

FALLING
WALLS
ENGAGE

FALLING
WALLS
LAB

hannover **re**[®]



FINAL REPORT
GLOBAL SOLUTIONS
FOR WATER SECURITY
SUMMER SCHOOL BY **hr**|foundation

SUMMARY

FOUR DAYS TO WORK ON GLOBAL SOLUTIONS FOR WATER SECURITY

Hannover Re Foundation Summer School | 27 - 30 September 2023

Bringing together researchers, innovators and Science Engagers with the aim of facilitating a fruitful exchange of knowledge, ideas and the joint development of projects in order to find innovative solutions to the pressing issue of global water security.



5 LOCATIONS



**35 PARTICIPANTS
FROM 21 COUNTRIES**



75 APPLICATIONS



**GLOBAL SOLUTIONS
FOR WATER
SECURITY
SUMMER SCHOOL**
by hr foundation

12 SPEAKERS



7 SOLUTIONS



3 CO-CREATION DAYS



1 PITCH DAY

PROGRAMME

EMPOWERING INNOVATORS TO CREATE IMPACTFUL PROJECTS

From Input to Output

EXPLORATION

What Is Water?

Critical reflections on a not-so-clear question: Recent insights from anthropology and related fields.

Flowing Dreams: Saving Yakshawati's Fading Waters

Civic Sentinels For Justice: A Journey Into Our Senses

Science Is For Everyone: Exploring the many ways of engaging the public in science, discuss the importance of building a bridge between science and society.

Blue-Green Infrastructures And Nature-based Solutions For Water Security In Cities

Introducing the concepts of Blue-Green Infrastructure and Nature-based Solutions by providing real-world examples from Latin America and Europe.

Bioplastics: Production And Biodegradability

Introducing the basics of Water and Wastewater Biology.

Simulating The Water Cycle

Future scenarios of the impact of climate and socioeconomic change

IDEATION

Engagement Activities For Climate Neutral Schools In Berlin

Best Practices Of Communications In Science

Water Extremes On The Blue Planet

Exploring the impact and uncertainties of extreme weather events and defining related challenges.

Walk To Wasserkunst At Herrenhäuser Garten

Business Model Thinking - Moving From An Idea To A Solution With Systemic Impact

Developing initial ideas into a fully fledged proposal for an impact-oriented business or initiative, based on the business model canvas methodology.

CO-CREATION

The Art Of The Pitch - Why Storytelling Matters For Supporters, Stakeholders & Investors

Taking proposals for a solution to tackle a water-security problem in the world and working on a pitch decks and a storytelling framework that effectively crystallizes and communicates key ideas.

Impact-oriented Monitoring

Using impact-based monitoring to drive meaningful change and evaluate the effectiveness of project ideas.

Pre-Pitch

Initial feedback in the participant plenary to finalise the teams' presentations, fine-tune their visions and ensure they are ready to deliver a convincing presentation on the fourth day.

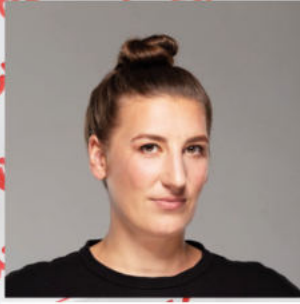
CULMINATION

SPEAKERS

RENOWNED EXPERTS PROVIDING INSIGHTFUL GUIDANCE FOR TRANSFORMATIVE INITIATIVES



Franz Krause
Global South Studies Center,
Cologne University



Johanna Barnbeck
Spread the Nerd



Jochen Hack
Institute for Environmental
Planning, Leibniz University
Hannover



Regina Nogueira
Institute for Sanitary
Engineering, Leibniz
University Hannover



Mikhail Smilovic
Water Security Research Group,
International Institute for Applied
Systems Analysis



Thorsten Wagener
Alexander von Humboldt
Professor of Hydrologic
Systems, University of Potsdam



