Established in 1942, The Ohio State University ElectroScience Laboratory (ESL) is a world-renowned research center for advancing analysis, design, development and measurement techniques for electromagnetics and RF systems. ESL receives approximately $10 million in research funding annually, provided by government agencies and industry.

ESL employs nearly 135 faculty, researchers and students, and encompasses more than 60,000 square feet of laboratory and workspace. The center is home to state-of-the-art measurement and computational facilities, including one of the finest compact ranges in the world. Measuring 60 feet by 40 feet by 20 feet, it is the largest academic anechoic chamber.

Most ESL students work on funded projects conducting cutting-edge electromagnetics research. ESL students frequently publish articles in industry journals and receive prestigious awards and fellowships. ESL alumni are leading experts in industry, Department of Defense agencies and other federally funded national laboratories.

CERF bridges the industry-student gap as students learn from industry experts by working on individually funded research projects with CERF affiliates. These projects provide students with the hands-on experience and preparation needed to excel in electromagnetics and RF systems careers after graduation.

Interested in learning more about CERF?
Visit electroscience.osu.edu/cerf or contact esl-cerf@osu.edu.
Consortium on Electromagnetics and Radio Frequencies

Electromagnetics (antennas, antenna platform interactions, EM/EMC, scattering, etc.) and radio frequency (RF) circuits and systems are the backbone of all modern communication, radar, telemetry, remote sensing and navigation systems. The demand for well-trained professionals who can develop and test new EM and RF systems and technology is exploding. U.S. industry and government agencies need to keep their workforce informed of the latest technological developments and breakthroughs in these areas to design next-generation systems in a timely fashion.

ESL faculty and researchers formed the Consortium on Electromagnetics and Radio Frequencies to share their expertise with the U.S.-based RF community, as well as provide a pipeline of dedicated, well-trained professionals ready for the EM workforce.

CERF provides industrial affiliates with access to state-of-the-art facilities, faculty and student researchers. Annual technical meetings cultivate research relationships and facilitate information sharing among members. Specialty short courses and technical meetings are open to U.S.-based personnel who are CERF affiliates.

ESL Short Courses

One of ESL’s main goals is to support professionals at the leading edge of their fields and provide them with access to world-class research and knowledge in EM and RF. As such, ESL faculty and researchers offer specialized short courses in their fields of expertise.

The short courses give attendees a competitive edge through staff education. Courses are offered annually after the ESL-CERF technical meeting. These half-day and full-day short courses are offered virtually and those not associated with ESL-CERF can attend for a fee.

CERF Membership

U.S. organizations benefit from ESL-CERF by joining the consortium as an affiliate. Affiliate organizations pay an annual membership fee, which is used to develop new short courses, organize technical meetings and sponsor student training and research.

Any U.S.-based organization can join the consortium as a Basic, Silver, Gold or Platinum affiliate. The benefits increase with the membership level.

For more information on ESL-CERF membership, please visit electroscience.osu.edu/cerf or contact esl-cerf@osu.edu.

Affiliate Benefits

- Participation in the annual technical meeting where recent research results are presented and discussed.
- Access to eight to twelve half-day short courses given annually by leading experts in key technical areas: radar, navigation and sensing, EM algorithms and measurements, RF circuits and optics research and antenna design.
- Opportunities to discuss technical problems and challenges with leading researchers.
- Access to well-trained graduate and undergraduate students.
- On-site short courses at Gold and Platinum affiliates’ locations.
- Opportunities to fund individual research projects.

<table>
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<tr>
<th>Membership Level/Fee</th>
<th>Annual Meeting Attendees</th>
<th>Seats for Short Courses</th>
<th>Access to ESL Experts</th>
<th>Access to ESL Students</th>
<th>On-Site Short Courses</th>
<th>Opportunity to fund individual research projects</th>
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*For companies with less than 50 employees