

Applied Computational Electromagnetics Society

News

In this issue, welcome the new (and first) class of ACES Fellows, elect new members to the Board of Directors and see the flyer being developed to help promote ACES , the ACES Journal and the ACES Conference.

Election of ACES Fellows

Congratulations to the new ACES Fellows. The following Fellows have all demonstrated exceptional achievements in computational electromagnetics and service to ACES. The first class of ACES Fellows is:

Dick Adler
Atef Elsherbeni
Allen Glisson
Osama Mohammed
Andy Peterson
Doug Werner

Certificates and Plaques will be presented during the 2008 ACES Conference.

The selection committee comprised:

Chair: Randy Haupt, Penn State
Members (in alphabetical order):
Bruce Archambeault, IBM
Steven Best, MITRE
Weng Cho Chew, U of Illinois
Raymond Luebbers, REMCOM, Inc.
Ronald Marhefka, Ohio State
Carey Rappaport, Northeastern University

The Bye-laws state that:

The grade of Fellow is bestowed by the BOD upon a person with exceptional achievements in computational electromagnetics, including ACES publications, and extensive service to ACES. The candidate, the nominator, and the references must be members of ACES in the nomination year and the year this honor is bestowed.

Nominations are submitted to the Awards and Membership Committee by 1 Sep. The Awards and Membership Committee provides a list of recommended candidates to the BOD. At the Fall BOD meeting, the BOD votes to approve the list. ACES Fellows will be officially announced in the March Newsletter and will be recognized at the following ACES conference awards banquet.

If you are interested in finding out more about the ACES Fellow committee and Awards program, please contact Dr. Randy Haupt, rlh45@psu.edu.

Board of Directors Elections

The annual BoD elections are currently ‘live’ – with a closing date of 20th March. The voting papers can be found by going to <http://aces.ee.olemiss.edu/> and clicking on the “BOD Elections” button.

The following reproduces the information of each of the candidates

Alistair Duffy



General Background

Dr Alistair Duffy is Reader in Electromagnetics at De Montfort University (DMU), Leicester, UK and Head of the Engineering Division in the School of Engineering and Technology at DMU. He received his BEng(Hons) and MEng degrees in 1988 and 1989 respectively from University College, Cardiff, University of Wales. He read for his PhD with professors Christopoulos and Benson at Nottingham University, graduating in 1993. He also holds an MBA from the Open University, UK, graduating in 2004.

He is a Fellow of the Institution of Engineering and Technology (IET, formerly the IEE) and a Senior Member of the IEEE

He has published approximately 150 papers, mostly on his research interests of validation of computational electromagnetics; physical layer components, particularly communications cabling, and electromagnetic compatibility testing. These are the three areas on which he is lecturing as an IEEE EMC Society Distinguished Lecturer.

Alistair’s professional service has seen him contribute to many successful conferences through refereeing functions or organising committee responsibilities (he is currently on the organising committee for the International Wire and Cable Symposium, which attracts approximately 1000 delegates annually). Publication commitments also see him as an Associate Editor for the IEEE Transactions on EMC and as Editor-in-Chief of the Transactions of the IWCS, as well as Editor-in-Chief of the ACES Newsletter. Other professional activities include standards body work in the UK (British Standards Institute) and in the IEEE.

Alistair was Series Editor for a series of undergraduate textbooks published by Butterworth-Heinemann (now part of Elsevier).

He has served in many committee roles in the IET (formally IEE) including Council, International Board and Chair of the Electromagnetics Professional Network.

Past Service to ACES

Alistair has contributed to the ACES newsletter for the last few years providing material for the *Perspectives on CEM* section, raising issues such as the balance of education of students in electromagnetics, how do we know when a simulation is good enough and should journal peer

review be open rather than anonymous. More recently he has been appointed as the Editor-in-Chief, taking over from Dr Bruce Archambeault.

He has organised and presented a special session on validation of computational electromagnetics at the 2006 ACES conference.

