Letter from the P.I.

It was great to meet with all those who attended the 5th Annual Technical Meeting in August. Thanks to all of you who participated. It was an exciting and informative few days with discussions focusing on the results of the six CERF-funded projects.

A reminder that CERF membership fees are due in January 2015. We have been working with Vera Fosnot, the College of Engineering’s Industry Liaison, to further promote CERF and we look forward to sharing the results of this collaboration.

In this issue we’ll highlight the student posters presented at the Annual Meeting, announce the addition of a new Consortium Advisory Board Member and solicit ideas for upcoming short courses.

We would love to hear your suggestions and comments on the CERF annual meeting and ideas for the next year’s short courses. For comments and questions please don’t hesitate to contact me.

Best Regards,

Greg Creech
P.I., ESL-CERF
Asst. Director, ESL
614-292-0609
creech.41@osu.edu


2014 Annual Technical Meeting

We had over 60 participants attend this year’s technical meeting. Those who attended included representatives from our Industrial Affiliates, Air Force Research Laboratory and ESL faculty and students.
ESL Research Scientist, Dr. Nima Ghalichechian (with co-PI Prof. John Volakis), received a 3-year $363k grant from the National Science Foundation (NSF) in August. The project is titled “Reconfigurable and Low-loss Millimeter-Wave Antennas using MEMS Paraffin Micro-actuators”. The CERF seed grant was utilized to perform initial electrical characterization as well as multi-physics finite element simulation. When additional information was requested by NSF, CERF findings were sent to the sponsor.

Student Poster Highlights

We had a total of 35 poster presentations, most of which were given by ESL students, presented during four poster sessions at the 2014 CERF Annual Meeting. The presentations gave a good cross section of all the research being done here at ESL. This also gave our affiliates the opportunity to interact with the students, researchers and faculty.

New CAB Member Selected

ESL-CERF is governed by the Consortium Advisory Board (CAB) consisting of University Representatives and selected Industrial Affiliates. Five University Representatives are selected from the faculty and researchers associated with the ESL. The Director of ESL appoints the University Representatives and each Platinum Industrial Affiliate appoints one person to the CAB. Also one member is selected from the other industrial affiliates. We’d like to introduce and welcome Jacob Kim as the newest CAB member.

Membership Fees Due

Contract membership renewal fees are due in January 2015. Please be sure to contact Dr. Greg Creech.

New for 2015 Poster Session

Starting with next year’s meeting we would like to give an award to the best presented poster. Ballots will be provided during each poster session in order to select the winning poster and presenter(s).

2015 Short Courses

We are currently soliciting ideas for short courses that members are interested in attending. Please be sure to contact Dr. Greg Creech with your input. We’d like to have the topics lined up by the end of December 2014.

Raytheon On-Site Short Courses a Success

Dr. Graeme Smith and Prof. Ronald Reano traveled to Tucson, AZ, to teach short courses for Raytheon engineers on October 31st. Over 100 engineers from Raytheon participated, including many off-site engineers via VTC and/or Sametime & Telecon from locations across the country. Feedback from Jacob Kim included that Smith and Reano “delivered excellent lectures” and that “responses from participants were positive”.
ESL Tour Highlights

A reception and tour of ESL Facilities followed the Annual CERF Meeting on August 5, 2014. Please check out our “Photo Library” at the ESL website to browse through the photos taken during these events.

ESL students at reception following CERF Meeting. Visitors touring the ESL's state-of-the-art Anechoic Chamber.

Saif Alsaif explains an experiment in the Cognitive Sensing Lab. A cognitive radar system steers a robotic vehicle equipped with 8 sensors by issuing guidance and control actions.

Dr. Georgios Trichopoulos explains the research done using the Terahertz Continuous Wave Spectrometer at the Helios Lab.

Reminders
- Membership Renewal Fees: January 2015
- Short course ideas by December 2014.

2015 CERF Funded Projects
A call for proposals requesting CERF funding was sent out. The Consortium Advisory Board has been reviewing each proposal and we will select 4-5 to fund in the coming year.

CERF Website
We've updated the CERF Website. Check out our new website at:
https://electroscience.osu.edu/cef
OSU ElectroScience Laboratory

The ElectroScience Laboratory (ESL) is a major "Center-of-Excellence" within the Ohio State University Department of Electrical and Computer Engineering and is one of the largest Radio Frequency (RF) research and Optics laboratories in the world.

Our faculty, research scientists, and students are involved in all aspects of electromagnetic and RF technologies. ESL has its own separate building with more than 60,000 square feet that house state-of-the-art measurement and computational facilities.

ESL-CERF

The faculty and researchers at ESL have formed a Consortium on Electromagnetics and Radio Frequencies (CERF) to share their expertise in training of undergraduate and graduate students as well as employees of the US-based RF industry.

One of the main goals of ESL-CERF is to support industry professionals at the leading edge of their fields and to provide them with access to world-class research and knowledge in EM and RF areas.

Under this consortium, members have access to state-of-the-art facilities, faculty and student researchers. Specialty training courses are tailored to member needs.

Consortium Advisory Board (CAB) Members

Chi-Chih Chen  Greg Creech  Inder J. Gupta  Ronald Reano  Fernando Teixeira  Jacob Kim

Become a Member

US industries can benefit from ESL-CERF by joining the consortium as Industrial Affiliates. As an Industrial Affiliate, the industry pays an annual membership fee to ESL-CERF. Funds collected through the membership fee are used to develop and organize new short courses and technical meetings.

Any US-based organization can join the consortium as Basic, Silver, Gold or Platinum Industrial Affiliate. The benefits vary with the membership level. Agreements to join ESL-CERF can be found on our website under “How to Join”:

https://electroscience.osu.edu/joincerf

For more information on ESL-CERF, contact Dr. Greg Creech (see contact information below).

Contact Information

The Ohio State University
ElectroScience Laboratory
Consortium on Electromagnetics and Radio Frequencies

1330 Kinnear Road
Columbus, OH 43212

Dr. Greg Creech
E-mail:creech.41@osu.edu
TEL: (614)292-0609

https://electroscience.osu.edu/cerf