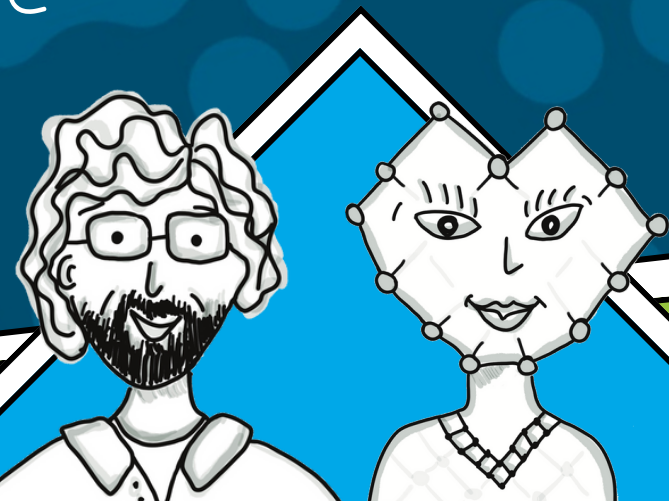
MOST-H_2

Nano the MOF & Professor Theodore save the planet!




PROFESSOR THEODORE
NANO THE MOF


Hi, I AM NANO THE MOF
I AM VERY SMALL AND I HAVE A SUPER-POWER!


WITH PROFESSOR THEODORE, I CAN SAVE THE PLANET!
DO YOU WANT TO DISCOVER HOW?

EPISODE 2

The super-power of Professor Theodore

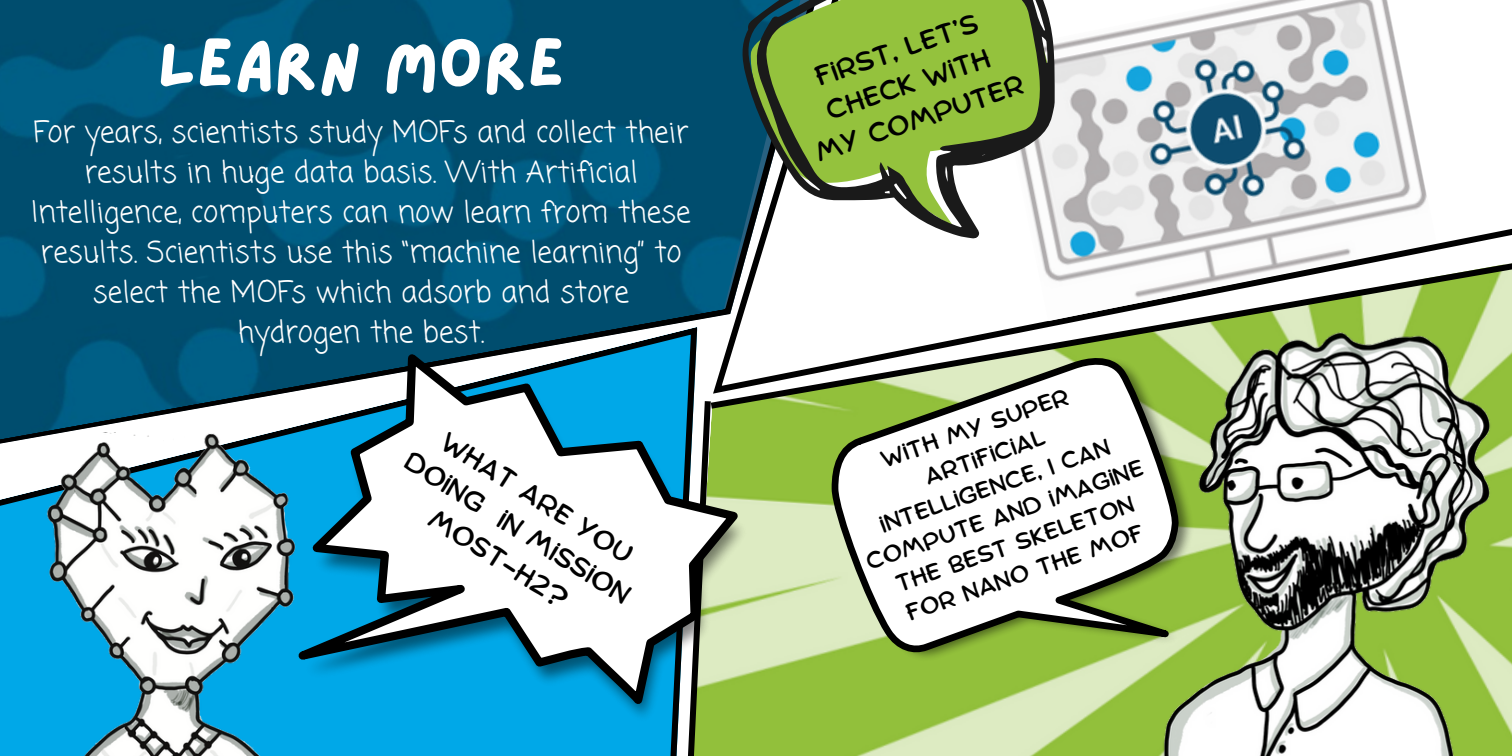

HI, I AM PROFESSOR THEODORE
I AM SUPER SMART AND I LOVE SCIENCE!

LEARN MORE

MOST-H2 is the name of a research project. Scientists of 8 European countries are working together to find new MOFs. They improve them to store more hydrogen.
They are also looking for new ways of producing MOFs, so that we can use them to store energy in the future.

LEARN MORE

For years, scientists study MOFs and collect their results in huge data basis. With Artificial Intelligence, computers can now learn from these results. Scientists use this "machine learning" to select the MOFs which adsorb and store hydrogen the best.



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It is difficult to find the best composition for MOFs. The structure can be made of different metals and many different organic linkers, which gives to the MOFs very different properties. It is also very difficult to produce MOFs and to make them as porous as possible. In the laboratory, chemists make different chemicals react together to produce the desired MOFs. This is named synthesis.

WITH MY FRIENDS, WE HAVE A FANTASTIC IDEA!

WE CONCENTRATE THE POWER OF NANO THE MOF IN CUBES!

AND WE CAN MEASURE THIS POWER WITH THE NEW TOOLS WE ARE BUILDING.

LEARN MORE

The higher the surface in the pores of a MOF, the more hydrogen it can adsorb. This can be done by compacting the MOFs in a monolith. This is a very stable and solid form, like a cube. In this monolith form the MOFs can adsorb much more hydrogen than when he was produced in a powder form.


THE END

THANK YOU

Nano the MOF and Professor Theodore got a lot of money from the European Union for helping to save the planet.
They say: "Thank you!"

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SOURCES

For writing the "Learn more" sections , the authors used vocabulary.com, kids.kiddle.co, academickids.com and similar sources

https://most-h2.eu/

Funded by the European Union