Candidate's Platform

I see my main mission, if elected as a member of the ACES BoD, to develop and improve the sense of 'community' that the membership of ACES brings. This is primarily bringing existing and new members together, physically or virtually, to share new knowledge, to ask questions, exchange material, probe each others expertise, and to debate issues of common interest.

I aim to be involved in developments to improve the impact, relevance and penetration of our Journal and Conference. I am supportive of activities to develop products that are relevant and useful to students, educators and practicing engineers. I would like to develop and contribute to initiatives that increase the interaction between ACES and other organisations, where this can be of tangible benefit to our members: both current and future.

Andrew Drozd



GENERAL BACKGROUND

Andrew L. Drozd is President and Chief Scientist of ANDRO Computational Solutions, LLC located at the Beeches Technical Campus in Rome, NY with offices in Bowie, MD. Since its establishment in 1994, his company's focus has been on the development and application of state-of-the-art computational electromagnetics (CEM) integrated toolkits, computational frameworks, hybridized numerical solutions, and dynamic spectrum optimization for large, complex system electromagnetic problems. Currently, the ANDRO Bowie, MD operations and staff report to

him on efforts in support of spectrum engineering, spectrum management, and electromagnetic compatibility (EMC) analysis for large platforms and system deployments. Under a contract with ITT Corporation, he and the Bowie Operations staff members support efforts to further modernize and maintain the CEM and electromagnetic environment effects (E3) tools arsenal for the prime customer — the DoD Joint Spectrum Center.

Mr. Drozd received a Bachelor of Science Degree in Physics and Mathematics in 1977 from Syracuse University, and a Masters of Science in Electrical Engineering specializing in RF Communications and Signal Processing in 1982 also from Syracuse University.

Mr. Drozd has been a Member of the ACES Board of Directors since 2006. Additionally, since 2002 he has been the Chair of the Industry Relations Committee for ACES. In this capacity, he acts as liaison between the ACES Board and other industry, government, and

academic organizations in order to encourage their participation in various ACES-sponsored activities. For example, he has been involved in arranging for vendor exhibitions and leading efforts to encourage participation in patron sponsorship programs as part of the annual ACES Conference. He has also led initiatives to conduct inter-society workshops and interactive forums for demonstrating the practical application of CEM software tools for solving real-world problems. He has arranged ACES special sessions at other technical conferences, including the Antenna Measurements Techniques Association (AMTA) annual conference. Since 1999, Mr. Drozd has been the Technical Features Article Editor for the ACES Newsletter.

He is the immediate Past President of the IEEE EMC Society (2006-2007) and is an IEEE Fellow “*For the development of knowledge-based codes for modeling and simulation of complex systems for Electromagnetic Compatibility*”. He is on the Board of Directors of the IEEE EMC Society and continues in his role on the IEEE Technical Activities Board (TAB). Mr. Drozd is a Member of the IEEE Standards Association (SA). Additionally, he is a member of the IEEE EMC Society Standards Development Committee and is Chair of the P1597.1 and P1597.2 Working Groups for the development of an *IEEE Standard for Validation of CEM Computer Modeling and Simulation (M&S)* and a *Recommended Practice for CEM Computer M&S Applications*, respectively. His efforts along with those of the Working Groups he chairs have culminated in the first-of-its-kind standard and recommended practice for the validation of CEM techniques and computer codes.

Mr. Drozd has authored and co-written over 145 technical papers, reports, and journal articles on topics related to: system-level electromagnetic interference (EMI) analysis, numerical modeling and simulation, dynamic spectrum management, and automated target recognition (ATR). Over the years, he has refereed a number of publications, textbook manuscripts, and study guides devoted to EMC. In 1994 and 1995, he completed peer reviews of a manuscript for the textbook titled, *Engineering Electromagnetic Compatibility* and a bibliographic compendium on EMC authored by V. Prasad Kodali. He published chapters on *Computer Modeling and Simulation for EMC* in the *EMC/EMI Principles, Measurement & Technologies Study Guide*. He also contributed a chapter on *EMC Modeling and Simulation* for the 1st and 2nd Eds. of the Wiley/IEEE Press book titled *Engineering Electromagnetic Compatibility: Principles, Measurements, Technologies, and Computer Models* by V. P. Kodali. Mr. Drozd also refereed papers on CEM topics for the American Geophysical Union Radio Science Journal in 1997 and 1998. In 1991 he received a best paper award for his publication in the EMC Expo Proceedings titled, “*Analysis of EMI for Shuttle/Space Station Communications Links: An Expert System Approach*”.