Jonas Schorr
Urban Impact



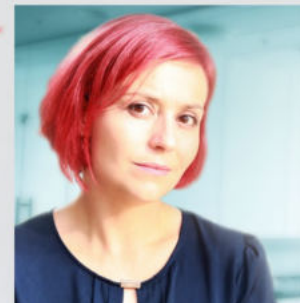
Pascal Vilhelmsson
Urban Impact



Laura Kirchoff
IMAP



Uta Giebel
IMAP



Claudia Zenkert
SEETREE

PROMOTING A GLOBAL PERSPECTIVE ON WATER SECURITY CHALLENGES AND SOLUTIONS



"I HAD THE PRIVILEGE OF ENCOUNTERING REMARKABLE INDIVIDUALS WHO ARE DEDICATED TO ADDRESSING WATER-RELATED CHALLENGES. THIS ENCOUNTER OFFERED ME THE PLATFORM TO SHARE INSIGHTFUL CASE STUDIES THAT SIGNIFICANTLY ENRICHED OUR PRESENTATION OF IDEAS. IN JUST TWO DAYS, OUR TEAM SUCCESSFULLY FORMULATED A ROBUST CONCEPT, EMPOWERING US TO PROPOSE A SOLUTION THAT CAN BRING ROBUST COMMUNITY LEVEL WATER SECURITY IN OUR REGION."

PARTICIPANT

THE PARTICIPATION OF THE SUMMER SCHOOL HELPED ME....

"...realise that there is so much work to be done especially with hard to reach communities. Most of our solutions were for communities that are already developed. We need to put more effort into reach out to those hard to reach communities."

PARTICIPANT

"...understand other realities of participants and other proposed solutions."

PARTICIPANT

"...meet people from so many different countries and backgrounds was invaluable - sharing all of our experiences of our homes and where we have worked."

PARTICIPANT

TEAM PITCHES

7 SOLUTIONS TO TACKLE GLOBAL WATER SECURITY

Working in multidisciplinary teams on impactful projects that strive towards a more resilient and sustainable world.

SMART WATER LAB



STEPHANIE OKEYO | BENGISU BERISPEK | KIRANMAI UPPULURI | ANICET NGOM

Transforming cities into blue-green cities through individual consulting/test results.

PLANNING FOR PLANET



BILEL MOSLAH | MBALI JIYANE | JOANNE DUFFY | CAMILA RAOTA

Integrated and future-proof neighborhood planning with all available tools.

WATER WATCHDOGS



GABRIEL ROJAS | ORIANA TREJO ALVAREZ | ADIVHAHO MPHAPHULI | ANNA BERTI SUMAN | KELECHI EZEUDENSI

Breaking the wall to water monitoring accessibility.

AQUAPURE



WRICHA JOHARI | AMARACHI ONYENA | AGATHA AGEMA | UUGANBAATAR ZULKHUU | DIEGO PADILLA VASSAUX

City-wide water treatment to reduce microplastics contamination in drinking water and soil.

AQUSFUND



CRISTIANO GOUVEIA | GUNSMAN BATBAYAR | MAUREEN GUMBO | PRISCILA PORTOCARRERO | MIKE MUMBO

Interactive platform to map prospective areas affected by water scarcity, marketplace for donations for wetlands.

H2OSURE



JOSEPH NGUTHIRU | CHUCK CHUAN NG | JAQUI GOLDIN | ENKHJARGAL SODNOMDARJAA | ABBY ORTEGA SANDOVAL

Insurance for water systems and waterborne diseases to treat the world's poor.

NEXTGEN WATER



TAMYLN SASHA NAIDU | AMIT KUMAR | MANOJ MATWAL | HUSSAM HUSSEIN

Hydrotech to filter water for farmers to increase yield.

“BEING PART OF A MULTIDISCIPLINARY TEAM HAS DEEPENED MY APPRECIATION FOR DIVERSE PERSPECTIVES ON GLOBAL CHALLENGES.”

PARTICIPANT

FALLING WALLS SCIENCE SUMMIT

NextGen Water

THE SOLUTION



WINNER'S SCHOOL: GLOBAL SOLUTIONS FOR WATER SECURITY

WHICH ARE THE NEXT WALLS TO FALL?

