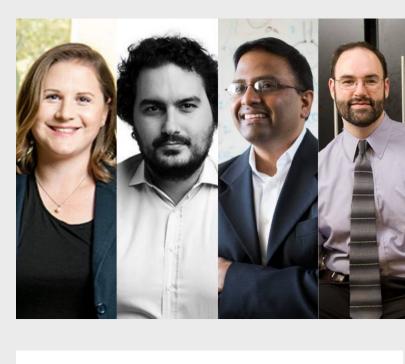


NEWS & ANNOUNCEMENTS



J-WAFS Pls work to boost crop resilience

Ariel Furst, Benedetto Marelli, Kripa Varanasi, and Michael Strano are developing technologies to fortify agriculture against climate change.

READ MORE

water use panel Scott Odell spoke at Stockholm University about increased mining activity in Chile leading to conflicts

J-WAFS researcher

speaks on mining and

over already scarce water resources.

change?

Which crops are most vulnerable to climate

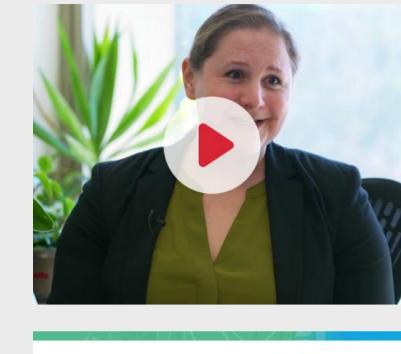
In an MIT Climate Portal interview, J-WAFS PI Dave Des Marais discusses the impact of climate change on staple

READ MORE

READ MORE

J-WAFS PI Ariel Furst

crop yields and farmers' need to adapt.



WATCH NOW

The MIT Industrial Liaison Program spoke to Furst about her work to utilize microbes for regenerative agriculture.

featured in ILP interview



J-WAFS student attends water conference

PhD student Mrin Penumaka gained valuable insights at the UNC Water and Health Conference last month.

READ MORE

MIT researchers discuss water challenges in nickel extraction

As nickel demand rises, Elsa Olivetti and others highlight the need to address the mining industry's effect on water rights and contamination.

Past J-WAFS PI assesses the impact of climate change on daily life

READ MORE

Elfatih Eltahir and his team use the concept of "outdoor days" to refer to the number of comfortable days for outdoor activities.

READ MORE MIT spinout featured in

The New York Times Pivot Bio, cofounded by J-WAFS PI Chris Voigt, has developed genetically modified bacteria as an alternative to



chemical fertilizers. **READ MORE**

AND OTHER OPPORTUNITIES

FUNDING

Grants for early-stage MIT research in areas related to water and food security, safety, and sustainability for

Call for J-WAFS Seed

Grant Letters of Interest

human need. Must submit a letter of interest, after which full proposals will

be welcome by invitation.

Deadline: December 9, 2024

Open to: MIT Pls

MORE INFO

MIT Climate and Energy

This competition, co-sponsored by J-WAFS, is for student startups in water, food, and/or agriculture. Compete for

a pool of \$50K, mentorship from

Open to: University students

Deadline: December 15, 2024

MIT Water, Food, and

Agriculture Prize

with entrepreneurs. MORE INFO

Martin Family Society of

Fellows for Sustainability

MIT faculty are invited to nominate an

outstanding student who is working in

sustainability, including water or food.

industry professionals, and networking

Prize

Open to: MIT PhD students

an area of environment and

Deadline: February 5, 2025

Deadline: December 2, 2024 (early-bird) This startup competition, organized by MIT students, is for student teams from around the world who have climate-

tech and energy startup ideas.

Open to: University students

MORE INFO

Interns for MIT desalination spinout MORE INFO

MIT \$100K Competition

kick-off

Open to: All familiar w/ desalination Deadline: December 18, 2024 Two interns will assist with pilot systems in seawater desalination, groundwater desalination for

agriculture, and produced water disposal for Harmony Desalting, cofounded by former student of J-WAFS director John Liendard, Quantum Wei. MORE INFO

Open to: Local students/researchers Deadline: December 3, 2024 This competition brings together students and researchers from across

MIT and greater Boston to launch their

talent, ideas, and technology into leading companies. Join this first round of pitches to compete for non-dilutive funding. MORE INFO

Deadline: January 6, 2025

& Exhibit Open to: All Deadline: January 26-29, 2025

NEWEA 2025 Conference

New England Water Environment Association's Annual Conference & Exhibit in Boston this January. MORE INFO

Connect with water and wastewater

industry colleagues and buyers at the

Open to: Graduate students in New England and California who focus on environmental improvement

2025 Switzer Fellowship

The fellowship includes a \$17,000 cash award, leadership training, and opportunities for professional development and grants.

