UB's noted engineering colloquium begins Feb. 14

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The University of Bridgeport's School of Engineering opens its annual Spring Colloquium on New Frontiers in Engineering on Feb. 14.



Dr. Jungling Hu

Dr. Jungling Hu, assistant professor of mechanical engineering, will be the speaker in the opening presentation in the series. She'll speak on "Advances of Computational Fluid Dynamics in Engineering Analysis and Design."

The talks are free and open to the public. They're in Dana Hall, 169 University Avenue, in the heart of the university campus, in Room 107, from 4 to 5 p.m.

Dr. Saikat Ray, series coordinator and a professor in the school's Electrical and Computer Engineering Department, said the colloquium brings in distinguished speakers from a broad range of institutes and disciplines and exposes students and others to the cutting edge ideas in the field,

Computational fluid dynamics, the subject of Dr. Hu's talk, was introduced in the early 1960s as a specialized engineering tool for the aerospace, defense and nuclear power industries. Due to the rapid growing of powerful computer resources and the development of CFD software packages, the last two decades have seen an expanding growth of CFD application in engineering analysis and design. There is a rising issue with the quality and reliability of industrial CFD simulations when more and more companies are integrating their CFD tools into their design processes.

Hu's talk will present CFD as an analysis and design tool and its development trend and challenges. The focus of the talk will be on turbulence modeling and industrial applications.

Dr. Hu has bachelor's and master's degrees in engineering from Huazhong University of Science and Technology and Ph.D. and postdoctoral training from University of Missouri-Rolla (now Missouri University of Science and Technology). Her research areas include computational fluid dynamics, numerical modeling of welding processes, laser material processing, thermal management of electronic devices and systems, and micro-/nano- scale energy transport. She is a member of ASME and ASEE.

Other speakers and topics in the series are:

- Feb. 21, Kimon Valavanis, University of South Florida, "Robotics"
- Feb. 28, Julie Newman, Yale University, "Sustainability Management"
- March 20, Saikat Ray, University of Bridgeport, "Computer Networking"
- March 27, Birsen Yazici, Rensselaer Polytechnic Institute, "Signal Processing"
- April 3, Ramez Elmasri, University of Texas-Arlington, "Computer Database"
- April 10, Jung Han, Yale University, "Semiconductors"
- April 17, Buket Barkana, University of Bridgeport, "Speech Processing"
- April 24, Zheng Li, University of Bridgeport, "Biomedical Devices"
- May 1, Pei-Chung Wang, General Motors, "Materials."

All presentations will be from 4 to 5 p.m. in Dana Hall, Room 107.