FALLING WALLS

7 NOVEMBER
**WINNER'S
PITCH**

UNLOCKING AGRICULTURAL ABUNDANCE WITH HYDROTECH'S WATER FILTRATION



AMIT KUMAR

Environmental Engineer
at Helmholtz-Zentrum
Dresden-Rossendorf
(Germany)



MANOJ MATWAL

Conservation &
Sustainability
Consultant at Harela
Society (India)



TAMLYN NAIDU

Chemical Engineer at
Centre for Water
Research & Development
at University of the
Witwatersrand (South
Africa)



HUSSAM HUSSEIN

Political Scientist at the
Royal Scientific Society
(Jordan)

(not present at Falling Walls Science Summit)

The team's innovative approach illuminated the risks of emerging contaminants like PFAS and pharmaceuticals in various water sources, from drinking to household and even recycled water.

The project's core is an advanced cavitation based oxidative technique (developed by CLEWATEC), targeting contaminants at their molecular level, and removing the need for filtration.

Proposing a partnership with farmers, the team aims to reduce the use of contaminated water, thereby enhancing the purity of agricultural produce and boosting yields. Moreover, a robust public awareness campaign intends to inform communities about these unknown water challenges and drive legislative and policy change.

This initiative advocates for tighter contamination controls and the adoption of refined purification methods, ensuring clean and safe water for all.

Conceptual in its origin, the project embodies the synergy of cutting-edge science and community engagement, setting a new benchmark for water purification solutions.

The team remains collaboratively engaged on this pivotal topic, while the technology undergoes further refinement through R&D.

PARTICIPANT SURVEY

BUILDING CONNECTIONS TO DEVELOP SOLUTIONS FOR A MORE SUSTAINABLE FUTURE

92% OF THE PARTICIPANTS WERE SATISFIED OR VERY SATISFIED WITH THEIR EXPERIENCE OF THE SUMMER SCHOOL.

