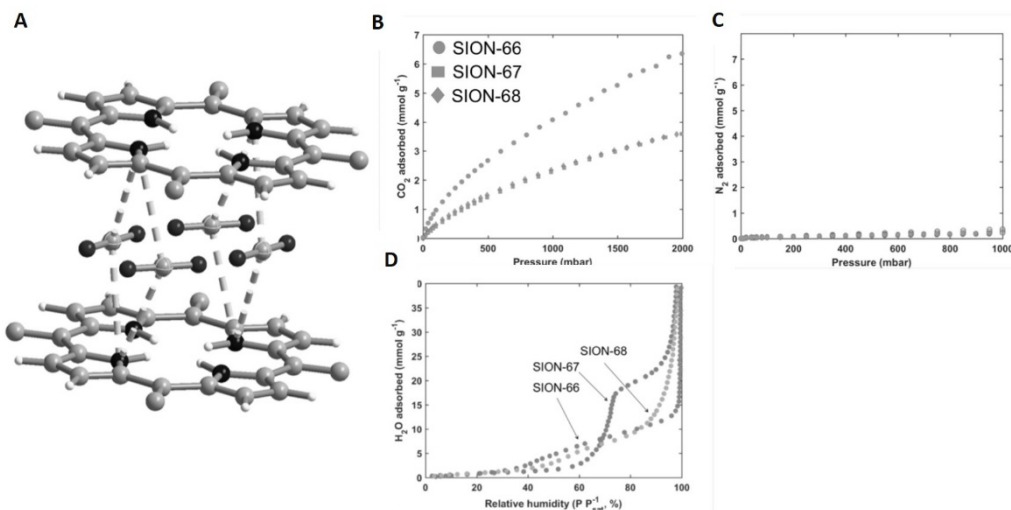


# MOFs for wet flue gas CO<sub>2</sub> capture



Ref. Nr

6.1823

Keywords

 CO<sub>2</sub> selective adsorption  
 Carbon capture and storage  
 Flue gases  
 Metal-organic frameworks

Intellectual Property

PCT/EP2019/060148

Publications

Nature | Vol 576 | 12

December 2019

Date

25/08/2020

## Description

Different technologies have been described to capture carbon from a gas but none that function in the presence of water. This represents an important limitation for applications to post-combustion gases.

The invention solves this problem with a new class of metal organic Frameworks (MOF) that can uniquely adsorb and capture CO<sub>2</sub> in the presence of water. Further, moderate heating (80 to 100 °C) can release the CO<sub>2</sub> from the MOF.

## Advantages

Excellent CO<sub>2</sub> selectivity and capture capacity under both dry and humid conditions.

## Applications

Post-combustion Carbon capture (wet or dry flue gas, carbon storage).

## Offering

Opportunity for licensing and/or collaborating.