MORE INFO

IN-DEPTH LOOK

JAMEEL INDEX DEBUTS AT WORLD FOOD PRIZE EVENT

J-WAFS researchers present a new framework

to assess countries' risks to food trade shocks

The J-WAFS-led Food and Climate Systems Transformation (FACT)

the Norman E. Borlaug International Dialogue, a prestigious conference hosted by the World Food Prize Foundation. Supported by Community Jameel, the Jameel Index is a new framework

Alliance launched the Jameel Index for Food Trade and Vulnerability at



scenarios to assess future vulnerabilities in the coming year. READ MORE

EVENTS

2024 MIT Research and Development Conference

of Pat Doyle and Cem Tasan's labs, all J-WAFS PIs. MORE INFO

Tuesday-Wednesday, November 19-20, 2024, All day, In-person

J-WAFS executive director Renee Robins will speak at this MIT Industrial Liaison Program event. Plus presentations from Olivier de Weck & Jongyoon Han, and tours



MCSC Annual Symposium (MIT ONLY) Wednesday-Thursday, November 20-21, 2024, All day, In-person Join the MIT Climate & Sustainability Consortium for conversation, collaboration, and strategic programming, including a welcome session with Dean Anantha Chandrakasan, as well as a poster session with the MIT community. MORE INFO

Webinars on climate change impacts to land, water, & food

Learn how the effects of climate change are impacting water and food security. Co-

November 21 and December 13, 9:00 - 10:00 a.m. ET, Online



hosted by the J-WAFS-led FACT Alliance and the University of Natural Resources and Life Sciences, Vienna (BOKU). MORE INFO

PUBLICATIONS

César Terrer studies carbon restoration and water stress

risks to water security in waterstressed and densely populated regions. READ MORE

The J-WAFS PI notes that achieving the

full potential of ecosystem restoration

human needs by 26%, posing significant

could reduce water availability for

J-WAFS Grand Challenge project publishes foundational work Ahmed Badran of Scripps Research and

the inaugural J-WAFS Grand Challenge

project to improve the photosynthesis

enzyme RuBisCO, published a paper on efficient genetic code expansion to inform future protein engineering efforts. **READ MORE**

AWARDS & RECOGNITIONS J-WAFS spinout wins

HydroGel, which grew out of a J-WAFS

national competition

Greg Sixt researches groundwater governance in Nebraska

J-WAFS director uses

John Lienhard and his team say

selective and bipolar ion-exchange

economy for lithium-ion batteries,

challenges caused by mining, like

water contamination.

READ MORE

offering a way to address ecological

membranes can create a circular

recycling

electrodialysis for battery

The J-WAFS researcher worked with Theresa Jedd of Technical University of Munich and Anthony Schutz and Mark Burbach from the University of Nebraska, Lincoln, to investigate how polycentric governance can conserve groundwater in agriculture.

J-WAFS PIs awarded MCSC

seed grants

Three current & prior J-WAFS

of soil organic carbon.

Coverage of J-WAFS

project wins gold

READ MORE

seed grant and subsequent Solutions researchers received grants from the grants to Professor Pat Doyle, won first MIT Climate & Sustainability place at the U.S. National Finals of the Consortium for projects that will CleanTech Open Global Forum! The examine aquifer water withdrawals; company's purification solutions aim to the suppression of nitrous oxide from transform the biopharma and food agricultural soils; and remote sensing

LEARN MORE

industries.

Massachusetts Institute of Technology

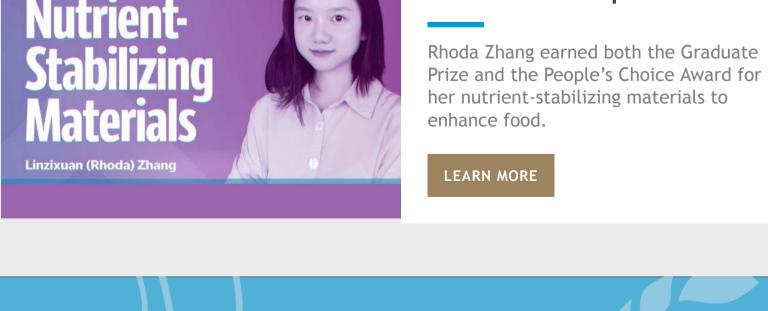
LEARN MORE

Kavli Science Journalism Award for his coverage of J-WAFS work to transform agricultural productivity. LEARN MORE

Past J-WAFS fellow wins

Inventors Competition

Jesse Nichols, of Grist, won a 2024 AAAS



her nutrient-stabilizing materials to enhance food. LEARN MORE

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,

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and sustainability of the world's water and food systems.

INTERESTED IN

FOR MORE INFORMATION ABOUT SPONSORSHIP OPPORTUNITIES, CONTACT: **RENEE J. ROBINS** Executive Director, J-WAFS

J-WAFS is an Institute-wide effort that brings MIT's unique strengths to bear on the many and resilient supplies of water and food while

challenges our food and water systems face. Our program catalyzes MIT research, innovation, and technology for ensuring safe

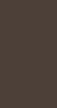
and evolving population on a changing planet.

reducing environmental impact, to meet the

local and global needs of a rapidly expanding

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