

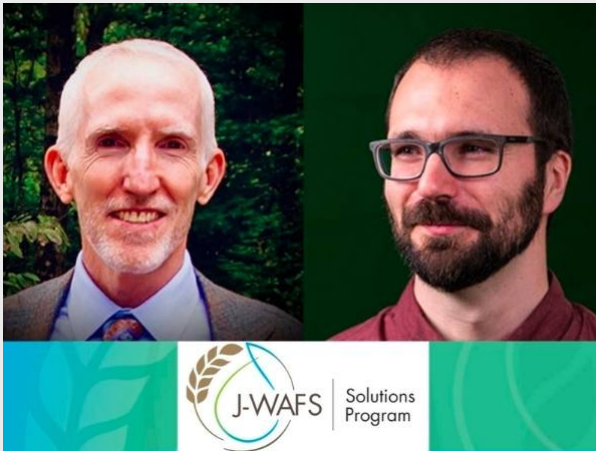


Abdul Latif Jameel  
Water & Food Systems Lab

*Securing humankind's vital resources*



## NEWS & ANNOUNCEMENTS



### J-WAFS awards new 2022 \$150K Solutions Grant

Patrick Doyle & Rafael Gomez-Bombarelli will develop industry-scale water treatment systems.

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### Company founded by MIT alums develops water purification system

J-WAFS director John Lienhard's past PhD student Prakash Govindan co-founded Gradient to address increasing drought.

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### J-WAFS' Greg Sixt serves as guest speaker for MISTI course

Sixt spoke about water governance between Israel, Jordan & Palestine during the course which explored solutions to issues in the Middle East.

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### Student from J-WAFS PI's lab takes on water treatment project

As a student in Julia Ortony's lab, Ty Christoff-Tempesta, PhD '22, invented a nanomaterial that can be used to

### J-WAFS PI discusses the downsides of carbon capture and storage

Charles Harvey says recently enacted CCS subsidies may handicap technologies that reduce carbon

clean contaminated water.

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dioxide production.

[READ MORE](#)



## Renee Robins speaks at Greentown Labs

J-WAFS executive director spoke at Sector Pitch Day about the importance of making food systems more resilient.

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## New book addresses need for hybrid crops

MIT Sloan professor Robert Pindyck explains that in addition to reduction of greenhouse gas emissions, more adaptation technologies are needed to mitigate climate change.

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## MIT research links seismometers and groundwater

Seismometers could be used for cost-effective monitoring and mapping of groundwater fluctuations during megadrought periods.

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## Scientists at MIT discover food-responsive neurons

The researchers found that neurons that light up when people see food may reflect the special significance of food in human culture.

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## Tech Review reports on MIT Climate Grand Challenges

The report looks at how MIT problem solvers are addressing issues like how to make agriculture greener.

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## J-WAFS director & team win \$150K prize



John H. Lienhard and some of his former students won the More Water Less Concentrate prize for their batch reverse osmosis system.

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## Facility to turn plant oils into renewable diesel

John Reilly, former co-director of the MIT Joint Program, says converting food crops to fuel is not currently feasible at scale but worth exploring.

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## Whitepapers outline contaminants in water

MIT Sea Grant researchers and others discuss "contaminants of emerging concern," as well as their transport and impacts in marine ecosystems.

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# IN-DEPTH LOOK

J-WAFS TRAVEL GRANTEES ATTEND WORLD WATER WEEK 2022

## J-WAFS students gain knowledge of water-related issues and solutions at World Water Week in Stockholm

J-WAFS offers travel grants for MIT graduate students to attend select international water conferences. This year, four students received grants to attend World Water Week in August. Jonathan Bessette, Chun Man Chow, Aditya Ghodgaonkar, and Gokul Sampath traveled to Stockholm, Sweden for the event, which offered close to 300 sessions and activities on global water issues.

The travel grants are made possible by the generous support of J-WAFS' Research Affiliate companies, Xylem, Inc. and GoAigua. Xylem is also a sponsor of World Water Week and the affiliated Stockholm Junior Water Prize, offering additional networking and professional development opportunities for the MIT students who attended the conference. The students were also able to tour the Xylem Stockholm facility, where they



interacted with engineers and other Xylem staff members, as well as the Stockholm Junior Water Prize finalists.

“I have been on many company and lab tours, and this was one of the most in-depth I had seen,” say Jon Bessette. “I had a fantastic time talking to their engineers, scientists, and managers about their organization’s role in water and climate,” he adds.

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## EVENTS

WATER AND FOOD



### MIT Sustainability Conference: Technologies and Industry Tuesday-Wednesday, September 20-21, 2022, In-person

J-WAFS research will be featured at this Industrial Liaison Program conference exploring new sustainable advances in the corporate world. [MORE INFO](#)



### MIT Sustainability Lunch (MIT ONLY)

Thursday, September 22, 2022, 11:30 a.m. - 12:30 p.m. ET, In-person

MIT’s Sustainability Initiative will give an overview of the sustainability landscape at MIT and how you can get involved. [MORE INFO](#)



### J-WAFS GERD Lecture Series (MIT, HARVARD, & TUFTS COMMUNITIES)

Wednesdays, Oct 12 & Nov 16, 2022 & Feb 15, 2023, 4:00 - 5:00 p.m. ET, In-person

J-WAFS visiting scholar Dale Whittington will give three lectures on the Grand Ethiopian Renaissance Dam. [MORE INFO](#)



### J-WAFS World Food Day Student Video Festival

Friday, October 14, 2022, 12:00 - 100 p.m. ET, Online

Join us for a video festival to honor the winning videos from the J-WAFS Student Video Competition: MIT Research for a Food Secure Future. [MORE INFO](#)



## MIT ILP Research and Development Conference

Tuesday-Wednesday, November 15 - 16, 2022, All day, In-person

MIT researchers, MIT Startup Exchange entrepreneurs, & others will discuss global challenges like those in food supply and security. [MORE INFO](#)

## IN CASE YOU MISSED IT



**J-WAFS researchers publish paper on supply chain challenges of irrigation firms:** The team surveyed firms in 35 cities in Senegal to assess risks and how managers address them. [MORE INFO](#)

**J-WAFS director, John H. Lienhard, co-authors working paper:** The paper considers the feasibility of a large-scale reverse osmosis desalination plant at the Diablo Canyon Nuclear Power Plant. [MORE INFO](#)

**J-WAFS Water Quality Month Twitter chat:** Miss our recent Twitter chat on water quality issues & research for solutions? Check out the chat threads! [MORE INFO](#)

**MIT spinoff develops equipment for waste biomass conversion:** J-WAFS researcher and co-founder of Takachar, Kevin Kung, is working to transform agricultural waste into clean-burning fuel. [MORE INFO](#)

## FUNDING

AND OTHER OPPORTUNITIES

### MIT's NE I-Corps

**Deadline: September 14, 2022**

Open to: New England researchers, engineers, and others with STEM-related technology

A free 3-week program to help researchers and engineers explore the potential applications of their new technologies, including those in water and food.

[MORE INFO](#)

### J-WAFS World Food Day Student Video Competition

**Deadline approaching: September 27, 2022**

Open to: MIT students/postdocs/22 alum

Submit a 2-minute video on agriculture and/or food systems research to possibly win a cash prize!

[MORE INFO](#)

# 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.

[DONATE ONLINE](#)

**FOR MORE INFORMATION  
ABOUT SPONSORSHIP OPPORTUNITIES, CONTACT:**

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J-WAFS is an Institute-wide effort that brings MIT's unique strengths to bear on the many challenges our food and water systems face.

Our program catalyzes MIT research, 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.



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