New Doppler Radar Unveiled at AMS

Enterprise Electronics Corporation (EEC) in partnership with ARRC members Robert Palmer, Boon Leng Cheong, Yan Zhang and Redmond Kelley, recently unveiled an innovative low-cost polarimetric Doppler weather radar at the national American Meteorological Society conference in New Orleans, LA. The next phase of this $1.8M State of Oklahoma EDGE project is to develop an assembly facility in Norman to manufacture and globally market the radars to government and commercial entities.

Publications

- Cambridge University Press has published *Slavery in the Late Roman World, AD 275-425* by Kyle Harper (Classics & Letters). This book has been awarded the Classical Association of the Middle West and South's Outstanding Publication Award.
- Cambridge University Press has published *Transatlantic Literary Studies, 1660-1830* by Eve Tavor Bannet (English) and Susan Manning.
- Broadview Press has published *Emma Corbett: Or, the Miseries of Civil War* by Eve Tavor Bannet (English).
Donna Nelson (Chemistry & Biochemistry) has been awarded the Oklahoma Chemist Award. The award is the most prestigious award given to chemists within Oklahoma. The award consists of $1,000 and a plaque.

Jeff Kelly (OK Biological Survey) was part of a team that has received the Research and Partnership award from the U.S. Forest Service’s International Office. Kelly and his team were nominated for their work on “Bird Responses to Invasive Species, Fire and Fire Removal in Vulnerable Southwestern Ecosystems.” This team is a partner organization with the Forest Service’s Rocky Mountain Research Station in Albuquerque.

Yiqi Luo (Botany & Microbiology) chaired a workshop on “Disturbance Regimes and Climate-Carbon Feedback,” together with Maria Leite (former Math visiting assistant professor). The workshop was held at the National Institute of Mathematical and Biological Synthesis in Knoxville, TN. The workshop examined the feedback processes among climate change, disturbance regimes, and global carbon cycles.

The collaborative effort between Electrical & Computer Engineering (Rui Yang) and Physics & Astronomy (Michael Santos & Matthew Johnson) has resulted in the world’s first demonstration of InAs-based interband cascade lasers in the second atmospheric infrared transmission window (8-12 microns). The lasing wavelength reached 10.4 microns, the longest wavelength attained, to date, for III-V interband lasers. The laser’s energy efficiency and very low power consumption are advantages for applications in chemical sensing. This work was recently published in Electronics Letters (Vol. 48, No. 2, 2012).
Faculty Recognition


- Bernard Roddy’s (Art & Art History) film Transit screened at the 33rd Big Muddy Film Festival in Carbondale, IL on February 19, 2011 and at the 14th Antimatter Film Festival in Victoria, British Columbia on October 18, 2011.

- Mohammed Atiquzzaman (Computer Science) has been elected as the Vice Chair of IEEE Communication Society Technical Committee on Communications Switching and Routing IEEE Communications Society.

- Robert Palmer (ARRC) has been invited to England to speak at The Royal Society conference on signal processing for the physical sciences in March 2012. The aim of the conference is to bring together cutting edge methods from data analysis with pressing data challenges in the physical sciences, with a particular focus on challenges involving time-series data.

- Stamatios Kartalopoulos (Electrical & Computer Engineering) has been selected as an “IEEE Life Fellow” for his long term contributions to IEEE and Communications Society.
January New Awards

- Phillip Chilson
  School of Meteorology
  “Monitoring and Spatial Mapping of Migratory Bird and Bat Habitat Use in the Thousand Islands Region of Western New York State”
  BRILLOON
  $10,000

- Xinyu Dai
  Department of Physics & Astronomy
  “Energy Dependent Microlensing in X-rays”
  NP-SA0
  $18,230

- Xinyu Dai
  Department of Physics & Astronomy
  “An Archival Study of the Dust-to-gas Ratio of High Redshift Galaxies”
  NP-SA0
  $48,000

- Karl Hambright
  Biological Station
  “Cyanobacterial Monitoring in Lake Texoma”
  DOD-COR
  $2,476

- Richard Henry
  Department of Physics & Astronomy
  “Carbon and Nitrogen Enrichment Patterns in Planetary Nebulae”
  NP-STSCI
  $15,452

- Friederike Jentoft
  School of Chemical, Biological & Materials Engineering
  “Reduction Mechanism of Cr(VI)/Silica by Ethylene and Other Organics”
  CPCC
  $100,000

- Yiqi Luo
  Department of Botany & Microbiology
  “Collaborative Research: Grassland Sensitivity to Severe Drought: Disentangling the Role of Precipitation Amount vs. Pattern across Regional-Scale Biotic and Climatic Gradients”
  NSF
  $28,755

- Joseph Suflita
  Department of Botany & Microbiology
  “University of Oklahoma Biocorrosion Research Center Consortium”
  ConocoPhillips
  $450,000

- Joseph Suflita
  Department of Botany & Microbiology
  “University of Oklahoma Biocorrosion Research Center Consortium”
  IN-TOTALSA
  $149,975

- Xuguang Wang
  School of Meteorology
  “Improving High Resolution Tropical Cyclone Prediction using a Unified GSI-based Hybrid Ensemble-Variational Data Assimilation System for HWRF”
  DOC-NOA
  $125,090

- Jizhong Zhou
  Department of Botany & Microbiology
  “Development of Microarrays-based Metagenomics Technology for Monitoring Sulfate-Reducing Procaryotes in Subsurface Environments”
  GLOMICS
  $128,819

- Jizhong Zhou
  Department of Botany & Microbiology
  “Development of Novel Random Network Theory-Based Approaches to Identify Network Interactions Among Nitrifying Bacteria”
  GLOMICS
  $128,819