

Newsletter

December 2019

Applied Computational Electromagnetic Society (ACES)

President's Message



Greetings from Golden Colorado, USA.

The ACES Board of Directors, BoD, met on December 7, 2019 and elected three new ACES Fellows. The elected fellows will be recognized with the recipients of ACES Awards at the awards dinner during ACES 2020 in Monterey, CA, USA. On behalf of ACES BoD and myself, I would like to congratulate the new ACES Fellows. In addition, I would like to note 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.

Looking forward, ACES 2020 will be held at the Embassy Suites Monterey Bay – Seaside, Monterey, California, USA (March 22-26, 2020). Call for papers is posted at the ACES website, http://aces-society.org/conference/Monterey_2020/. As usual, the conference proceedings will be published on IEEE Xplore.

Finally, as ACES members, I urge you to participate in the society activities. This includes attending and contributing to ACES conferences, getting involved in ACES awards and fellow nominations, as well as contributing to ACES Journal, and actively participating in the journal paper review process. In closing, I wish you a good and productive 2020. As always, I am looking forward to seeing you at the next ACES conference, this time at beautiful Monterey, CA!

Abd A. Arkadan,
President-ACES
Professor of Electrical Engineering
Colorado School of Mines
Golden CO, USA

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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 <u>here</u>.



ACES 2020 Conference in Monterey



The ACES 2020 "western" Conference will be held in beautiful Monterey: as you all know Monterey is the place where it all started, and where the ACES attendees like to gather.

The organizing committee is composed by the following people: feel free to contact any of them for conference related issues.

General Chair:

Abd A. Arkadan, Colorado School of Mines, USA

Technical Program Chair:

Atef Elsherbeni, Colorado School of Mines, USA

Technical Program Co-Chairs:

Sami Barmada, University of Pisa, Italy

Yasushi Kanai, Niigata Institute of Technology, Japan

Atif Shamim, King Abdullah University of Science and Technology, Saudi Arabia

Mike Wakin, Colorado School of Mines, USA

Don't miss the chance to participate in this great event. What follows is the list of convened sessions that will be activated.

Advances in Integral Equation & Hybrid Computational Methods, Session Organizer: Ulrich Jakobus Advances in Time-Domain Methods for Electromagnetic Analysis and Design, Session Organizer: Rodolfo Araneo

Computation Electromagnetics for Nondestructive Evaluation, Session Organizer: Lalita Udpa

Computational Electromagnetics, Advanced Algorithms and Emerging Applications, Session Organizers: Zhen Peng, Lijun Jiang

Computational Techniques for Imaging, Session Organizer: Abbas Omar

Design and Optimization for Nanophotonics: Multiscale Techniques, Session Organizers: Douglas Werner, Sawyer Campbell, Zhaxylyk Kudyshev

Designing Microwave Devices using CAD Tools, Session Organizer: Taha Imeci

Devices and Applications - Electric Machines and Drives, Session Organizer: Shisong Li

Efficient Optimization Approaches of Electromagnetic Structures, Session Organizers: Mohamed Bakr,

Slawomir Koziel

Electromagnetic and Electromechanical Devices and Applications, Session Organizer: Abd Arkadan

Electromagnetic Susceptibility of COTS Control Systems, Session Organizer: Randall Musselman

Electromagnetics for Medical Applications, Session Organizer: Khaled ElMahgoub

EM Modeling using Feko/WinProp, Session Organizer: CJ Reddy

EMC/EMI Issues in Energy Conversion Systems, Session Organizer: Osama Mohammed

Flexible and Wearable Electronic Simulation Challenges, Session Organizers: Sima Noghanian, Michael Griesi

Smart Clothing for IoT Applications, Session Organizer: Dalia Elsheakh

High Performance Computing in Electromagnetics, Session Organizers: Amedeo Capozzoli, Angelo Liseno

Low Frequency Computational EM, Session Organizer: Osama Mohammed

Machine Learning Applications in Electromagnetics, Session Organizer: Mohamed Bakr

Machine Learning for Applied and Computational EM, Session Organizers: Jason Wu, Michael Johnson

