This lightweight, high surface area material based on inexpensive aluminum is stable to 350 °C.

The compound shows great water stability, a necessity for flue gas CO₂ capture.

Transition metals can be added to the framework by simply soaking the material in salt solutions.

An added copper salt greatly increased CO₂ capacity and CO₂/N₂ selectivity.

Small amounts of precious metal salts supported on this porous framework may be useful for catalysis applications.