

RETHINKING WATER: A CRITICAL RESOURCE

A workshop to advance water research and teaching at MIT

KIRSCH AUDITORIUM – STATA CENTER 32-123



PROGRAM

THURSDAY, MAY 20TH, EVENING

Opening & Public Keynote Address

6:00 PM

Opening remarks

Philip Khoury

Associate Provost

6:15 PM

Keynote Address

Charles Duhigg

New York Times, author of special series “Toxic Waters”

7:15 PM

Reception

Areas Surrounding Kirsch Auditorium

FUNDED BY: The Office of the Provost; the MIT Environmental Research Council; the Deans of Science, Engineering, Architecture + Planning, Sloan, and Humanities, Arts & Social Sciences; the MIT Energy Initiative; the MIT Earth System Initiative; the Department of Mechanical Engineering; and the Aga Khan Program for Islamic Architecture.

FRIDAY, MAY 21ST, MORNING

Presentations by faculty members from the five Schools at MIT. Each Faculty member will present examples of research projects related to water as a physical substance, technological system, environmental hazard, and critical human and ecological resource.

9:00 AM

Welcome and Introduction

Dara Entekhabi

Department of Civil and Environmental Engineering

Opening Remarks

Susan Hockfield

President of MIT

9:15 AM

Rethinking Water: Framing the Problem

James Wescoat

Aga Khan Program for Islamic Architecture

9:30 AM

SCHOOL OF SCIENCE

Raffaele Ferrari

Department of Earth, Atmospheric and Planetary Sciences

10:05 AM

SCHOOL OF ARCHITECTURE + PLANNING

Anne Whiston Spirn

Department of Architecture and Urban Studies and Planning

10:40 AM

SCHOOL OF ENGINEERING

Remote Sensing, Hydrology, Modeling, Fate & Transport, Aquatic Biology & Chemistry, Health & Exposure

Charles Harvey

Department of Civil and Environmental Engineering

11:10 AM

Water Purification and Distribution

John Lienhard

Department of Mechanical Engineering

11:45 AM

SCHOOL OF HUMANITIES, ARTS AND SOCIAL SCIENCES

Harriet Ritvo

Department of History

12:15 AM

SLOAN SCHOOL

Sarah Slaughter

Sloan, Entrepreneurship and Strategic Management

12:30

Goals for Lunch Sessions

James Wescoat

Aga Khan Program for Islamic Architecture

FRIDAY, MAY 21ST, LUNCH SESSIONS

BREAKOUT SESSIONS FROM **12:40 PM TO 2:15 PM**. SEE LOCATIONS BELOW.

WATER IN METROPOLITAN LANDSCAPE DESIGN - ROOM 32-155

Eran Ben Joseph, Department of Urban Studies and Planning
Alan Berger, Department of Urban Studies and Planning
Shun Kanda, Department of Architecture
Chris Walley, Department of Anthropology
Kamal Youcef-Toumi, Department of Mechanical Engineering
Graduate Rapporteurs: Laura Delaney; Chris de Vries

WATER, TECHNOLOGY, ENGINEERING AND INNOVATION - ROOM 32-141

Martin Bazant, Department of Chemical Engineering
Steve Dubowsky, Department of Mechanical Engineering
Gautam Makunda, Department of Political Science
Phil Gschwend, Department of Civil and Environmental Engineering
John Lienhard, Department of Mechanical Engineering
Graduate Rapporteurs: Karen Noiva Welling; Eric Mackres

SCIENTIFIC PROBLEMS IN WATER - ROOM 32-124

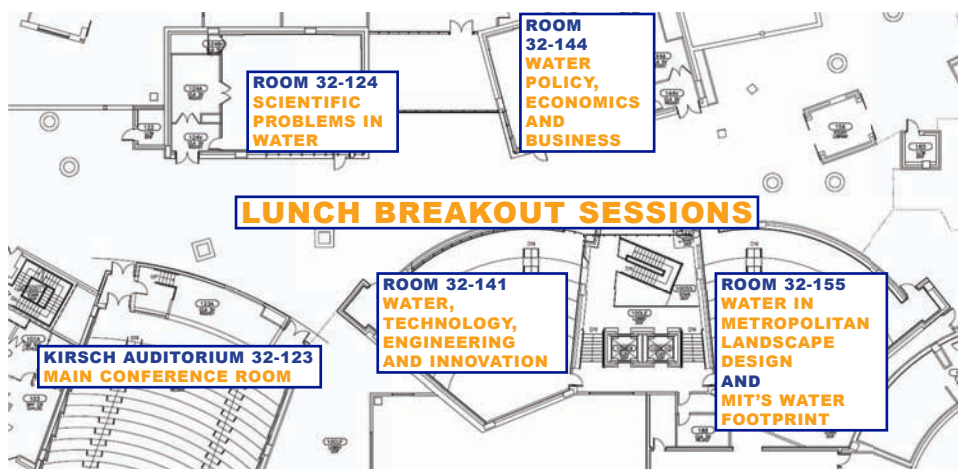
Dara Entekhabi, Department of Civil and Environmental Engineering
Raffaele Ferrari, Department of Earth, Atmospheric and Planetary Sciences
Stefan Helmreich, Department of Anthropology
John Marshall, Department of Earth, Atmospheric and Planetary Sciences
Martin Polz, Department of Civil and Environmental Engineering
Graduate Rapporteurs: Tyler Corson-Rikert; Sarah Madden

