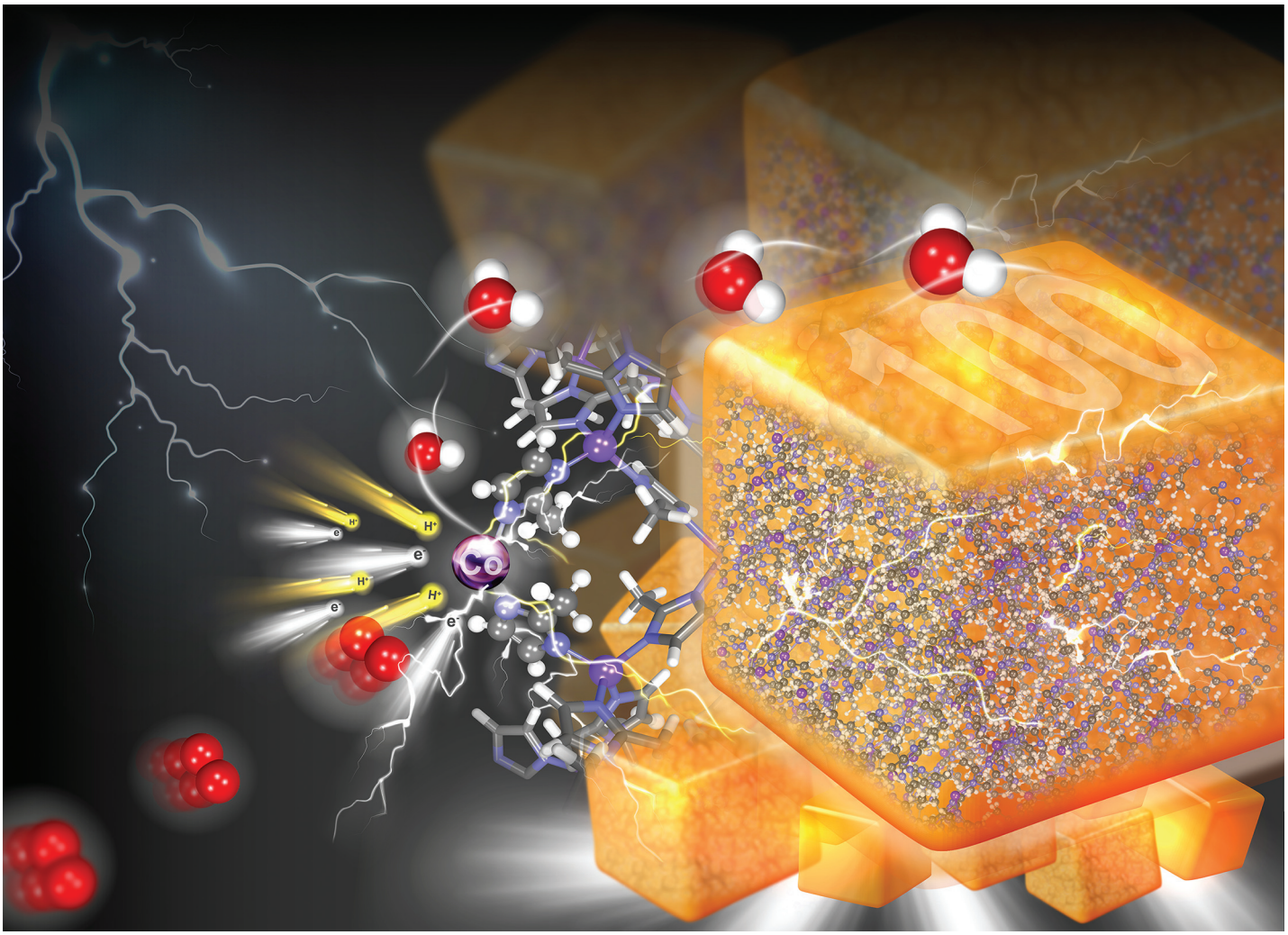

Showcasing research from the groups of Dr Kanokwan Kongpatpanich (School of Molecular Science and Engineering, Vidyasirimedhi Institute of Science and Technology, Rayong, Thailand) and Dr Supawadee Namuangruk (National Nanotechnology Center, National Science and Technology Development Agency, Pathum Thani, Thailand).

Impact of exposed crystal facets on oxygen reduction reaction activity in zeolitic imidazole frameworks

This work highlights the importance of crystal facets in electrochemical performances. ZIF-67 nanocubes synthesized by an anisotropic crystal growth process exhibit excellent catalytic performance and a fast kinetic process compared to its bulk structure. DFT demonstrates that the higher performance is governed by the enriched (100) facet, which provides more exposed Co^{2+} sites and exhibits a distinguished mechanism, resulting in improved ORR performances.

As featured in:

See Supawadee Namuangruk, Kanokwan Kongpatpanich *et al.*, *Dalton Trans.*, 2023, **52**, 15377.

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