Improved efficiency and sustainability in the way we use our limited resources are crucial factors across many industry sectors.

Metal Organic Frameworks (MOFs), made up by joining metal atoms with organic linkers forming an array similar to a building scaffold, are the world’s most porous materials – they are almost entirely made of holes. One teaspoon of MOF may have as much surface area as an entire football field hidden inside it.

Like a sponge, the pore surfaces can store and release substances on demand, such as fertilisers or fuels, or, like a sieve, the uniform pore sizes can be used to separate one thing from another, such as natural gas from impurities or carbon dioxide from an exhaust stream.

Career development in this area is often seen as quite unconventional. This presentation will offer some perspectives on things that might help in this difficult pathway.
Bio:

Associate Professor Matthew Hill is an Australian Research Council Future Fellow and the Winner of a 2014 Australian Prime Minister’s Prize for Science. Matthew leads an interdisciplinary team of researchers that are actively involved with industry partners to bring exciting discoveries in the laboratory to market.

Recent publications