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Honoree Keynote No. MON-AM1



Soroosh Sorooshian
University of California
Irvine, CA, USA

Time: 09:00-10:00
Day Monday June 4, 2018
Chair: Mo Jamshidi, USA
Venue: Stevenson Ballroom A

*Climate Variability and The Global Hydrologic System:
Efforts in Monitoring, Modeling and challenges in
forecast Changes*

ABSTRACT: In response to society's need for more effective tools to address hydrologic hazards and manage water resources systems, engineers and scientists have become more reliant on the use of predictive models and stochastic methods. Depending on the problems, the hydrometeorological information needed may range from hourly forecasts (i.e., in the case of flash floods) to seasonal to inter-annual (i.e., in the case of reservoir operation), and to decadal to century (i.e., in the case of long range water supply planning and structural designs). While there is a rich body of literature reporting on progress related to both, "weather-scale" and "climate-

scale” hydrologic predictions, many challenges face the research community attempting to extend the lead time and accuracy of predictions.

The presentation will provide a summary of both the progress as well as the related challenges in the three pillars of hydrometeorological prediction system (models, observations and parameterization). It will be a personal reflection of over 3 decades of research and experience with hydrologic modeling and involvement with a number of international initiatives.

Bio: Soroosh Sorooshian is a Distinguished Professor of Civil and Environmental Engineering and Earth System Science Departments and Director of the Center for Hydrometeorology & Remote Sensing (CHRS) at University of California Irvine. His area of expertise includes the interface of global hydrologic cycle, and climate system. He is a member of the U.S. National Academy of Engineering (NAE); the International Academy of Astronautics (IAA); and the World Academy of Sciences (TWAS).

Among his other honors: Recipient of the 2017 Ven Te Chow Award of the American Society of Civil Engineers’ (ASCE); named the 2014 Einstein Professorship by the Chinese Academy of Sciences (CAS); the 2013 recipient of the American Geophysical Union’s (AGU) Robert E. Horton Medal; Recipient of the 2010 4th Prince Sultan Bin Abdulaziz International Prize for Water Resources Management & Protection; recipient of the 2005 NASA Distinguished Public Service Medal; the 2012 Eagleson lectureship, Consortium of Universities for the Advancement of Hydrologic Science (CUAHSI); honorary Professor at Beijing Normal University, China 2010; named the Walter Orr Roberts Lecturer, American Meteorological Society (AMS), 2009; recipient of AMS Robert E. Horton Memorial Lectureship, 2006; and the William Nordberg Memorial Lecture at the NASA Goddard Space Flight Center in 2004

He has served on numerous advisory committees, including those of NASA, NOAA, DOE, USDA, NSF, EPA, and UNESCO and has testified to both U.S. House of Representatives and U.S. Senate Committees on issues related to water, climate and satellite programs.