Omar Yaghi's chemistry can harvest water from the air

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Mobile water sources that can be exhibited in the desert and which deliver liters of water. There is already thanks to so-called network chemistry. Converting carbon dioxide into fuel is another goal of the network chemistry.

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Omar M Yaghi, one of the founders of the so-called network chemistry, lectured for young researchers at Lund University. Photo: Sanna Ekstedt Larsson

These are relatively new materials , metal-organic networks (MOFs), which are a mixture of organic and metallic building blocks. At the molecular level, these are strong and porous and in the cavities, specific molecules can be captured. The networks can also be designed according to which specific molecule you want to capture.

Research is taking place around the world in the possible uses of network chemistry. Efficient hydrogen storage and the ability to cure cancer are two ways that are tested. In the US, there has been a long way to harvest water from the air and, according to researchers, there are soon machines that can provide several thousand liters of pure water per day.

In the program, Omar M Yaghi, who together with Michael O'Keefe has founded the network chemistry. Yaghi is a professor of chemistry at the University of California Berkeley. Ola Wendt, professor of inorganic chemistry at Lund University and Karolina Mothander, PhD student at Lund University also participates.

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