

# Advance your career in science

with professional recognition that showcases  
your **experience, expertise and dedication**

## Stand out from the crowd

Prove your commitment  
to attaining excellence in  
your field

## Gain the recognition you deserve

Achieve a professional  
qualification that inspires  
confidence and trust

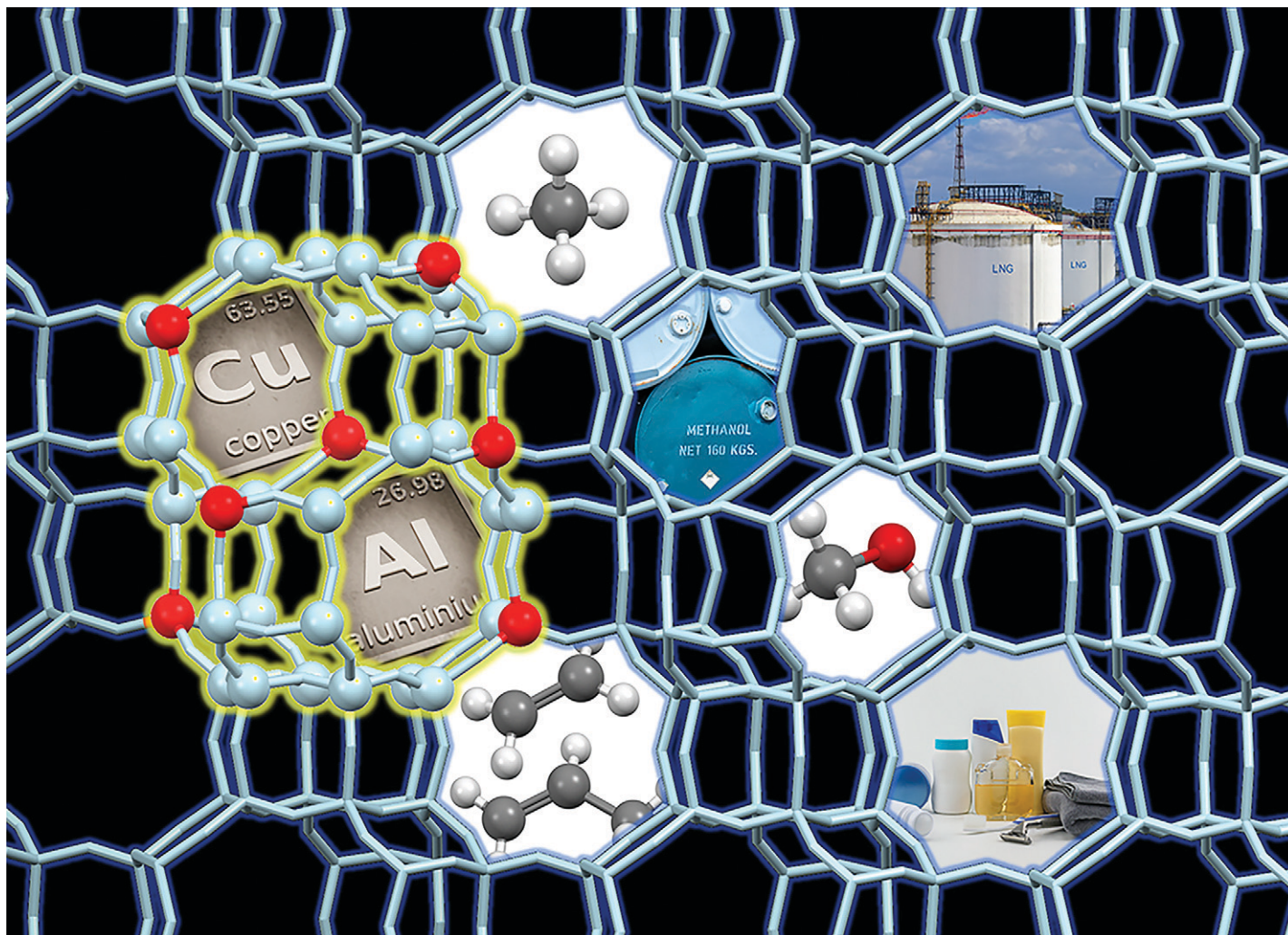
## Unlock your career potential

Apply for our professional  
registers (RSci, RSciTech)  
or chartered status  
(CChem, CSci, CEnv)

## Apply now

[rsc.li/professional-development](https://rsc.li/professional-development)





Showcasing research from Professor Toshiyuki Yokoi's laboratory, Institute of Innovative Research, Tokyo Institute of Technology, Japan.

Impacts of framework Al distribution and acidic properties of Cu-exchanged CHA-type zeolite on catalytic conversion of methane into methanol followed by lower hydrocarbons

This work highlighted the significance of the Al distribution in the CHA-type zeolite to the formation of active Cu species for oxidative conversion of  $\text{CH}_4$ ; isolated Al atoms in the zeolite framework are found to be advantageous for producing  $\text{CH}_3\text{OH}$ . The acid sites also played an important role in the production of hydrocarbons; produced  $\text{CH}_3\text{OH}$  is converted into hydrocarbons over the acid sites.

### As featured in:



See Toshiyuki Yokoi *et al.*, *Catal. Sci. Technol.*, 2023, 13, 2648.