92% (VERY) SATISFIED

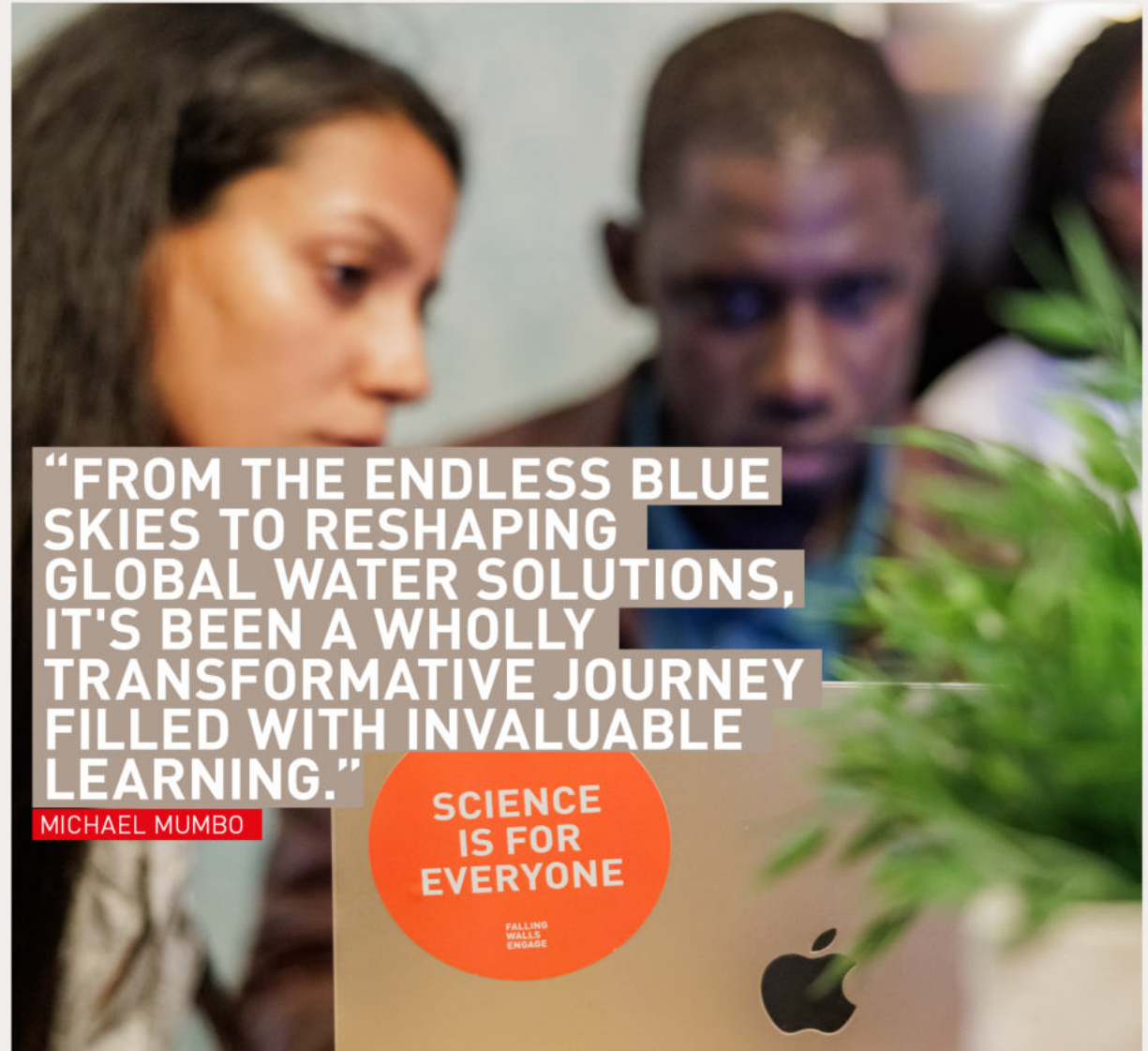
8% NEUTRAL

100% OF THE PARTICIPANTS ARE PLANNING TO STAY IN TOUCH WITH THEIR FELLOWS.

92% RATED THE NETWORKING OPPORTUNITIES AS VALUABLE FOR THEIR PROFESSIONAL AND ACADEMIC WORK.

92% VERY HAPPY

8% IT COULD HAVE BEEN BETTER



“FROM THE ENDLESS BLUE SKIES TO RESHAPING GLOBAL WATER SOLUTIONS, IT'S BEEN A WHOLLY TRANSFORMATIVE JOURNEY FILLED WITH INVALUABLE LEARNING.”

MICHAEL MUMBO

SCIENCE
IS FOR
EVERYONE

FALLING
WALLS
ENGAGE

COMMUNICATIONS

ENGAGING WITH THE PUBLIC, PROVIDING INFORMATION ABOUT THE PROJECT AND RAISING AWARENESS OF THE ISSUE

SOCIAL MEDIA POSTS



01.09.2023 | Project Information
2.122 Impressions, 42 Klicks, 1,98 % Klickrate, 49 Reactions, **15 shared posts** 5,28% Engagement Rate

07.09.2023 | Info about Public Event
1.153 Impressions, **78 Klicks**, 6,76 % Klickrate, 17 Reactions, 8 shared posts, **8,93 % Engagement Rate**

20.09.2023 | Public Event Invitation
940 impressions, 17 Klicks, 1,81% Klickrate, 21 Reactions, 7 shared posts, 4,79% Engagement Rate

25.09.2023 | Event Reminder
852 Impressions, 12 Klicks, 1,41% Klickrate, 13 Reactions, 3,17% Engagement Rate

05.10.2023 | Recap
2.282 Impressions, **275 Klicks**, 12,05% Klickrate, 48 Reactions, 16 shared posts, **15,21% Engagement Rate**

PRESS CLIPPINGS



05.09.2023 | Press Release in English and German

Innovercity – Haus der Innovationen, Veranstaltungskalender
<https://innover.city/event/global-solutions-for-water-security-pitch-prep/>

Zentrale Einrichtung für Weiterbildung, Leibniz Universität Hannover
<https://www.zew.uni-hannover.de/en/ueber-uns/news/news/news-details/news/global-solutions-of-water-security>

Informationsdienst Wissenschaft (idw)
<https://nachrichten.idw-online.de/2023/09/05/water-security-hannover-re-foundation-and-falling-walls-foundation-gather-international-experts-in-hannover>

BUILDING UPON OUTCOMES, LEVERAGING CONNECTIONS, AND APPLYING INSIGHTS ACQUIRED



STAYING IN TOUCH

What connections have been sustained in the recent months?