Additionally, Mr. Drozd organized and chaired well over twenty conference technical sessions, special sessions, and workshops at annual international EMC symposia and ACES conferences. The focus of these various sessions and workshops was on numerical modeling, spectrum management and optimization, EMC and waveform diversity, software standards development, RF communications and sensor systems, and intelligent

transportation systems. In addition to ACES, these conferences and other activities have included:

- Quality in Electronics Symposium

- IEEE EMC Symposium

- National Conference on High-Power Microwave Technology for Defense

Applications

- EMC Expo

- International Zurich Symposium and Technical Exhibition on EMC

- EMC Roma

- EMC Japan/Tokyo

- C3I Dual Use Technology and Applications Conference

- Society for Computer Simulation (SCS)

- Asilomar Conference on Circuits, Systems and Computers

- European Cooperation in Science and Technology (COST) 261 Workshop: EMC in Complex and Distributed Systems

- DoD E3 Program Review

- Euro Electromagnetics (EUROEM/ANEREM) Joint Conference on High Power Electromagnetics, Ultra-Wideband Short Pulse Electromagnetics, and Unexploded Ordnance Detection & Range Remediation

- International Wroclaw Symposium and Exhibition on EMC.

He is also an active participant in the Electromagnetic Code Consortium (EMCC) annual meetings. His other professional activities and memberships have included the IEEE MTT Society, Association of Computing Machinery (ACM), American Institute of Physics, and Optics Society of America. He is an iNARTE (International Association of Radio and Telecommunications Engineers) Certified EMC Engineer since the program's inception.

He is a member of the IEEE EMC Society's Technical Committee TC-9 on Computational Electromagnetics and has been a contributor on behalf of TC-6 on Spectrum Management and EMC.

As an active Member and Vice Chair of the IEEE EMC Society Education and Student Activities Committee, Mr. Drozd organizes an annual special workshop session on EMC experiments and modeling and simulation demonstrations held in conjunction with the annual International Symposium on EMC. Mr. Drozd launched and spearheaded this activity starting in 1992 under the auspices of the EMC Society Education and Student Activities Committee. The special session is designed for both the novice and experienced engineer. Important EMC phenomenology and effects are illustrated and demonstrated through physical hardware experiments and computer demonstrations. The session also highlights new or innovative approaches to EMC measurement and simulation. Because of his role as Chair of the Special Session on EMC Experiment Demonstrations, he has been an honorary member of every symposium steering committee since 1992.

Additionally, Mr. Drozd is a Member of the Executive Board of the Armed Forces Communications and Electronics Association (AFCEA) Erie Canal Chapter. In his present AFCEA capacity, he actively supports education, scholarship, scholastic achievement, and science fair award and incentive programs for students and teachers in the local school system.

Mr. Drozd was Chair of the IEEE Mohawk Valley Section's EMC Chapter from 1998 to 2002.

In summary, his fields of interest and expertise include CEM and the development of E3 tools for RF antenna modeling and analysis. Mr. Drozd's responsibilities include: systems engineering; E3 computer modeling, simulation and analysis; novel applications of AI/expert system technologies to CEM analysis; radar cross section (RCS); software development and 3-D visualization tools. Mr. Drozd continues to apply his over 30 years of technical and program experience in electromagnetic technologies primarily in the area of computer modeling. In recent years, he has been involved in applying AI/expert systems to the domain of electromagnetics problem solving. He has developed E3 software products under contracts with the US Air Force Research Laboratory and Naval Air Warfare Center, namely, the *E3Expert* toolkit, which is a progressive computer modeling and simulation capability and a computational framework that provides electromagnetic solutions for complex system using a stepwise multi-fidelity approach.

