



GLOBAL WATER
ALLIANCE



Science History Institute
Telling the stories behind the science

Global Water Alliance 16th Annual Conference

Advancing WaSH Goals in a Changing World Through Innovation and Resilience

The challenges of climate change and resource shortages require innovative approaches to advance resiliency and mitigation in [WaSH](#) (water, sanitation, and hygiene).

October 19, 2023

Science History Institute, Philadelphia

Description: This 1-day conference will address the urgent need for new technologies and new data analytics in water management throughout the world in order to adapt to the future realities of more extreme weather patterns and events, sea-level rising, glacier melting and drought. Innovative thinking is needed. Successful implementation of new and modern (water) management tools will be highlighted; innovative approaches for community involvement and commercial buy-in will be debated; and practical solutions as brokered by governing bodies, market suppliers, and adjusted legal frameworks will be highlighted. All stakeholder groups will be represented.

Conference participants will be actively involved in the discussions and are encouraged to network and interact with those whose work will be on display. Continuing education credits can be earned. Proceedings from the conference will be made available to all participants.

PROGRAM AGENDA

All Day:

- Selected student research e-posters
- Display of recently developed technology for WaSH, original and/or adapted

Conference Proceedings:

8:00 AM Registration & Breakfast

8:25 AM Call to order: **Melissa Stevens, PhD**, GWA Conference Manager

8:30 AM Welcoming Remarks

David A. Cole, PhD, President and CEO, Science History Institute: *How and why we innovate: Telling the stories behind the science.*

Christiaan Morssink, MPH, PhD, President, Global Water Alliance: *Disseminating WaSH insights throughout the global landscape of communities, swimming through data.*

- 8:55 AM *Shaping community science for wetland restoration and resilience: Lessons from East Kolkata Wetlands.* [Virtual]
Dhruba Das Gupta, Project Director, Society for Creative Opportunities and Participatory Ecosystems (SCOPE)
- 9:15 AM Panel discussion: *On water literacy and data translation: Synthesizing scientific and local knowledges for community-based solutions.*
Moderator: **Faith Sternlieb, PhD**, Associate Director of Engagement, Center for Geospatial Solutions, Lincoln Institute of Land Policy
- **Kim Nelson, MPA**, Chief Operating Officer, True Elements: *Using water intelligence to adapt, evolve and succeed in a rapidly changing climate.*
 - **Jaime Andrés Cárdenas Sánchez**, Ph.D. Student in Biology, Wake Forest University: *Advancing sustainability: Nonwoven stormwater runoff filtration and access to safe water.*
 - **Scott Ensign, PhD**, Assistant Director, Research Scientist, Stroud Water Research Center: *Water monitoring, modeling, and assessment tools developed by Stroud Water Research Center.*
- 10:30 AM MORNING BREAK & SHI MUSEUM TOUR: *Color comes at a cost— BOLD: From test tube to textile.*
Guides: **Christy Schneider**, Senior Manager of Exhibition Projects and Programming, and **Jesse Smith, PhD**, Director of Curatorial Affairs, Science History Institute.
- 10:50 AM Panel Discussion: *Managed Aquifer Recharge – Resiliency applications.*
Moderator: **Vincent W. Uhl, PH, PG**, Groundwater Resources Consultant, UHL & Associates, Inc.
- **Faith Sternlieb, PhD**, Associate Director of Engagement, Center for Geospatial Solutions, Lincoln Institute of Land Policy: *Conjunctive Transboundary Water Management in the Desert Southwest: Lessons from the Santa Cruz River.*
 - **Ashish Daw, PG**, Senior Hydrogeologist, UHL & Associates, Inc.: *Structural and nature-based solutions to enhance groundwater/aquifer recharge.*
 - **Casey Clapsaddle**, Senior Hydrologist, Princeton Hydro LLC: *Stream channel erosion repairs, and flood plain restoration – Case studies.*
- 11:45 AM *On the need for “good and reliable” data to do water management well in the circulars of economy, seasons, and water: Case studies from off the grid WASH systems.* [Virtual]
Dr. Clive Lipchin, Director, Center for Transboundary Water Management, Arava Institute for Environmental Studies
- 12:00 PM Lunch and Keynote Address: *The power of possibility: Building a clean water movement.*
Marc Yaggi, Chief Executive Officer, Waterkeeper Alliance

- 1:15 PM Panel Discussion: *Voices of Youth: The next generation of WaSH innovators and global sustainability leaders.*
- Moderator: **Angelita Fasnacht, PhD, MPH, PE**, Visiting Fellow at Princeton University, Emeritus Board Member and Past President Global Water Alliance
- **Musa Wilson, Jaida Jordan, JaNiece Watters, and Safiyah Johnson**, Imhotep Institute Charter High School STEM Ambassador Program: *Cultivating global leaders in STEM.*
 - **Julia Stengel**, PHBB Project Leader, Public Health Beyond Borders at Temple University (Dominican Republic Project): *Public Health Beyond Borders in Enriquillo.*
 - **Okezue Bell**, Founder & Executive Director, Fidutam: *Technology and AI: Climate solutions' biggest asset or liability?* [Virtual]
- 2:15 PM *"To make the Delaware a more mighty river:" A virtual (and historic) field trip.*
- Jesse Smith, PhD**, Director of Curatorial Affairs, Science History Institute
- 2:50 PM AFTERNOON BREAK & SHI MUSEUM TOUR: *Playing dirty: From oil spills to clean water in five rolls of the dice— collecting environmental board games.*
- Guide: **Sherri Sheu, PhD**, Curatorial Fellow, Science History Institute.
- 3:15 PM Breakout Sessions:
- A. *Breaking Barriers: Gender and Equity Perspectives on Sanitation and Hygiene Innovations.* Lead: **Amisha Shahra**, Independent Consultant, The Water Center at Penn and The World Bank
 - B. *"It ain't all about technology and data" – Social, cultural, and economic considerations in achieving SDG #6.* Lead: **Christiaan Morssink, MPH, PhD**, President, Global Water Alliance
 - C. *Water sector innovation and resilience in developing countries.* Lead: **Yinusa Saheed Olanrewaju**, Curriculum Development Consultant, Global Water Alliance
 - D. Virtual Breakout Session (to be held over Zoom): *Unleashing the collective agency of educational institutions in achieving SDGs through service learning, exchange programs and study abroad opportunities.* Lead: **Godlove Fonjweng, PhD**, Executive Director of International Programs, Prairie View A&M University
- 4:05 PM Breakout Sessions Wrap-Up
- Christy Schneider**, Senior Manager of Exhibition Projects and Programming, Science History Institute
- 4:35PM *"Bringing the message to Bali":* Invitational Address by **Loïc Fauchon**, President of the World Water Council
- 4:45 PM Closing Remarks
- Debbie Heuckeroth, PE, ENV SP**, President-Elect, Global Water Alliance
- 5:00 PM Reception at SHI
- Conference attendees are invited to stay for networking, light refreshments, and an opportunity to visit the museum after-hours from 5:00 PM – 7:00 PM.

CO-HOSTED BY:



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