! The support from the software and communications industry is an important indicator for the significance of what we all do.

While at ACES 2008, enjoy the beauty of early spring in the Niagara Falls region. To more than 18 million visitors annually, the Niagara region is many different things. Most notably, it is the spectacle of Niagara Falls. The Canadian "Horseshoe" Niagara Falls are 180 feet high (about 60 meters) and 2,500 feet (833 meters) wide. Together with the American Falls, they form the second largest falls in the world (after the Victoria Falls in Africa). But Niagara is also the aroma of grapes and the taste of exquisite wines. Niagara boasts the best icewineries in the world. To families, Niagara is great theme parks, most notably the numerous attractions of Clifton Hill, which is walking distance from the Conference hotel. To newlyweds, Niagara is the honeymoon capital of the world. To history buffs, Niagara is 20 historical museums, two reconstructed forts, and the historic charm of Niagara on the Lake. To gambling enthusiasts, Niagara is Casino Niagara, Niagara Fallsview Casino Resort and the Fort Erie Racetrack and Slots.

We wish you all productive and enjoyable stay in Niagara Falls!

Natalia K. Nikolova and Mohamed H. Bakr, General Chairs ACES 2008







The 25th International Review of Progress in Applied Computational Electromagnetics (ACES 2009) March 8 – 12, 2009 Embassy Suites Hotel, Monterey, California

On the momentous occasion of the 25th Review, the ACES symposium is returning to Monterey, California in March, 2009. The international ACES symposium serves as a forum for developers, analysts, and users of computational techniques applied to electromagnetic field problems at all frequency ranges. The symposium includes technical presentations, software demonstrations, vendor booths, short courses, and hands-on workshops.

Papers may address general issues in applied computational electromagnetics or may focus on specific applications, techniques, codes, or computational issues of potential interest to the Applied Computational Electromagnetics Society community. The following is a list of suggested topics, although contributions in all areas of computational electromagnetics are encouraged and will be considered.

SUGGESTED TOPICS

- Integral Equation Methods Differential Equation Methods Fast and Efficient Methods Hybrid and Multi-Physics Modeling EM Modeling of Complex Mediums Modeling Electrically Large Structures Inverse Scattering and Imaging Techniques Optimization Techniques for EM-based Design Asymptotic and High Frequency Techniques Low Frequency Electromagnetics Computational Bio-Electromagnetics Printed and Conformal Antennas Modeling and Performance of RFID Systems Wideband and Multiband Antennas Dielectric Resonator Antennas
- Phased Array Antennas Smart Antenna and Arrays EBG and Artificial Materials Nanotechnology Applications Frequency Selective Surfaces MEMS-NEMS and MMIC EMC/EMI Applications Propagation Analysis Remote Sensing Applications RF and Microwave Devices Modeling and Analysis of TeraHertz Antennas High Performance Computing Parallel and GPU Computations Modeling and Applications of Metamaterial Modeling and Analysis of Small Antennas

All authors of accepted papers will be invited to submit an extended version of their paper or papers for review and publication in a special issue of the ACES Journal.

SYMPOSIUM STRUCTURE

The international ACES Symposium traditionally includes: (1) oral sessions, regular and invited, (2) poster sessions, (3) a student paper competition, (4) short courses, (5) software demonstrations, (6) an awards banquet, (7) vendor exhibits, and (8) social events. The ACES Symposium also includes plenary and panel sessions, where invited speakers deliver original essay-like reviews of topics of current interest to the computational electromagnetics community.

PAPER FORMATTING REQUIREMENTS

The recommended paper length, including text, figures, tables and references, is four (4) pages, with six (6) pages as a maximum. Submitted papers should be formatted for printing on 8.5x11-inch U.S. standard paper, with one (1) inch top, bottom, and side margins. On the first page, the title should be one and half (1.5) inches from top with authors, affiliations, and e-mail addresses beneath the title. Use single line spacing, with 11 or 12-point font size. The entire text should be fully justified (flush left and flush right). No typed page numbers. A sample paper can be found in the conference section on ACES web site at: *http://aces.ee.olemiss.edu*. Each paper should be submitted in camera-ready format with good resolution and be clearly readable.

PAPER SUBMISSION PROCEDURE

No email, fax or hard-copy paper submission will be accepted. Photo-ready finished papers are required, in Adobe Acrobat format (*.PDF) and must be submitted through ACES web site using the "Upload" button in the left menu, followed by the selection of the "Conference" option, and then following the on-line submission instructions. Successful submission will be acknowledged automatically by email after completing all uploading procedure as specified on ACES web site. Notifications regarding paper submission, acceptance, and all other conference related issues will be directed to the corresponding author email supplied during the paper upload process.

SUBMISSION DEADLINE AND REGISTRATION REQUIREMENT

All papers must be uploaded to the ACES web site by the submission deadline of **November 14, 2008.** This is a firm deadline for all contributed and invited papers, including special session papers. A signed ACES copyright-transfer form must be mailed to the conference technical chair immediately following the submission as instructed in the acknowledgment of submission email message. Papers without an executed copyright form will not be considered for review and possible presentation at the conference. Upon the completion of the review process by the technical program committee, the acceptance notification along with the pre-registration information will be emailed to the corresponding author on or about **January 15, 2009.** Each presenting author is required to complete the paid pre-registration and the execution of any required paper corrections by the firm deadline of **January 31, 2009** for final acceptance for presentation and inclusion of accepted paper in the symposium proceedings.

BEST STUDENT PAPERS CONTEST

The best three (3) student papers presented at the 24th Annual Review will be announced at the symposium banquet. Members of the ACES Board of Directors will judge student papers submitted for this competition. The first, second, and third winners will be awarded cash prizes of **\$300**, **\$200**, and **\$100**, respectively. Students who wish to participate in this competition should upload their papers directly to the designated "student paper competition" session.

For questions please contact one of the conference technical program co-chairs **Dr. Daniela Staiculescu**, **Prof. Manos Tentzeris, or Prof. Andrew Peterson,** or visit ACES on-line at: *http://aces.ee.olemiss.edu*

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