



Highlighting a study on new generation organic material for application in a zinc-air battery by a team of researchers led by Prof. Manas K. Ghorai, and Prof Kamal K. Kar from the Indian Institute of Technology Kanpur.

Cobalt(II)-bridged triphenylamine and terpyridine-based donor-acceptor coordination polymer as an efficient trifunctional electrocatalyst

Multifunctional materials as the essence of futuristic innovations are illustrated. The donor-acceptor pair coordination polymer showed multifunctionality by exhibiting ORR, OER, and HER. The bifunctionality (ORR + OER) is leveraged by effectively utilizing electrocatalyst as cathode material for rechargeable Zinc-air batteries. Long-term stability and substantial voltage window demonstrated by the battery amount to a high utility source for energy conversion and storage devices.

As featured in:



See Manas K. Ghorai,  
Kamal K. Kar *et al.*,  
*J. Mater. Chem. A*, 2023, **11**, 8003.