

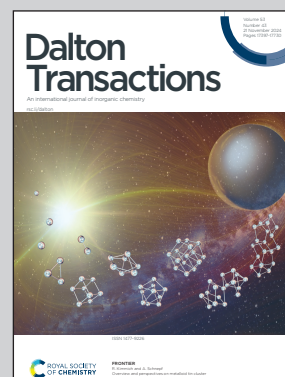
**Showcasing research from Professor Sumanta Kumar Sahu's laboratory, Department of Chemistry and Chemical Biology, Indian Institute of Technology (Indian School of Mines) Dhanbad, Jharkhand, India.**

**Rationally designed porous self-assembled nanoparticles for combinational chemo-photodynamic therapy**

This study presents zinc-coordinated quercetin-based self-assembled nanoparticles (ZnQ NPs) for dual-mode cancer therapy, combining chemotherapy with photodynamic therapy. Synthesized in a few minutes, these pH-responsive ZnQ nanoparticles utilize the anticancer properties of quercetin and show excellent water dispersibility and biocompatibility. Loading Chlorin e6 onto nanoparticles improves PDT efficiency by mitigating Chlorin e6 agglomeration. Overall, these innovative nanocarriers have significant potential for improving cancer treatment outcomes through combinational chemo-PDT.

Image generated with Google Gemini.

**As featured in:**



See Sumanta Kumar Sahu *et al.*,  
*Dalton Trans.*, 2024, **53**, 17465.