

**Fall 2023 International Symposium in Mathematics and Integrated STEM Education:
Water Quality in Global Contexts**

**UTSA Institute of Water Research, Sustainability & Policy (IWRSP)
UTSA Graduate Certificate in iSTEM Education
Indian Institute of Technology Mandi
Universidad de Guadalajara (UDG) -México
Universidad Politécnica de Piedras Negras (UPPN) -México**

The University of Texas at San Antonio, Mesquite, UC 2.01.24

Zoom: <https://utsa.zoom.us/j/93266296988>

Rector Raúl Vela Erhard, UPPN-México
Dra. Verónica Vargas Alejo, UDG-México
Dr. Saugata Datta, UTSA IWRSP
Dr. Harshad Kulkarni, IIT Mandi
Dr. Pousali Pathak, UTSA-IWRSP
Rubén Olivares, UTSA-IWRSP
Dra. Cynthia Lima, UTSA
Dra. Guadalupe Carmona, UTSA

Guest institution: Alamo Colleges District, San Antonio, TX
Mariela Cadena, Office of International Programs

Master of Ceremony:
Luis Montero Moguel, MSc, UTSA

Keynote Speakers

(15 minute presentation from each speaker followed by Q&A)

Dr. Saugata Datta
Professor and Department Chair, IWRSP Director, Earth and Planetary Sciences
UTSA-IWRSP
San Antonio, TX, USA

Dr. Pousali Pathak
Postdoctoral Fellow
UTSA-IWRSP
San Antonio, TX, USA



Poster Presentations

1	Mathematical knowledge and representations in models constructed by university students to explain an MEA	Dinorah Méndez Huerta, Luis Antonio Muñoz, Arely Romo Becerra, Luis Montero Moguel, Verónica Vargas Alejo Universidad de Guadalajara-México
2	Computational Informatics and Water Quality in STEM Classrooms	Paulina Salinas, UTSA
Q&A (Session 1)		
3	Public Meeting for Community Water Management Education in Comal County, TX: An Actor in Complete Participant Field Research	Donna Dancer, UTSA
4	Rainwater harvesting model eliciting activity to foster estimation processes	Arely Romo Becerra, Maureen Melina Marín Muñoz, Gilberto Vargas Hernández, Angélica Hernández Arellano, Verónica Vargas Alejo Universidad de Guadalajara-México
Q&A (Session 2)		
5	Water quality, nitrogen cycle, and project-based learning	Emily Wright, UTSA
6	The Nitrogen Cycle and Agriculturists: Guided Inquiry in Situated Cognition	Krista Schultze, UTSA
Q&A (Session 3)		
7	How can water quality develop scientific inquiry for school-aged children?	Tessa Martinez, Amy Mendez, Cali Moran, UTSA
8	Water Quality and Filtration Experiment	Amy Mendez, UTSA
Q&A (Session 4)		

