

Monthly CREW Update: October 2010

Here is an update on recent, current, and upcoming activities and opportunities:

Upcoming CREW opportunities and activities

1. CREW has just released its 2nd annual RFP for shared research, which can be found at: http://ecee.colorado.edu/crew/RequestForProposals/RFP_Announcement_2010.doc

CREW is soliciting proposals for highly innovative Seed Grant research projects covering all aspects of wind power generation. Seed Grant research proposals will be funded at up to \$50,000 modified direct costs for one-year. Subject to the availability of non-state CREW funds, projects led by NREL will be funded at up to \$75,000 (including overhead) to account for NREL's increased overhead rate. Proposals are due by 5pm MST on November 30, 2010. Proposals consist of a proposal cover sheet, a 2-page project description, a one-page biosketch for each PI/Co-PI, and a 1-page budget summary. The CREW Center Advisory Board (CAB) will score and rank proposals. Each member company in CREW has a representative on the CAB, and they will handle the reviews of the proposals. Funding decisions on the proposals are expected to be made by April 2011. Please download the CREW RFP from the above link for more information.

2. Please plan to attend our next CREW seminar, which will be given by David Corbus of NREL. David will talk on "Grid Integration of Wind Energy - The Eastern Wind Integration and Transmission Study," at *1pm* on Friday, November 5, in *ECCS 1B12* in the CU Engineering Center. Please note the time change and room change for this CREW seminar. More information about the seminar can be found at:

http://crew.colorado.edu/Newsroom/Events/2010Fall_Seminar3_DaveCorbus_NREL_Nov5.pdf

Recent activities

3. A core group of approximately 20 CREW faculty and researchers submitted a full proposal to the NSF IGERT (Integrative Graduate Education and Research Traineeship) program on September 30, where we are proposing to establish a new interdisciplinary wind energy graduate program. Thanks to our institutions and external sponsors for letters of commitments. We believe our proposal is quite strong, and we hope that NSF reviewers and program managers will think so too! ;-) Funding recommendations are expected to be made by April 2011. If funded, the program would start by Fall 2011.

4. Our 2nd CREW seminar of Fall semester was given by Professor Kim Stelson from the University of Minnesota on October 1. In addition to providing brief overviews of University of Minnesota's DOE-funded EOLOS wind power research center as well as their NSF Engineering Research Center for Compact and Efficient Fluid Power (CCEFP), Professor Stelson also discussed "Hydrostatic Transmission of Wind Power" as an alternative to mechanical transmissions through the use of gear boxes.

Other opportunities

5. Please alert students, recent graduates, and colleagues to the following opportunities:

a. Each year, the wind turbine manufacturer Vestas Wind Systems arranges an international case competition for engineering masters students called Winnovation. The competition challenges the students within different engineering areas through a preliminary case as well as a two day event at Vestas' Technology R&D centre in Aarhus in Denmark for the 30 lucky students chosen to proceed to the finals. This time the event is planned to take place on the 10th-11th of February 2011 and this year's focus areas are:

- Supply Chain Management
- Power plant/electrical engineering
- Quality in Production

The Winnovation competition is a great opportunity for masters students to challenge themselves within their field of study as well as creating a strong international network for themselves, both in Vestas but also among the other students participating. Submission of solutions for the preliminary cases runs until the 26th of November. For more information, and to enter the competition, please visit: <http://www.vestas.com/winnovation>

b. NREL's National Wind Technology Center has an immediate opening for a full time Postdoctoral Researcher. The assignment is for one year with possible renewal for up to three years. Work will support the DOE Wind and Hydro Power Program through the development and application of computer system dynamic models to assess engineering designs for offshore wind energy systems. This Post Doctoral position will work closely with NREL senior staff to develop and run computer codes that can estimate the performance, loads, and dynamic behavior of innovative offshore energy systems, including fixed-bottom and floating wind turbine concepts. Candidates will develop research plans to advance the computer analysis capabilities for coupled aerodynamic-hydrodynamic simulation models that are under development. Duties will involve the analysis and verification of field data, and the validation of physical modeling assumptions. The candidate must be a recent PhD graduate within the last three years. For more information, and to apply, go to http://www.nrel.gov/employment/job_openings.html , click on Search Openings, and enter 1476BR in the Requisition Number box.

c. The Department of Electrical & Computer Engineering at the University of Wyoming invites applications for a tenure-track faculty position at the rank of Assistant Professor. The position is open for all areas of power and energy including, but not limited to, transmission and distribution, generation, smart grids, sustainable energy, wide area measurement and applications, cyber security, stability and protection, and energy systems. The position includes a competitive start-up package. The position entails developing an externally funded research program with peer-reviewed publication activities, teaching at both the undergraduate and graduate levels, and mentoring MS and PhD students. Applicants must hold a Ph.D. in

Electrical Engineering or a related field. Screening of applications will begin December 15, 2010, and continue until the position is filled. Additional information about the Department is available at <http://www.eng.uwyo.edu/electrical> , and further information about this position and how to apply can be found at: <http://www.eng.uwyo.edu/electrical/misc/ECEfacultyAdvertisement100610.pdf>

d. The Department of Mechanical Engineering at the University of Minnesota invites applications for two or more openings at the level of tenure-track assistant professor or untenured associate professor. Other levels of appointment may be considered in exceptional cases. The Department encourages applications of individuals with a strong foundation in one of the Department's areas of strength, including research in heat and mass transfer, aerosols, combustion and plasmas, biomechanics and biotransport, design, systems and controls. Candidates should have a strong vision to build a program in one of the broad areas of:

- Medical devices;
- Drive train and engines research;
- Indoor environment research.

Review of applications will begin immediately and applications will continue to be received until the positions are filled. More information about the position and on how to apply can be found at: <http://me.umn.edu/search/index.shtml>

e. The School of Engineering at the University of New Mexico (UNM) invites applications for the position of Department Chair, Department of Mechanical Engineering (ME) to begin July 2011. The University of New Mexico is the premier research university in the state of New Mexico, and the UNM Department of Mechanical Engineering is committed to excellence in both undergraduate and graduate education offering an ABET accredited BS degree program, as well as MS and PhD degrees. In addition to the traditional areas of thermodynamics, heat transfer, manufacturing & automation, materials science, engineering design, dynamic systems/controls, fluid mechanics, and computational mechanics, the ME faculty and students are engaged in several thrust areas such as Nanotechnology, Energy, and Bioengineering. For best consideration, applications should be submitted by November 30, 2010. For further information about the Department of Mechanical Engineering at the University of New Mexico, see <http://www.me.unm.edu> . Further application information may be found at: <http://unmjobs.unm.edu/applicants/Central?quickFind=59868>