From 1984 to 1994, Mr. Drozd was a Senior Scientist at Kaman Sciences Corporation (currently ITT) where he managed an EMC Engineering Group. Prior to that he was an EMC Test Engineer for the General Electric Underwater Electronics Programs Department where he led MIL-STD-461/462 and MIL-E-6051 EMC measurement programs. During the 1983 to 1984 period he was an Instructor for Syracuse University teaching courses on Electromagnetics and Physics. From 1978 to 1983, he was the Lead EMC Engineer for the IIT Research Institute Intracsystem Analysis Program Support Center which was responsible for maintaining the inventory of US Air Force EM computer software codes. During the period 1976 to 1978 Mr. Drozd was a Technical Assistant for the US Air Force Rome Air Development Center (RADC) where he provided technical services to government test and computer simulation engineers on behalf of electromagnetic code modification and validation. One of the codes that he performed limited verification and validation (V&V) testing on at the time was the *General Electromagnetic Model for the Analysis of Complex Systems (GEMACS)* program. He also conducted laboratory measurements aimed at assessing component high-frequency parasitic effects and nonlinear responses in the HF/VHF regime.

PAST SERVICE to ACES

Mr. Drozd has been a Member of ACES for well over 15 years. He has been a Member of the ACES Board of Directors since 2006 and Chair of the Industry Relations Committee since 2002. He has concentrated on developing stronger ties to other agencies and institutions to broaden awareness of ACES and what it has to offer to its members internationally. He has further organized sessions and presented papers at many of the ACES conferences. He has been a long-time active member of ACES and its journal editorial board primarily as Technical Feature Article Editor for the ACES Newsletter. He has twice been a recipient of ACES service/recognition awards in 2002 and 2003 for

contributions to the ACES community for his efforts as Technical Feature Article Editor and for his efforts on behalf of supporting industry relations.

CANDIDATE's PLATFORM

As an ACES Board Member, I will continue to strive towards the goal of bringing together various technical and industry/academic communities that have not necessarily been traditionally part of the mainstream of ACES. My hope is to help diversify the ACES technological forefronts, while keeping within our traditional vision and mission, and to help expand our membership base in the process. I firmly believe that ACES, like any established technical organization, must continually keep pace with upcoming as well as current developments in the relevant fields of interest, ours of course being CEM and its practical application. It must be more than just a theoretical exercise. My ongoing involvements in ACES along with my positions in the IEEE, EMC Society and other key organizations that foster new advancements in CEM and numerical tools, can only help this cause and achieve the goals of diversity and growth as I envision it. This will be accomplished in concert with other Board members and ACES colleagues. I have achieved some modest success over the past several years through my industry relations efforts and would like to further these accomplishments as a Board member. We are on the verge of a new age for numerical tools and CEM technologies. There is a new thrust afoot within government and academic CEM communities which is leading to resurgence in the advancement of CEM tools. Research is underway to develop the next generation of CEM tools and numerical approaches that will lead to a major broadening of our perspectives on CEM as we know it today and pave the way towards the collaborative, interdisciplinary realm of CEM in the coming few years. I would like to see the ACES community and its members be a major player in leading this advancement. My role as an ACES Board Member will be directed at achieving this goal and setting the stage for the future.

Erdem Topsakal

Erdem Topsakal was born in Istanbul, Turkey in 1971. He received his BSc. degree in 1991, M.Sc. degree in 1993 and PhD degree in 1996 all in Electronics and Communication Engineering from Istanbul Technical University. He worked as an Assistant Professor in Electrical and Electronics Engineering Department at Istanbul Technical University between 1997 and 1998. He was a post doctoral fellow from 1998 to 2001 and an assistant research scientist from 2001 to July 2003 in Electrical Engineering and Computer Science Department of the University of Michigan. In August 2003, he joined the Electrical and Computer Engineering Department of James Worth Bagley College of Engineering at Mississippi State University as an Assistant Professor. His research areas include implantable antennas, numerical methods, fast methods, antenna analysis and design, frequency selective surfaces/volumes, electromagnetic coupling and interference, direct and inverse scattering. He has published over 80 journal and conference papers in these areas. He received the URSI young scientist award in 1996 and NATO fellowship in 1997. He is the recipient of 2004- 2005 Mississippi State

