Securing humankind's vital resources

WORLD WATER DAY 2024 SPECIAL EDITION NEWSLETTER

Water for Peace

In an effort to raise awareness of major water-related issues and inspire action for innovative solutions, the United Nations created World Water Day, observed every year on March 22. This year's theme is 'Water for Peace,' underscoring the fact that even though water is a basic human right and intrinsic to every aspect of life, it is increasingly fought over as supplies dwindle due to problems including drought, overuse, and mismanagement.



The 'Water for Peace' theme is exemplified in a current J-WAFS seed grant project that is studying the Chilean mining industry's use of water sources that are already stressed due to climate change. Professor John Fernández, director of MIT's Environmental Solutions Initiative (ESI), and Scott Odell, a visiting researcher with ESI, are examining the converging impacts of climate change and mining and their effects on both local agriculture communities and Chilean glaciers, a

critical and beloved resource. The research aims to inform policies to reduce the social and environmental harms inflicted on mining communities and to protect their limited water sources.

READ MORE

STATS ON WATER CONFLICT

HIGHLIGHTING THE NEED FOR BETTER WATER COOPERATION

3 billion

More than 3 billion people worldwide depend on water that crosses national borders. Yet, out of 153 countries that share rivers, lakes, and aquifers with their neighbors, only 24 countries report having cooperation agreements for all their shared water. MORE INFO

388

Between 2010 and 2019, 388 water conflicts—cases in which water was used

388

as a weapon in a conflict or in which water was the cause of a conflict and the objective of violence—were reported in Asia alone. That's a rise from 111 cases from 2000-2009. MORE INFO

Researchers at the Pacific Institute, a global water think tank, compiled data

collected through an effort called the Water Conflict Chronology, that showed 543 instances of water-related conflicts worldwide from 2020 to

543

present day. MORE INFO

MORE INFO

543

80% In 2022 and the first half of 2023, about 80% of water-related conflicts that were reported occurred in four regions: Middle East, Sub-Saharan Africa, Eastern Europe (almost all related to the war in Ukraine), and Southern Asia.

OPPORTUNITIES AND EVENTS IN WATER

Civil/Wastewater Engineer, Research Scientist

Open to: M.S./PhD. in water areas

Deadline: Ongoing NONA Technologies, a J-WAFS desalination spinout, is seeking an electrodialysis engineer to build a pilot scale ICP (Ion Concentration Polarization) process for brackish water, produced water, and wastewater treatment.

MORE INFO

Atmospheric water harvesting speaker session

Open to: MIT community

Date: April 16, 2024 Join mechanical engineering PhD and postdoc student speakers, alongside guest speaker Ines Strohschein, Vice President Water Network Development and Investments at TAQA, an international energy and water company.

RSVP & MORE INFO



Brendan Smith to speak at **MIT Startup Conference**

Smith is the co-founder and CEO of SiTration, a J-WAFS spinout, which creates membranes for wastewater treatment, manufacturing, and more.

LEARN MORE

WATCH RECENT VIDEOS ON WATER



Nadia Christidi studies water strategies for cities

The former J-WAFS Fellow researches the complexities of urban water management amidst the looming challenges of climate change.

WATCH NOW



John Lienhard IV discusses water and research

Father of J-WAFS director MIT Prof. John Lienhard V, Prof. John Lienhard IV, of the University of Houston, talks about the unique properties of water.

WATCH NOW

INTERESTED IN SUPPORTING J-WAFS?

When you make a gift, you are making an investment in both the future of J-WAFS and our Institute-wide work to improve the productivity, accessibility, and sustainability of the world's water and food systems.

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MIT's unique strengths to bear on the many challenges our food and water systems face.

Our program catalyzes MIT research,

J-WAFS is an Institute-wide effort that brings

innovation, and technology for ensuring safe and resilient supplies of water and food while reducing environmental impact, to meet the local and global needs of a rapidly expanding and evolving population on a changing planet.

"Abhijit and I are collaborating to create an insubordinate, theatrical lecture in which Abhijit speaks about certain guiding principles to understand water, water crisis, water management." --Sarnath Banerjee, an MIT Center for Art, Science, and Technology visiting

artist hosted by Ford Foundation International Professor of Economics Abhijit Banerjee (no relation), speaking about their short films "Water Wars" which illustrate the nuances of water issues and economic development in a multi-character soap opera format.







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