Metamaterial Applications and Devices, Session Organizer: Abdullah Eroglu

Methods for Transient Analysis of Electromagnetic Systems, Session Organizer: Ata Zadehgol

Microwave Filters, Session Organizer: Thottam Kalkur

Model-based Parameter Estimation in Electromagnetics, Session Organizer: Edmund Miller

Modeling and Simulation of Electromagnetic Bandgap Structures, Session Organizer: Mohammod Ali

Modeling for ELF/ULF Through-the-Earth Communication, Session Organizer: Lincan Yan

Modelling and Applications of Metamaterials and Plasmonics, Session Organizer: Mohamed Hameed

Multiphysic Effects of High Power Electromagnetic Fields, Session Organizer: John Pantoja Acosta

New Looks into Electromagnetic Modeling of Composite Materials, Session Organizers: Zhen Peng, Ahmed Hassan

Advances in Finite Difference and Other Numerical Methods for Computational Electromagnetics and

Photonics, Session Organizers: James Cole, Yasushi Kanai, Saswatee Banerjee,

PIC Method in Electromagnetic, Session Organizer: Meng Cui

Printed, Flexible and Reconfigurable Antenna Implementations, Session Organizers: Atif Shamim, Langis Roy

Progress in Adaptive Refinement Techniques, Session Organizer: Andrew Peterson

Recent Advances in Finite Difference Time Domain Methods, Session Organizers: Atef Elsherbeni, Fatih Kaburcuk

RF/Microwave Electromagnetics, Session Organizer: Shahid Ahmed

Science of the Short: Pulsed Power, Burst Communications, and Pulsed Magnetic Field Generation,

Session Organizer: James Vedral

Sensors and Imaging Applications, Session Organizers: Mfonobong Charles Uko, Sunday Cookey Ekpo

Simulation and Realization of Metasurfaces for RF Applications, Session Organizer: Steven Weiss

Sparse Array Processing and Radar Sensing, Session Organizers: Michael Wakin, Payam Nayeri

Time Domain Modeling of Switchable and Tunable Devices in Photonics, Session Organizers: Alexander

Kildishev, Sawyer Campbell, Mikhail Shalaginov

Validation of Computational Electromagnetics, Session Organizers: Alistair Duffy, Edmund Miller

Wireless Power Transfer and Energy Harvesting: Advances in Modelling and Practice, Session

Organizers: Sami Barmada, Nunzia Fontana

ACES Journal

Latest issues

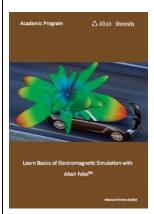
The ACES Journal is devoted to the exchange of information in computational electromagnetics, to the advancement of the state of the art, and to the promotion of related technical activities. The ACES Journal welcomes original, previously unpublished papers, relating to applied computational electromagnetics.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

Direct link to the September 2019 Issue Direct link to the October 2019 Issue Direct link to the November 2019 Issue Direct link to the December 2019 Issue

We wish to remind all of you that all ACES Journal Issues can be downloaded from the website at no charges; in addition, Express Journal Papers (short papers with faster publication track) are now published on a dedicated section of the ACES Journal.

Book Presentation

FREE eBook: Learn Basics of Electromagnetic Simulation with Altair Feko



Altair Feko is an environment to solve electromagnetic problems. This book takes the reader through the basics of broad spectrum of EM problems, including antennas, the placement of antennas on electrically large structures, microstrip circuits, RF components, the calculation of scattering as well as the investigation of electromagnetic compatibility (EMC). The concepts are explained with examples and step-by-step tutorials after each section. Moreover, the users will also be guided with videos to make the learning experience fast and effective. The free eBook can be downloaded from: https://altairuniversity.com/free-ebook-electromagnetic-simulation-feko/

Students enrolled in a university and the faculty can download free Feko Student Edition at https://altairuniversity.com/feko-student-edition/. Most examples in the eBook can be solved using the student edition.

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

Sincerely,

Sami Barmada

Editor - ACES Newsletter