University Department of Electrical and Computer Engineering outstanding educator award. He is a senior member of IEEE and an elected member of the URSI commissions B and K. He currently serves as the Chair for the Mississippi Academy of Sciences Engineering and Physics Division, Associate Editor-in-Chief for the Applied Computational Electromagnetics Society (ACES) journal, Associate Editor for IEEE Antennas and Wireless Propagation Letters (AWPL), and Secretary for URSI-USNC Commission K, Electromagnetics in Biology and Medicine. He is also a member of the IEEE United States Committee on Communications and Information Policy as a representative of IEEE Engineering in Medicine and Biology Society. He is a member of electrical engineering honor society, eta kappa nu.

Yashushi Kanai



GENERAL BACKGROUND

Dr. Yasushi Kanai is a current Associate Editor of *ACES*. He is a Professor of the Information and Electronics Engineering Department at Niigata Institute of Technology, Kashiwazaki, Japan. He received his Bachelor's Degree, Masters of Engineering Degree, and Doctorate Degree in Information Engineering from Niigata University, Japan, respectively in 1982, 1984, and 1989. He worked as a research engineer at Alps Electric Co., Ltd., from 1984 to 1992, where his responsibility was developing magnetic recording heads using numerical methods. During 1992–1995, he was an Associate Professor at the Department of Information Engineering, Niigata University. In 1995, he joined the Niigata Institute of Technology at its establishment. He has many years of teaching, research, and industry consulting experience. He has authored and co-authored more than 70 peer-reviewed journal papers, more than 90 international conference records, and more than 100 national conference records. Furthermore, he has contributed several chapters to books. He specializes in micromagnetic analysis, both in perpendicular magnetic recording heads and media, and electromagnetic field – heat transfer coupled computations of hyperthermic treatment. He is also interested in wave propagation using non-standard finite-difference time-domain (NS-FDTD) analysis. Professor Kanai was an Exhibit Co-chair of the Twelfth Biennial Conference on Electromagnetic Field Computation (IEEE CEFC Miami) during Apr. – May, 2006 and a Treasurer of the Eighth Perpendicular Magnetic Recording Conference (PMRC Tokyo) in Oct. 2007. He was also on the Advisory Boards of the 1st, 2nd, and 3rd IEEE North American Perpendicular Magnetic Recording Conference (2002, 2003, and 2004), the Programme Committees of the XII-th, XIII-th XIV-th, and XV-th International Symposia on Electrical Apparatus and Technologies, Bulgaria (2001, 2003, 2005 and 2007), and the Advisory Boards of the 1st and 2nd Nanoscale Devices & System Integration Conferences (2003 and 2005). He also has experience reviewing many journal papers and conference record digests, including IEEE Transactions on Magnetism, Journal of Applied Physics, and national journals in Japan.

PAST SERVICE to ACES

Currently an Associate Editor of *ACES*, Dr. Kanai has presented many papers at *ACES* Conferences since 1995. In 2003, he organized the special session related to “Japanese

Research in Electromagnetic Field Computations.” It was the first attempt to organize a session exclusively related to Japanese research. For his contribution to organizing that session, he received The Valued Service Award. He also surveyed Japanese researchers and found that it was difficult to join and submit papers unless the journal has an Impact Factor listed on the ISI citation index. He conveyed that opinion to the then President. Eventually, the President accepted the opinion and now *ACES* has an Impact Factor listed on the ISI citation index. He was also a co-organizer of “Low frequency Applications 1” and “Low frequency Applications 2” at the *ACES 2006 Conference*. This attempt was based on his wish to invite many researchers of low-frequency applications to *ACES* to participate along with the high-frequency researchers. In cooperation with another co-organizer, he invited many Asian researchers to the *ACES* conference in Miami.

