



OKLAHOMA

EPSCoR UPDATE

Promoting Innovative Research

OK NSF Established Program to Stimulate Competitive Research | August 2022

Two Newly Hired Faculty Joined OU and OSU through S³OK Project

The Socially Sustainable Solutions for Water, Carbon, and Infrastructure Resilience in Oklahoma (S³OK) researchers aims to develop and test socially sustainable, science-based solutions for complex (“wicked”) problems at the intersection of land use, water availability, and infrastructure in Oklahoma (OK). S³OK will employ a framework informed by theories of public policy learning to invest in science at the intersections of four *Focus Areas*: (1) changing sub-seasonal to seasonal weather patterns (S2S), (2) variable and marginal quality water supplies (V-MQW), (3) shifting terrestrial water and carbon dynamics (TWCD), and (4) sustainable water and energy infrastructure (SI).

One of the goals of the S³OK project is to build human infrastructure of the collaborating universities through new faculty hires. To help build the human capacity of the SI and TWCD teams, two faculty members were hired at the University of Oklahoma (OU) and Oklahoma State University (OSU) through the S³OK project early this year.



Arif Sadri has joined the School of Civil Engineering and Environmental Sciences, OU as an assistant professor. His research focuses on how transportation systems depend on social and other physical systems in the context of natural and man-made hazards. He specializes in resilience engineering, evacuation modeling, shared mobility, social influence modeling, machine learning, agent-based modeling, and network modeling.

Sadri joins OU from Florida International University, Miami, Florida where he was an assistant professor. He earned his doctorate (2016) and master’s degrees (2012) in transportation engineering from Purdue University, West Lafayette, Indiana, and bachelor’s degree in civil engineering from Bangladesh University of Engineering and Technology, Dhaka, Bangladesh.

“Dr. Sadri will lead SI tasks related to modeling infrastructure networks and propagating uncertainties across these networks,” Muralee Mura-leetharan (SI team lead) said.



Jia Yang has joined OSU’s Department of Natural Resource Ecology and Management. His research interests include ecological modeling, fire ecology, impacts of climate change and disturbances on land ecosystems, natural resource conservation, and GIS and remote sensing applications in natural resources.

Yang joins OSU from Mississippi State University where he was an assistant professor. He earned his doctorate degree in forest ecology from Auburn University, Auburn, Alabama and bachelor’s degree in agricultural meteorology from China Agricultural University, Beijing, China.

“Dr. Yang will help TWCD’s team to determine the effects of redcedar encroachment on wildfire fuels and behavior as well as other ecosystem services, and to determine trade-offs between carbon uptake and water loss and how these are affected by climate and ecosystem type,” Rod Will (TWCD team lead) said.

Upcoming Event:

OK NSF EPSCoR Research Retreat
September 22-23, 2022
Reed Conference Center
Midwest City

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