Camila Raota & Amit Kumar maintain an ongoing collaboration, synchronizing efforts on parallel projects in their respective hometowns, sharing technical insights.

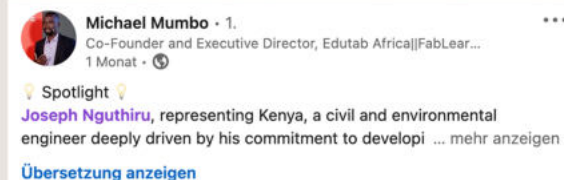
Kiranmai Uppuluri is set to journey to India, transporting technology from Poland to conduct comprehensive water quality tests, generating „hard data“ for **Manoj Matwal**.

Oriana Trejo Alvarez & Teresa Gutierrez remain in close contact with **Jaqui Goldin**, steering their engagement with the Mexico Hub towards shared objectives.

IMPLEMENTING KNOWLEDGE

How was the acquired knowledge effectively applied in a professional setting?

Bilel Moslah uses the knowledge he has acquired by leading a workshop as part of a master's degree programme and guiding the participants through every step of project realisation.



TAKING RESULTS FURTHER

How can the outcomes and efforts of the Summer School be disseminated and translated into real-world impact?

Manoj Matwal & Amit Kumar are diligently crafting a scalable and streamlined iteration of the water monitoring tool, poised for broader application across diverse regions.

Joseph Nguthiru, Amit Kumar, & Hussam Hussein convened at COP28, while **Camila** is orchestrating an exchange initiative for active involvement in **COP30** in Brazil.


Looking ahead, participants are gearing up for forthcoming events, with **European Science Engagement Association Conference 2024** & the **Mediterranean Water Forum 2024** in Tunisia topping the list.

WISHING FOR

What are visions or ideas for future encounters?

Envisioning future encounters involves a desire for regular **monthly meetings** and the contemplation of establishing a **platform** to showcase and harness the collective expertise of Summer School participants and speakers. Another concept is the cultivation of a **shared project** where all can contribute, fostering ongoing connections and maximizing the achievements of the Summer School.





**SOME EVENTS ARE EDUCATIONAL,
OTHERS ARE FUN. THE SUMMER
SCHOOL WAS BOTH.**

JOSEPH NGUTHIRU

**IT WAS LIFE CHANGING, I REALLY LOVED IT.
THANK YOU FOR THE OPPORTUNITY!**

EZEUDENSI KELECHI LOVETH

**FALLING WALLS FOUNDATION HAS A MAGICAL WAY OF BRINGING PEOPLE TOGETHER
AND PROMOTING A NATURAL ENVIRONMENT FOR IDEAS TO FLOURISH AND GROW! THE
SUMMER SCHOOL FOR WATER SECURITY REUNITED SPECIALISTS FROM THE MOST
DIVERSE AREAS TO CREATE SOLUTIONS FOR A BETTER WORLD. TOGETHER, WE PROVED
THAT IT IS POSSIBLE TO MAKE A DIFFERENCE!**

CAMILA SULIANI RAOTA

FALLING WALLS FOUNDATION

LOOKING FORWARD TO WORKING TOGETHER IN THE FUTURE



PLEASE CONTACT US



ANJA SCHOCH

Head of Falling Walls Engage
anja.schoch@falling-walls.com
+49 30 60 988 39-75



LARA ELENA KADEGGE

Head of Falling Walls Lab
lara.kadegge@falling-walls.com
+49 30 6098839-730

FALLING WALLS FOUNDATION gGmbH

Kochstraße 6-7
10969 Berlin, Germany