CANDIDATE’S PLATFORM

I would like work with particular emphasis on several subjects, all of which are important to *ACES*. First, I would like to encourage many foreign researchers to join *ACES* conferences and submit many papers to the *ACES* journals. Because the *ACES Journal* now has an Impact Factor listed on the ISI citation index, increased participation of foreign researchers is expected. Second, I would like to encourage organization of “low-frequency” sessions as well as high-frequency sessions and welcome the involvement of low-frequency issue researchers to *ACES* conferences. In addition, I am currently co-organizing a special session “Non-standard FD-TD methods” at the *ACES 2008 Conference* at Niagara Falls, Canada. I will work hard to succeed this session.

Dr. Atef Z. Elsherbeni



GENERAL BACKGROUND

Atef Z. Elsherbeni received an honor B.Sc. degree in Electronics and Communications, an honor B.Sc. degree in Applied Physics, and a M.Eng. degree in Electrical Engineering, all from Cairo University, Cairo, Egypt, in 1976, 1979, and 1982, respectively, and a Ph.D. degree in Electrical Engineering from Manitoba University,

Winnipeg, Manitoba, Canada, in 1987. He was a part time Software and System Design Engineer from March 1980 to

December 1982 at the Automated Data System Center, Cairo, Egypt. From January to August 1987, he was a Post Doctoral Fellow at Manitoba University. Dr. Elsherbeni

joined the faculty at the University of Mississippi in August 1987 as an Assistant Professor of Electrical Engineering. He advanced to the rank of Associate Professor on July 1991, and to the rank of Professor on July 1997. On August 2002 he became the director of The School of Engineering CAD Lab, and the associate director of The Center for Applied Electromagnetic Systems Research (CAESR) at The University of Mississippi. He was appointed as Adjunct Professor, at The Department of Electrical Engineering and Computer Science of the L.C. Smith College of Engineering and Computer Science at Syracuse University on January 2004. He spent a sabbatical term in

1996 at the Electrical Engineering Department, University of California at Los Angeles (UCLA) and was a visiting Professor at Magdeburg University during the summer of 2005.

Dr. Elsherbeni received the 2006 School of Engineering Senior Faculty Research Award for Outstanding Performance in research, the 2005 School of Engineering Faculty Service Award for Outstanding Performance in Service, The 2004 Valued Service Award from the Applied Computational Electromagnetics Society (ACES) for Outstanding Service as 2003 ACES Symposium Chair, the Mississippi Academy of Science 2003 Outstanding Contribution to Science Award, the 2002 IEEE Region 3 Outstanding Engineering Educator Award, the 2002 School of Engineering Outstanding Engineering Faculty Member of the Year Award, the 2001 ACES Exemplary Service Award for leadership and contributions as Electronic Publishing Managing Editor 1999-2001, the 2001 Researcher/Scholar of the year award in the Department of Electrical Engineering, The University of Mississippi, and the 1996 Outstanding Engineering Educator of the IEEE Memphis Section.

Dr. Elsherbeni has conducted research dealing with scattering and diffraction by dielectric and metal objects, finite difference time domain analysis of passive and active microwave devices including planar transmission lines, field visualization and software development for EM education, interactions of electromagnetic waves with human body, sensors development for monitoring soil moisture, airports noise levels, air quality including haze and humidity, reflector and printed antennas and antenna arrays for radars, UAV, and personal communication systems, antennas for wideband applications, and antenna and material properties measurements. He has co-authored 94 technical journal articles, 24 book chapters, and contributed to 266 professional presentations, offered 17 short courses and 18 invited seminars. He is the coauthor of the book entitled "*Antenna Design and Visualization Using Matlab*", Scitech, 2006, the book entitled "*MATLAB Simulations for Radar Systems Design*", CRC Press, 2003, the book entitled "*Electromagnetic Scattering Using the Iterative Multiregion Technique*", Morgan & Claypool, 2007, the book entitled "*Electromagnetics and Antenna Optimization using Taguchi's Method*", Morgan & Claypool, 2007, and the main author of the chapters "*Handheld Antennas*" and "*The Finite Difference Time Domain Technique for Microstrip Antennas*" in Handbook of Antennas in Wireless Communications, CRC Press, 2001. He was the main advisor for 31 MS and 8 PhD students.

