**OKLAHOMA NSF EPSCoR**

2024 ANNUAL STATE CONFERENCE

April 3-4, 2023 \* Oklahoma History Center \* OKC, okLAHOMA

# Day 1: Wednesday, April 3

8:30-9:30 Registration & Networking breakfast

9:30-10:00 Annual Conference Kickoff

* Welcome & Introductions (Kevin Wagner)
* Developing the S3OK Framework (Hank Jenkins-Smith)

10:00-12:00 **Water reuse & green stormwater** – State of the Science & Application in OK

* Setting the stage (Dr. Bob Nairn, Moderator)
* State of the science
	+ Testing wetland treatment trains for water polishing – James Queen (Advisor: Dr. Bob Nairn)
	+ CECs and water reuse (Dr. Kiran Mangalgiri
	+ Integrated transportation-stormwater systems – Imran Kays (Advisor: Dr. Arif Sadri)
	+ Predictability of pluvial events for stormwater planning (Dr. Tiantian Yang)
	+ Public perceptions of water reuse – Kaitlin D’iodosio (Advisor: Dr. Joe Ripberger)
* Table discussion & full group debrief

12:00-1:00 Networking Lunch

1:00-3:00 **Natural Hazards & Utility Resilience** – State of the Science & Application in OK

* Setting the stage (Dr. Muralee Muraleetharan, Moderator)
* State of the science
	+ Precipitation Whiplashes and Wildfires – Bryony Puxley (Advisor: Dr. Elinor Martin)
	+ Fuel load & fire modeling (Dr. Jia Yang)
	+ Ice storms and electrical grid resilience – Vinushika Panchalogaranjan (Advisor: Dr. Paul Moses)
	+ Fire risks and electrical grid resilience – Richard Campos (Advisor: Dr. Scott Harvey)
	+ Transportation network rerouting during wildfires – Imran Kays (Advisor: Dr. Arif Sadri)
	+ Willingness-to-Pay for a Resilient Electric Grid (Dr. Andrew Fox)
* Table discussion & full group debrief

3:00-3:15 Networking Break

3:15-3:45 Student Poster Introductions

3:45-5:30 Poster Session & Reception

6:00 Day 1 Concludes & Student Social Begins

# Day 2: Thursday, April 4

8:30-9:30 Networking breakfast

9:30-9:40 Day 2 kick-off (Kevin Wagner)

* 2023 S3OK Project Highlights

9:40-10:00 OEIE Update (Michael Miller)

10:00-12:00 **Produced Water Reuse** – State of the Science & Application in OK

* Setting the stage (Mark Krzmarzick, Moderator)
* State of the science
	+ Trends in drought and need for new water supplies – Jordan Christian (Advisor: Dr. Jason Furtado)
	+ Pre-Treatment of Produced Water with Microbes (Dr. Babu Fathepure)
	+ Solar Distillation (Dr. Prem Bikkina)
	+ Resource Extraction from Produced Water (Dr. Clint Aichele)
	+ Use of cleaned produced water for energy crop cultivation (Dr. Xiangming Xiao)
* Table discussion & full group debrief

12:00-1:00 Networking Lunch

* Special lunch presentation: Surviving the Megadrought (Rigia Bowman)

1:00-1:15 Conference Wrap-Up (Kevin Wagner)

* *Conference Take-Homes*
* *Announcements/reminders*
* *Thank you’s*

1:30-2:30 Team Leads Debriefing with External Advisory Committee

1:30-2:30 Student Professional Development

2:30-3:30 External Advisory Committee Discussion of Recommendations for Year 4