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# The 110<sup>th</sup> iCeMS SEMINAR

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**Wed 23 May 2012**  
**16:00-17:30**

## **MOFs for Selective CO<sub>2</sub> Capture**

Lecturer: **Dr. Christian James Doonan**  
The University of Adelaide

Venue: Room 308, A2 Building,  
Katsura Campus, Kyoto University

MOFs are a class of highly porous, crystalline materials that have been widely investigated for their gas adsorption properties. A feature of MOFs is their simple synthesis from metal-oxide and rigid organic building blocks that form the *joints* and *links*, respectively, of an open network. Accordingly, MOF materials can be constructed with pore architectures and chemistry tailored for a specific function. Such high levels of synthetic control have identified MOFs as promising materials for selective CO<sub>2</sub> capture. In this work we describe the synthesis and gas adsorption properties of new Functionalized MOF materials designed to preferentially bind CO<sub>2</sub>.

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**Hosted by:** iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University