Dr. Elsherbeni is a Fellow member of the Institute of Electrical and Electronics Engineers (IEEE) and a fellow member of The Applied Computational Electromagnetic Society (ACES). He is the Editor-in-Chief for ACES Journal, and an Associate Editor to the Radio Science Journal. He serves on the editorial board of the Book Series on Progress in Electromagnetic Research, the Electromagnetic Waves and Applications Journal, and the Computer Applications in Engineering Education Journal. He was the Chair of the Engineering and Physics Division of the Mississippi Academy of Science and was the Chair of the Educational Activity Committee for the IEEE Region 3 Section. Dr. Elsherbeni's home page can be found at <http://www.ee.olemiss.edu/atef> and his email address is Elsherbeni@ieee.org.

PAST AND CURRENT SERVICE TO ACES

Technical Program Chair of ACES 2006, 2007, and 2008 conferences
Co-chair of ACES 2005 conference
Chair of ACES 2003 conference
Co-chair of ACES 2004 conference
ACES electronic publication manager editor, 2000-present
ACES Journal Editor-in-Chief, 2002-present
ACES pilot electronic publication project and website developer, 1999-present
Presented papers at many ACES conferences
Chaired and co-chaired, and organized sessions at ACES conferences
Offered short courses at the last 6 ACES conferences
ACES publications committee chair, 2004-present
Member of ACES conference committee, 2003-present

CANDIDATE'S PLATFORM

For the coming few years, my continued service to ACES society will be focused on

- Enhancing the quality of the published journal articles and increasing the frequency of publications of the Journal,
- Expanding the scope of the Journal to include up to date applications addressing emerging technology,
- Expanding the annual conference activity and encouraging the participation from other electromagnetic communities in holding joint conferences in US and abroad,
- Continuing the development and enhancement of the on-line service provided by ACES web site, and
- Increasing the membership of the society

The ACES Flyer

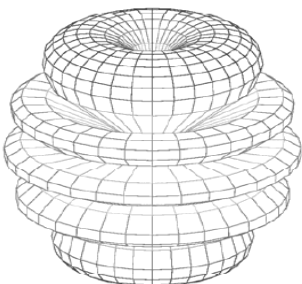
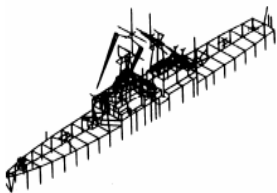
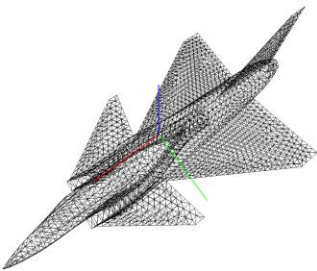
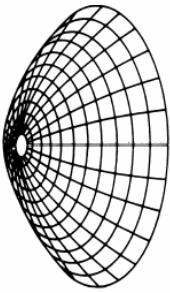
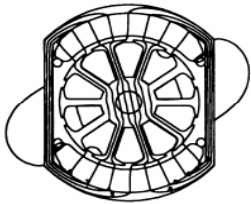
Although the title may sound like the name of an old steam locomotive, it actually refers to the development of a two page leaflet to be used (typically) at conferences and other meetings to raise awareness of ACES and of the Journal and Conference.

What is presented on the next couple of pages is the latest draft of the flyer. It will be finalised for the Conference.

If you are holding a meeting or attending a conference and think that you may be able to distribute some of these to anyone who is (or is potentially) interested in the Society, then please get in touch with the Newsletter editor in the first instance.

