



Monthly CREW Update

October 2012

Here is an update on past and upcoming activities as well as opportunities:

1. Seminar series:

On October 19, 2012, Dr. Branko Kosovic of NCAR gave a presentation entitled “Toward Multiscale Simulations of Flows in Atmospheric Boundary Layers for Wind Energy Applications”. Dr. Kosovic started his talk by emphasizing on the importance of scale interactions and the reasons why we need multiscale simulations, e.g., bridging mesoscale and large eddy simulations (LES) models. The Weather Research and Forecasting model (WRF) is the model used in the attempt to simulate flows across the scales from mesoscale to LES or microscale, such as needed in a wind farm environment. Dr. Kosovic presented the new WRF-LES implementation of a generalized actuator rotor disk model, and discussed the promising results from the simulations.

2. Seminar series:

Please join us on our next monthly seminars, which will take place on CU campus (DLC Collaboratory room 1B50), at 11am-noon, on the following Fridays:

- November 9: Wenzhong (David) Gao of Denver University (DU) http://crew.colorado.edu/Newsroom/Events/2012Fall_Seminar3_DavidGao.pdf and
- December 7, 2012: Jay Diffendorfer of Rocky Mountain Geographic Science Center, USGS <http://rmgsc.cr.usgs.gov/rmgsc/staff/diffendorfer.shtml>

As in the past, the seminars will be broadcast live, and this semester we are using Adobe Connect. Please spread the words to interested parties and join us on those next seminars!

Should you have any suggestions for speakers or topics of discussion for the future seminar series, we would like to hear from you! Please contact Florence Bocquet at bocquet@colorado.edu with your suggestions.

3. Proposal solicitation from DoD, where the proposal submission will open on August 27, 2012. The objective of the program is to develop a process for real-time radar location of targets in cluttered environments, specifically air traffic targets in environments complicated by complex natural (e.g., hills and valleys) and manmade (e.g., wind turbines) features. For more information, please visit the two following websites: <http://www.dodsbir.net/solicitation/default.htm> and http://www.dodsbir.net/sitis/display_topic.asp?Bookmark=43033



4. The **5th Annual Green Technologies Conference** announces "Rethink, Reimagine and Recreate Energy Technologies" on Thursday Apr 4, 2013 and Friday Apr 5, 2013 in Denver, Colorado.

Call for Papers is open

Please visit: <http://sites.ieee.org/greentech2013/conference-program/call-for-papers/>

Some important dates are:

- Submission Deadline: Nov 15, 2012

- Notification Due: Dec 20, 2012

- Final Version Due: Jan 21, 2013

For example of topic areas of interest and much more information, please visit:

<http://www.wikicfp.com/cfp/servlet/event.showcfp?eventid=25046©ownerid=41283>

For the latest information, please check the Green Technologies Conference website:

<http://www.ieeegreentech.org>

Abstract submission deadline: November 15, 2012.

5. NREL is holding its **2nd workshop on Wind Energy Systems Engineering** on January 29-30, 2013 with some follow-on meetings planned for the 31st and 1st. The first workshop was held in December 2010 and brought together members from academia, the national laboratories and industry to look at how systems engineering is used and holds potential for support of wind energy system research, design and development. There has been a significant growth of interest in the area since that time, and NREL is excited about again bringing together various world experts in the area of systems engineering with particular applications to wind energy. Below is the save-the-date flier with general information about the event:

http://crew.colorado.edu/Newsroom/Events/2013-Jan29_NREL-WindEnergySystemsEngineeringWorkshop.pdf

Formal registration instructions and information about poster abstract submission will be coming soon.



6. Call for Applications: Graduate Student Seminar on Energy Ethics and Society. The Center for Engineering, Ethics, and Society calls for students to apply to attend the National Institute on Energy, Ethics, and Society (NIEES), a week-long educational seminar for about 20 graduate students or postdoctoral fellows doing energy-related research, which will train them for leadership in the fields of energy ethics and energy ethics education. It is sponsored by the NAE and it will be held at the Arizona State University campus in Tempe from April 7-13, 2013. This exciting activity will allow these students to examine the ethical and societal issues associated with U.S. energy choices through lectures and discussions, work on individual and group projects, and visits to energy research facilities to talk with leading researchers and managers about the directions and ethical aspects of their work. Students will also develop plans for continuing activities on energy ethics at their home institutions. Participating faculty members will include well-known energy scientists, engineers, policymakers, and social scientists and ethicists. Stipends and travel support will be available for five to ten applicants from US programs. Guidelines for applications can be found at <http://onlineethics.org/Projects/EESE/NIEES.aspx>.

Applications will now be accepted between October 31st and November 30th, 2012 and reviewed as they are received until all positions are filled.

7. New Book Announcement: “Grid Integration and Dynamic Impact of Wind Energy”
by Vijay Vittal and Raja Ayyanar, Arizona State University
Springer Series in Power Electronics and Power Systems
ISBN978-14419-9322-9 ISBN 978-1419-9323-6 (e Book)

Wind based renewable energy generation has had a significant resurgence in the past decade. This is primarily due to advances in technology driven by the advent of variable speed wind turbine generators, which include doubly fed induction generator based wind turbines as well as full converter permanent magnet synchronous machine based wind turbines. This book presents an account of the salient aspects of the various wind turbine technologies, details of the associated power electronic converters and their controls, and a comprehensive discussion of the impact of wind turbine generators on system dynamic performance of the electric grid.

8. Please alert students, recent graduates, and colleagues to the following opportunity:

- a. The Transmission and Grid Integration Group at NREL has an immediate opening for a full-time Postdoctoral Researcher to study topics related to numerical weather prediction models and their utilization in wind resource characterization and wind power forecasting. The initial appointment is for one year, with possible renewal for up to three years, depending on funding availability.

To apply, please go to http://www.nrel.gov/employment/job_openings.html and search for requisition 2707. Please note that the position is limited to anyone who has graduated from their Ph.D. In the last 3 years (or will graduate before the hiring date). Strong analytical skills and an ability to work with large data sets are a plus.

- b. Earth-related job search engine: EarthWorks is an extensive listing of physical science jobs. Numerous categories of interest: Renewable Energy, Electrical Engineering, Environmental Engineering, Climate/Atmospheric Science, etc. Please visit: <http://www.earthworks-jobs.com/>

Happy Halloween!

(If you wish to unsubscribe from our emailing list, please email Florence Bocquet at [hocquet at colorado dot edu](mailto:bocquet@colorado.edu))

