

WISE

WATERLOO INSTITUTE
FOR SUSTAINABLE ENERGY



LECTURE SERIES

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PRESENTED BY THE WATERLOO INSTITUTE
FOR SUSTAINABLE ENERGY

Friday, December 07, 2012
3:30 - 4:30 pm
DC 1304

CARBONACEOUS ADSORBENTS WITH UNIQUE BULK AND NANOSTRUCTURED PROPERTIES AND THEIR APPLICATIONS TO IMPROVE AIR QUALITY

Dr. Mark J. Rood

Racheff Professor of Environmental Engineering
Department of Civil and Environmental
Engineering
University of Illinois at Urbana-Champaign

An introduction about adsorption pertaining to air quality purification applications will begin the lecture. Currently used and new types of adsorbents will then be discussed, including their morphology, porosity, and composition. Air quality applications for adsorption will then be discussed, and in particular those technologies developed at the University of Illinois. Methods to improve adsorption for specific adsorbates will then be considered followed by a discussion about new materials to meet air quality engineering challenges of the future.

Biography



Mark Rood is the Ivan Racheff Professor of Environmental Engineering in the Department of Civil and Environmental Engineering, University of Illinois, USA. His research interests pertain to gas purification to effectively recover or dispose of materials before they are emitted to the atmosphere, and in-situ characterization of aerosols' optical and hygroscopic properties related to climate and emissions to the atmosphere. Mark was the Chief Editor of Journal of Environmental Engineering and associate editor of Journal of the Air and Waste Management Association. He has successfully advised 20 Ph.D. and 40 M.S. graduates.