

Communications Technology Laboratory Awards

2014

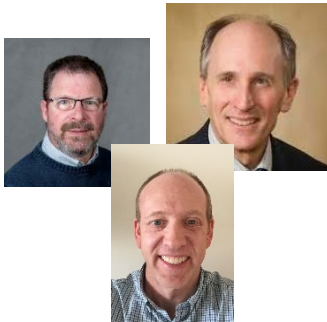


The IEEE Board of Directors, at its November 2014 meeting, elevated **Paul Hale** to IEEE Fellow, effective 1 January 2015, with the following citation: For contributions to metrology of high-speed electronic and optoelectronic devices.

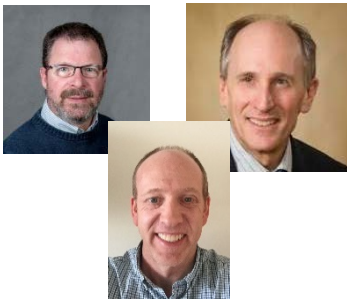
2015



2015 National Public Safety Communications Council Leadership Award was awarded to **Dereck Orr**. The National Public Safety Telecommunications Council presented its Leadership Award to PSCR Program Manager Dereck Orr for his work to advance the cause of public safety communications. The NPSTC Leadership Award was created to recognize individuals and/or organizations that have demonstrated exceptional personal and professional conduct.



Best Oral Presentation - **D. F. Williams, J. A. Jargon, U. Arz, and P. D. Hale**, "Rectangular-Waveguide Impedance," 85th ARFTG Microwave Measurement Conference, Phoenix, AZ, May 2015.



Best Interactive Forum Presentation - **J. A. Jargon, C. H. Cho, D. F. Williams, and P. D. Hale**, "Physical Models for 2.4 mm and 3.5 mm Coaxial VNA Calibration Kits Developed within the NIST Microwave Uncertainty Framework," 85th ARFTG Microwave Measurement Conference, Phoenix, AZ, May 2015.

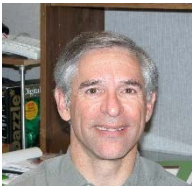
2016



Jim Booth was awarded the NIST Bronze Medal for the development of measurement methods to determine electrical properties of thin-film materials over a broad range of frequencies, and for the application of these methods to the study and optimization of tunable materials that enable frequency-agile chipsets needed for the telecommunications systems of tomorrow. Dr. Booth's innovations led to substantially improved understanding of tunable materials and enabled improved devices that decrease the footprint, lower the power consumption, and increase the frequencies of operation of next-generation telecommunication components.



A group from CTL's Radio-Frequency Technology Division was recognized for the development of the "Configurable Robotic Millimeter-Wave Antenna" (CROMMA) facility. Based on a six-degree-of-freedom articulated-arm robot, and a dynamic position and orientation laser-tracking system, CROMMA is the world's first 100 – 500 GHz antenna near-field scanning range. This group included **Mike Francis, Jeff Guerrieri, David Novotny, Josh Gordon** and **Alex Curtin**



Ron Ginley was granted the 2016 William A. Wildhack Award in 2016 for exceptional dissemination of his expertise in high frequency electromagnetics to the NCSLI community via training, individual technical assistance, and leadership



The Board of Directors of the Antenna Measurement Techniques Association (MTA) honored **Jeff Guerrieri** with the organization's 2016 Distinguished Service Award for contributions as a presenter, a session chair, and a member of the Technical Coordinator's Abstract and Paper Review Committee.



Dan Kuester was elevated to IEEE Senior Member Status. Members gain senior status after ten years of professional experience in a field designated by the IEEE, and five years of significant performance.



Josh Gordon was elevated to IEEE Senior Member Status. Members gain senior status after ten years of professional experience in a field designated by the IEEE, and five years of significant performance.

Josh was also issued a patent: Simultaneous Imaging and Precision Alignment of Two Millimeter Wave Antennas Based on Polarization-Selective Machine Vision. Date Issued: Sept 6, 2016

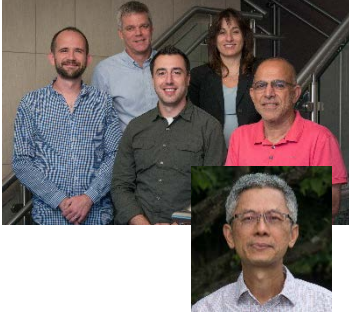


Matt Simons, an associate in CTL, received the Outstanding Presentation Award, a special recognition for selected poster presenters at the Boulder Laboratories Postdoctoral Poster Symposium. This recognition was selected by senior scientists who circulated through the poster session and noted outstanding quality in both preparation of a poster and its oral presentation. His poster was entitled: "Extensions of SI-Traceable RF Field Metrology Using Rydberg Electromagnetically-Induced Transparency



The Paul Ehrenfest Best Paper Award is a prize for the most significant publication in the foundations of quantum physics, theoretical or experimental, during one calendar year. The aim of the award is to raise awareness for the field of quantum foundations, and to draw attention to new and interesting achievements in this area without delay. CTL's **Shane Allman** was among recognized authors who collaborated on the winning paper entitled "Strong Loophole-Free Test of Local Realism".

