

CITATION FOR ASSISTANT PROFESSOR ZHAO DAN YOUNG RESEARCHER AWARD

This year's Young Researcher Award recipient, Assistant Professor Zhao Dan, is a rising star in the field of advanced porous materials and membranes. His investigations into metal-organic frameworks (MOFs) as adsorbent and membrane materials have uncovered their huge potential in separation processes.

Dan's group has simplified the scaled-up production of water-stable MOFs and pioneered the engineering evaluations of these MOFs as adsorbent materials for post-combustion CO₂ capture, which have been largely overlooked by the scientific community. Besides MOFs, Dan's group is also working on other advanced porous materials including covalent organic frameworks (COFs) and various cage compounds. By integrating material chemistry and engineering applications, Dan has made a conscious effort to bring the best of both fields to address several challenges in clean energy and environmental sustainability, including natural gas storage, CO₂ capture, smell sensing, and water treatment.

Dan's studies have generated 64 NUS-based research papers with a total citation of more than 6000, and 13 patents and patent applications. His expertise has already been recognised in his appointments on the editorial advisory board of two high ranking ACS journals: *Inorganic Chemistry* and *ACS Sustainable Chemistry* & *Engineering*. He is clearly on the path to becoming an international leader in the field of advanced porous materials. Currently, Dan is leading a project to commercialise his lab's gas sensing technology, which can be very useful in building Singapore towards a smart nation.

Please join me in congratulating Assistant Professor Zhao Dan on receiving the Young Researcher Award this evening!