



NWI has one of the Top Techsans for 2013



Jeff Livingston, Senior Superintendent for NWI's research facilities, was recently recognized as one of the Texas Tech Alumni Association's Top Techsans.

The award recognizes employees with extraordinary work proficiency and an attitude of team spirit within the Texas Tech family. Only four Top Techsan awards are given each year, and the recipients will be recognized at the award luncheon in October. Started in 1973, this award is open to only full-time non-faculty employees who are nominated by their peers.

Jeff is an integral part of the research team for NWI. He's noted for his great work ethic, his cheerful demeanor, and his winning team attitude.

According to John Schroeder, NWI Director, Jeff's award was "much deserved for unbelievable service over countless years" which Interim Provost Lawrence Schovanec echoed adding his congratulations and noting that the Top Techsan award is one of the really meaningful awards at TTU.

NWI Researchers Awarded NSF CBET Funding



NWI Research Faculty Dr. Brian Hirth and NWI Director Dr. John Schroeder have been awarded funding by the National Science Foundation Chemical, Bioengineering, Environmental and Transport Systems (NSF CBET) program for their proposal to collaborate between Texas Tech University (TTU) and multiple industry partners using research-grade radars and regional wind farms. Titled "Building the Foundation for Smart Wind Farms through First-Order Controls Opportunities based on Real-Time Observations of Complex Flows," the project will use the two

mobile TTU Ka-band radar systems to study complex flows and turbine-to-turbine interaction within various wind farms in the region. Currently, there is a dearth of real-time wind data fed into wind farm control systems, and individual turbines are unable to react in a timely manner to rapidly changing wind conditions.

According to Lead PI, Dr. Brian Hirth, a key aspect of this project will be the collaboration with wind farm operators who will manually control turbine operation (e.g. yaw a turbine, turning turbines on and off, etc.) during periods of radar data collection to see the impact on the wind flow through the entire wind farm. The radar measurements will then be used to help develop the next generation of "smart" wind farm controls. This project has the potential to transform how wind farms operate by providing operators with comprehensive and timely wind maps, that when used in real-time, will lead to more efficient and higher-performance wind farms.

"This is an exciting opportunity for TTU to remain on the forefront of wind energy research. It's a unique chance to collaborate with industry to help develop the next generation of smart wind farms," added Dr. Hirth.

The NSF CBET program is part of the Directorate of Engineering, and funds fewer than 20% of its total applications for research. The project is funded for 30 months starting in September.

TTU NWI and Group NIRE co-host IP Roundtable



TTU's NWI and Office of Technology Commercialization, along with Group NIRE, hosted a breakfast roundtable focusing on renewable energy and intellectual property issues.

Titled "Positioning Renewable Energy for Commercial Success", the event featured Daniel Chalker (IP attorney with Chalker Flores Law Firm), Dr. Carsten Westergaard (President of Nextra, Inc.), Drew Bond (VP of public policy with Battelle), and Mark Harral, CEO of Group NIRE. (See photo left.)

The breakfast was focused toward faculty and graduate students who are working on NWI research projects to learn more about working with industry partners, regulatory hurdles for wind energy technology, Intellectual Property, and commercializing early stage research.

NWI Has a New Home...



The National Wind Institute (NWI) now has a new place to hang its multiple hats. After a busy summer, the NWI team is all moved into the building currently called the Old Student Media building (just behind the old MCOM building). The building underwent substantial renovations recently and enables both the former WiSE and TWEI teams to be under one roof at the same time to support collaboration and make effective use of resources. Thanks to all who have helped make this large project a success. Your work is appreciated.

Photo Credit: Liz Inskip-Paulk, NWI. Brinia Pearson, NWI Student Assistant.