2017



A Team from CTL was awarded the **NIST Gold Medal for Exceptional Service** for developing a test methodology and performing measurements to quantitatively assess the impact of LTE signals on the performance of GPS receivers. This award was granted to **Ari D. Feldman, Sheryl M. Genco, Michael D. Janezic, Azizollah Kord, Daniel G. Kuester, John M. Ladbury, Duncan A. McGillivray, Adam J. Wunderlich, Wen-Bin Yang, and William F. Young.**



Perry Wilson, a former group leader in CTL was given the International Electrotechnical Commission (IEC) 1906 Award for valuable technical contributions to the CISPR/SC77B joint task force on transmission electron microscope devices.

Perry also became an IEEE Life Fellow. Becoming an IEEE Life Fellow is an award and fellowship granted to members of the Institute of Electrical and Electronics Engineers (IEEE) who have made "extraordinary accomplishments" in recognition of many years of support for of the activities of the IEEE.



CTL honored Distinguished Associates, **Audrey Puls** and **Andre Rosete** for contributions to CTL's Gold Medal NASCTN team in successfully developing a new test methodology and performing complex radiated measurements to quantitatively assess the impact of LTE wireless signals on the Performance of GPS receivers operating in the RNSS LI frequency band in less than one year.



Best Interactive Forum Presentation - **A. A. Koepke** and **J. A. Jargon**, "Quantifying Variance Components for Repeated Scattering-Parameter Measurements," 90th ARFTG Microwave Measurement Conference, Boulder, CO, Nov. 2017.

2018



Annie J. Smith was presented the Crittenden Award, for exceptional administrative service in the establishment and operation of NIST's Communications Technology Laboratory and NIST Boulder Laboratories.



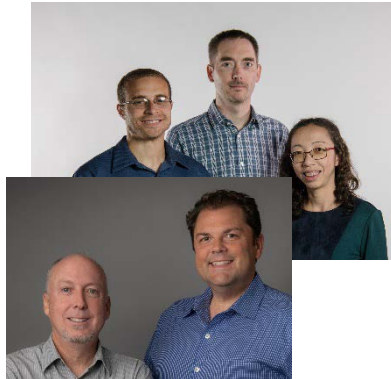
David Novotny was awarded the Colleagues' Choice Award in 2018. David was recognized for helping numerous NIST staff and associates by establishing a powerful electromagnetic modeling system located in NIST Boulder. Based on a powerful computing platform, the modeling system runs the High-Frequency Structural Simulation (HFSS) software that supports the computational needs of the many NIST researchers who require advanced computational capability for simulating complex high-frequency electromagnetic devices and systems.



Craig Connelly, Andrew Thompson along with Saidi Kamel from our Gaithersburg Engineering Laboratory were awarded the NIST Safety Award, first established in 1979. The Safety Award recognizes NIST employees and organizations for substantial contributions to improving safety at NIST. The team is recognized for the development and execution of rigorous safety protocols, training, and infrastructure to support the NIST Unmanned Aerial Systems (UAS) Flight and Payload Challenge.



Josh Gordon was issued a patent for Noncontact Metrology Probe Process for Making and Using of Same, Date Issued: September 18, 2018



The team of **David Cypher, Wesley Garey, Jason Kahn, Richard Rouil, Yishen Sun, and Christopher Walton** were recognized with the 2018 NIST Bronze Medal. The PSCR/WND team is recognized for the standardization of Mission Critical Voice Over Long-Term Evolution in support of public safety communications. The team's sustained efforts in standards development have led to new products with Mission Critical Voice capabilities that will have significant impact on multi-agency coordination during severe network congestions and large disaster events by leveraging the broadband capabilities of FirstNet. These products will enable public safety communication across organizations on commercially available public safety devices – from smartphones to tablets to laptops.



Ari Feldman was part of the PhotoForce project, which was awarded the R&D 100 Award. The R&D 100 Awards have served as the most prestigious innovation awards program for the past 55 years, honoring great R&D pioneers and their revolutionary ideas in science and technology. The R & D 100 Award goes to the PhotoForce Project for the development of a Radiation Pressure Power Meter that enables extremely high continuous laser powers to be measured as the force applied by the laser light reflects from a mirror. It improves on conventional laser power meters by being a truly portable, lighter, faster, measurable and traceable primary standard device.



The NIST Silver Medal was awarded to a group for innovative leadership of cost-effective facilities construction resulting in a state-of-the-art building for world-class scientific advances. **Roger A. Blalock, Christine A. Carson, and Ellen L. Ryan** were awarded the Silver Medal along staff from OFPM.

2019



The Karl Schwartzwalder-Professional Achievement in Ceramic Engineering (PACE) Award is designed to recognize outstanding young ceramic engineers for achievements significant to the profession. CTL's **Nate Orloff** was granted this award.



Dereck Orr was awarded the Association of Public-Safety Communications Officials (APCO) International Leadership in Advocacy Award. APCO is the leading public safety communications professional organization with over 30,000 members. This award was given in recognition for significantly advancing research and development of public safety communications through his leadership of the NIST Public Safety Communications Research Portfolio, which includes CTL, other NIST organizations, and a worldwide network of partners through grants and prize challenges.