WATER POLICY, ECONOMICS AND BUSINESS - ROOM 32-144

Nicholas Ashford, Technology and Law Program
Franklin Fisher, Department of Economics
Kurt Sternlof, Earth Systems Initiative
Larry Susskind, Department of Urban Studies and Planning
Graduate Rapporteurs: Christopher Chung; Saira Hashmi

MIT'S WATER FOOTPRINT - ROOM 32-155

Ben Bradley, Public Service Center
Karl Haglund, Boston's Metropolitan District Commission
Harry Hemond, Department of Civil and Environmental Engineering
Jim Wescoat, Aga Khan Program for Islamic Architecture
William Colehower, Peter Cooper & Raul Varela, Department of Facilities
Graduate Rapporteurs: Maryam Eskandari



FRIDAY, MAY 21ST, AFTERNOON

AFTERNOON PANELS IN KIRSCH AUDITORIUM

WATER-ENERGY-FOOD NEXUS - 2:15 PM TO 2:50 PM

Ahmed Ghoniem, Department of Mechanical Engineering

Judy Layzer, Department of Urban Studies and Planning

Heather Paxson, Department of Anthropology

Sanjay Sarma, Department of Mechanical Engineering

John Reilly, Sloan, Center for Energy and Environmental Policy Research

WATER, SANITATION, HEALTH AND TECHNOLOGY - 2:50 PM TO 3:25 PM

Ed Boyle, Department of Earth, Atmospheric and Planetary Sciences

Karen Gleason, Department of Chemical Engineering

Susan Murcott, Department of Civil & Environmental Engineering

Harriet Ritvo, Department of History

Sarah Slaughter, Sloan, Entrepreneurship and Strategic Management

CLIMATE, HYDROLOGY, RISK AND ADJUSTMENT - 3:25 PM TO 4:00 PM

Dara Entekhabi, Department of Civil and Environmental Engineering

Paul O’Gorman, Department of Earth, Atmospheric and Planetary Sciences

John Marshall, Department of Earth, Atmospheric and Planetary Sciences

John Sterman, Sloan, System Dynamics Group

Larry Suskind, Department of Urban Studies and Planning

SCALING OF WATER SOLUTIONS - 4:00 PM TO 4:35 PM

Alan Berger, Department of Urban Studies and Planning

Harry Hemond, Department of Civil and Environmental Engineering

Charles Harvey, Department of Civil and Environmental Engineering

James Wescoat, Aga Khan Program for Islamic Architecture

Kamal Youcef-Toumi, Department of Mechanical Engineering

NEXT STEPS AND COLLABORATION - 4:35 PM TO 5:00 PM

Moderator: John Lienhard, Department of Mechanical Engineering

Participation of the conference organizers and

Peter Rogers, Environmental Engineering, Harvard University

James Yoder, Woods Hole Oceanographic Institution

WORKSHOP ORGANIZERS

Dara Entekhabi

Bacardi and Stockholm Water Foundations Professor.
Chair, Environmental Research Council, Department of Civil and Environmental Engineering and Department of Earth, Atmospheric and Planetary Sciences

Raffaele Ferrari

Cecil and Ida Green Professor of Oceanography
Department of Earth, Atmospheric and Planetary Sciences

Charles F. Harvey

Doherty Associate Professor
Department of Civil and Environmental Engineering

Philip S. Khoury

Associate Provost
Ford International Professor of History
Department of History

John H. Lienhard

Samuel C. Collins Professor of Mechanical Engineering
Director, Center for Clean Water and Clean Energy at MIT and KFUPM
Department of Mechanical Engineering

Harriet Ritvo

Arthur J. Conner Professor of History
Department of History

Kurt Sternlof

Executive Director
Earth System Initiative

James L. Wescoat

Aga Khan Professor of Architecture
Department of Architecture