

AMEREM – EUROEM – ASIAEM Memos

Memo 14

22 September 2018

Awards Presented at AMEREM 2018

Prepared by:

William Radasky and Edl Schamiloglu

In this memo we will identify the awards and citations presented on Thursday afternoon, 30 August 2018. This presentation is usually given at the banquet, but for AMEREM 2018 the banquet on Wednesday evening, which took place at Goleta Beach, did not allow a microphone on the beach. Since there was space in the schedule, a special awards ceremony was held the following day. There were 4 categories of awards presented. There were two best HPEM Note awards, two best student paper awards, 6 HPEM Fellow awards and 2 awardees of the Carl E. Baum Medal. Each of these award categories will be documented in detail in this Memo.

Best HPEM Notes

The awards process was chaired by Dr. Nicolas Mora with the support of a panel of judges. This award is presented every 2 years (in even years) based upon a review of the notes published in the past 2 years. Certificates and a \$200 check from Summa Foundation were presented to the winners in two categories:

Best Theoretical Paper (2016 – 2018)

J-P. Parmantier, I. Junqua, S. Bertuol, P. Schickele

Interaction Note 628, June 2016

“Effects of Distributed Sources on Transmission-Line Models: Low Frequency Approximations”

Best Applied Paper (2016 – 2018)

Markus Nyffeler and Armin Kaelin

System Design & Assessment Note 47, November 2016

“EMP-Hardened Photovoltaic Generators: A Possible Emergency Power Solution for Critical Infrastructure?”

Best Student Paper Award Winners

The awards process was chaired by Dr. Nicolas Mora with the support of a panel of judges. Certificates and a \$500 check from the Summa Foundation were presented to the winners of papers written for this conference:

Title: "A Kind of Symmetric TEM Horn Antenna Based on Low Frequency Compensation"

Authors: Yi Zhou, Yan-zhao Xie, Shao-fei Wang

Affiliation: State Key Laboratory of Power Equipment and Electric Insulation, National Center for International Research on Transient Electromagnetics and Applications, School of Electrical Engineering, Xi'an Jiaotong University, Xi'an, Shaanxi, China

Title: "Features and Statistics of S-parameters in Nonlinear Wave Chaotic Systems"

Authors: Min Zhou, Edward Ott Thomas, M. Antonsen, Jr, and Steven M. Anlage

Affiliation: Departments of EE and Physics at University of Maryland, College Park, USA

HPEM Fellows

The HPEM Fellow awards process was chaired by Dr. William Radasky with the support of a panel of judges. New Fellows are elevated every two years (in even years) based on their career accomplishments. Certificates from the Summa Foundation were presented to the awardees. The new fellows and their citations are added to the complete list of HPEM Fellows found on the Summa website.

Jinliang He For contributions to the understanding and protection of lightning discharging and electromagnetic effects

Tomas Hurtig For development of compact HPM generators and contributions to HPM susceptibility testing

Jane M. Lehr For contributions to the development of fast closing pulsed power switches

Nicolas Mora Parra For contributions to IEMI sources and coupling to communication lines

Alan D. R. Phelps For research and development of high power microwave sources

Oleg A. Tarasov For contributions to analytical and numerical modeling of NEMP and HPEM coupling and effects and for theoretical research on the influence of electromagnetic waveforms on antenna-feeder devices and communication and power supply lines

The Carl E. Baum Medal

In 2016 Dr. Sholapurwala approached Dr. Dave Giri to initiate the concept of the Carl E. Baum Medal to be awarded to persons for their long standing accomplishments in the field of Applied Electromagnetics. Dr. Giri approached the Board of Directors of the Summa Foundation in Albuquerque, New Mexico, USA and the Summa Board agreed with the idea of this award. Further, Drs. Sholapurwala and Giri, donated \$1,000 each to Summa Foundation to facilitate this award. Twenty-five medals were produced and provided to the Summa Foundation. The front and back of the medal are shown below.



Front and Back Sides of the Carl E. Baum Medal

It was decided that the Summa Board of Directors would select the medal awardees each year and could choose any number between 0 and 4. In the inaugural year (2017) 4 initial awards were made to Drs. David Giri, Kelvin Lee, William Radasky, and Fred Tesche. The citations for their awards are documented in the AMEREM-EUROEM-ASIAEM Memo 12.

For AMEREM 2018 the Board of Directors of Summa Foundation chose 2 awardees for the Carl E. Baum Medal. Dr. Edl Schamiloglu made the presentations in Santa Barbara. Dr. Bäckström was not able to attend, and a colleague agreed to take the medal back to him.

Dr. Mats Bäckström
For contributions to the development of HPEM test techniques and facilities

William Prather
For contributions to EMP and HPM testing and hardening

A photo is shown below of Bill Prather accepting his certificate and medal from Dr. Schamiloglu.



At the end of the award ceremony, Dr. William Radasky, the Conference Chairman of AMEREM 2018 passed the traveling conference plaque to Prof. Yanzhao Xie, who is the Conference Chairman of ASIAEM 2019 in Xi'an, China next year. A photo showing the two Chairmen and the plaque is shown below.

