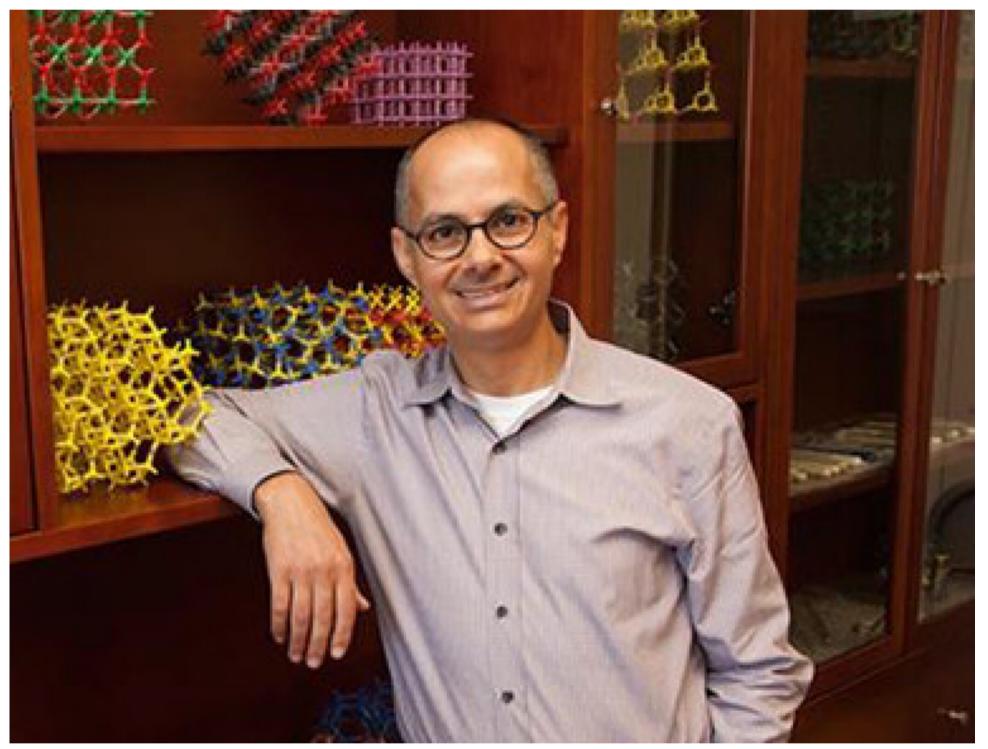


## The Nature of Water

MARCH 6TH & 7TH, 2023 MLK JR. BUILDING, WEST PAULEY BALLROOM, 2ND FLOOR 2495 BANCROFT WAY, BERKELEY, CA 94720

## PROFESSOR OMAR M. YAGHI

James and Neeltje Tretter Chair Professor of Chemistry University of California, Berkeley Elected member of the US National Academy of Sciences



## **TALK TITLE**

Shaping water behavior in water harvesting from air

## QUOTES

"Humanity has never faced a problem that we could not solve when we committed resources and had the will to solve it."

(c) UC Berkeley

BIOGRAPHY

Yaghi pioneered reticular chemistry, a new field of chemistry concerned with stitching molecular building blocks together by strong bonds to make open frameworks. His most recognizable work is in the design and production of new classes of compounds known as metal-organic frameworks (MOFs), zeolitic imidazolate frameworks (ZIFs), and covalent organic frameworks (COFs). MOFs are noted for their extremely high surface areas (5640 m2/g for MOF-177) and very low crystalline densities (0.17 g·cm-3 for COF-108). Yaghi also pioneered molecular weaving, and synthesized the world's first material woven at the atomic and molecular levels (COF-505). He has been leading the effort in applying these materials in clean energy technologies including hydrogen and methane storage, carbon dioxide capture and storage, as well as harvesting water from desert air.

MOLECULAR 🐼 FRONTIERS

"We need to care about the things that we do not see-we need to study those things and bring them fruitfully to society."

Professor Omar M. Yaghi