Applied Computational Electromagnetics Society

<http://aces.ee.olemiss.edu>



The Applied Computational Electromagnetic Society (ACES) was officially founded in 1986 after a computer modeling/electromagnetics workshop demonstrated the need for a society dedicated to computational electromagnetics that spanned the traditional discipline boundaries of the major professional societies, thus encouraging the interchange of ideas and experiences from researchers and practitioners from different backgrounds. *This strength, in bringing people together from different disciplines, was established right at the beginning of ACES.*

ACES has grown up quickly, and after more than 20 years of activity it is proud to offer high quality services to its members:

- **The ACES Journal.**
- **The ACES Newsletter.**
- **The annual ACES Conference.**
- **A Software Exchange Committee.**
- **Software Performance Standards Committee.**

ACES membership fees range from **35 USD (including reduced conference registration fee and electronic copies of Journal and Newsletter)** up to **125 USD** for institutional.

ACES has formed a world network of researchers in Electromagnetics: its members come from all continents.

The ACES Conference is a truly international symposium where papers of the highest quality, courses, and tutorials are given in an informal and friendly atmosphere. Some of the past conference locations have been:

ACES 2008: Niagara Falls, Canada

ACES 2007: Verona, Italy

ACES 2006: Miami, USA

ACES 2005: Hawaii, USA

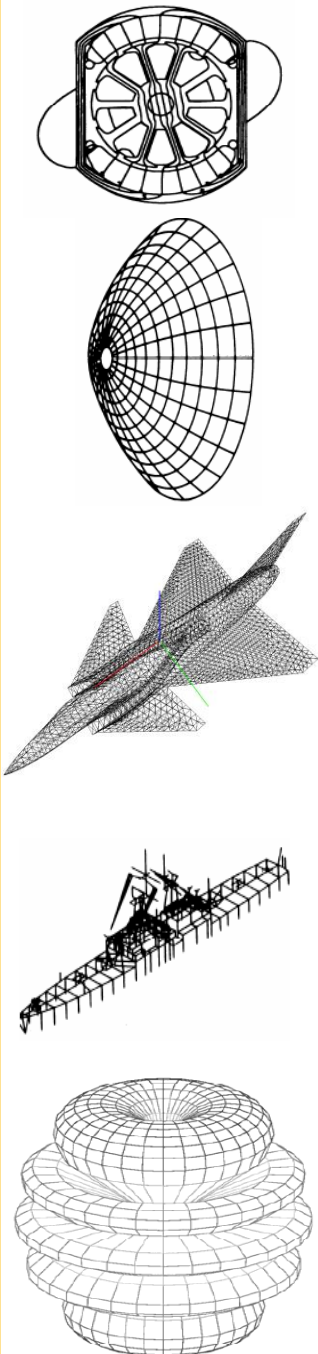
ACES 2004: Syracuse, USA

ACES 2003: Monterey, USA

Increase your resources and get in touch with researchers in your area by becoming a member of the ACES now: visit <http://aces.ee.olemiss.edu>, join the society and find out where the next ACES conference will take place!

Applied Computational Electromagnetics Society Journal

<http://aces.ee.olemiss.edu>



The Applied Computational Electromagnetics Society (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.

The scope of the Journal includes, but is not limited to:

- Numerical solution techniques, optimization, and innovation;
- Technological innovation in Electromagnetics;
- Identification of new applications for electromagnetics modeling codes and techniques;
- New materials;
- Biomedical effects of EM fields;
- Integration of computational electromagnetics techniques with new computer architectures;
- Code validation.

Some recent papers that have appeared in the journal are:

- A. Taflove, "A Perspective 40-year history of FDTD Computational Electromagnetics," vol. 22, no. 1, pp: 1-21, March 2007.
- J. L. Volakis, K. Sertel, and C. Chen, "Miniature Antennas and Arrays Embedded within Magnetic Photonic Crystals and Other Novel Materials," vol. 22, no. 1, pp: 22-30, March 2007.
- S. M. Ali, N. K. Nikolova M. H. Bakr, "Semi-analytical Approach to Sensitivity Analysis of Lossy Inhomogeneous Structures," vol. 22, no. 2, pp. 219-227, July 2007.

The ACES Journal is published four times annually (in March, June, September and December). The electronic copy of the journal is available at no charge to ACES members.

Editor-in-Chief: **Atef Elsherbeni (atef@olemiss.edu)**