

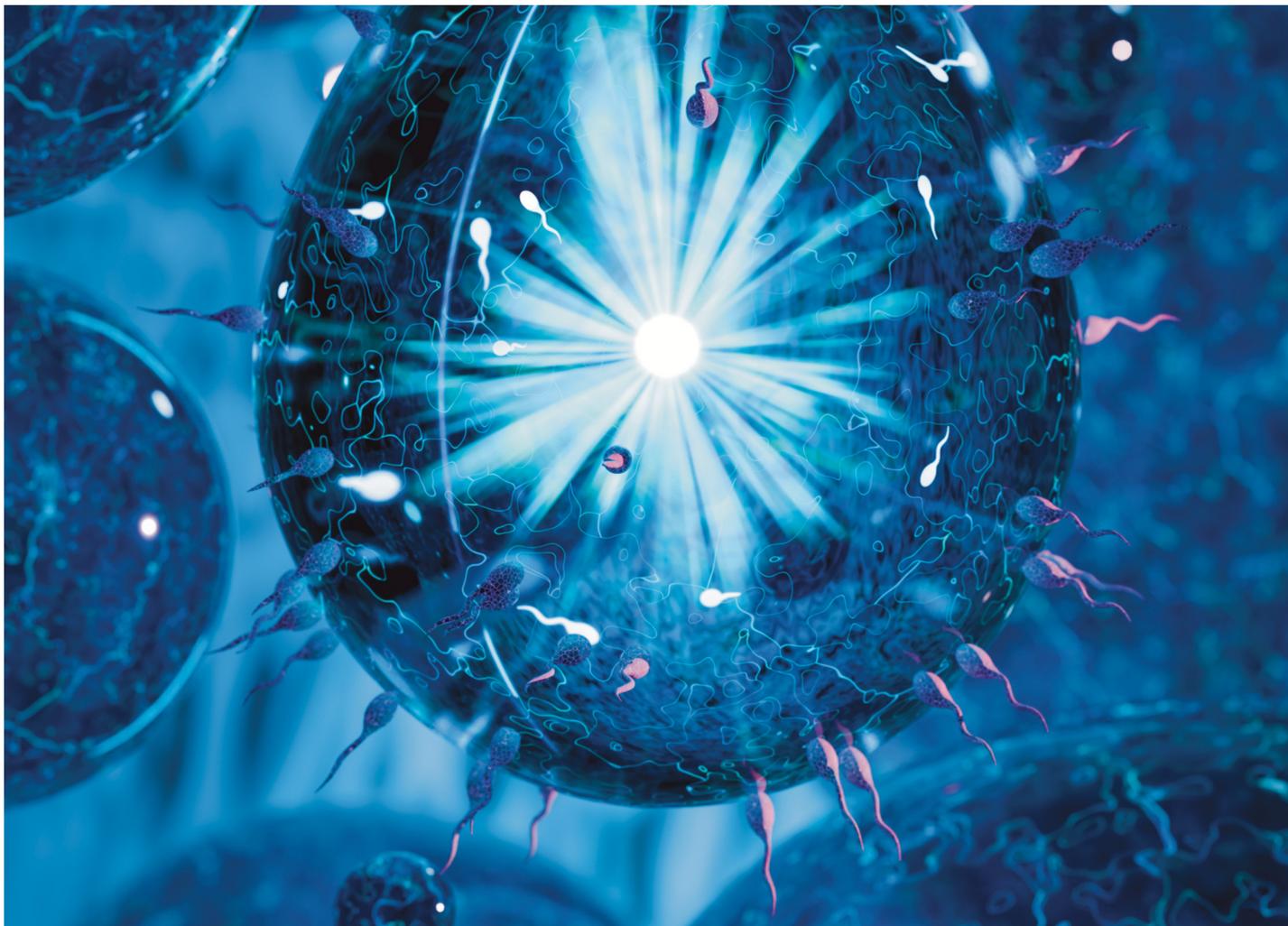
GOLD
OPEN
ACCESS

EES Solar

Exceptional research on solar
energy and photovoltaics

Part of the EES family

Join | Publish with us
in | rsc.li/EESolar



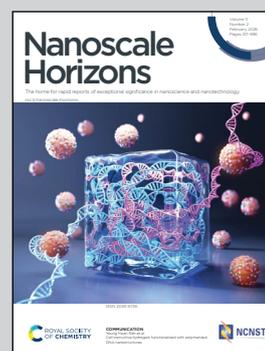
Showcasing research from Professor Raju Kumar Gupta's laboratory at the Department of Chemical Engineering, Indian Institute of Technology Kanpur, India.

Surfactant-induced wetting dynamics in the context of hypersaline desalination for membrane distillation

We report how salting-out, a phenomenon in which almost all surfactant molecules are pushed to the interface, results in accelerated wetting of a hydrophobic membrane by means of populating the wetting frontier. Salting-out of surfactant occurs depending on the salinity of the feed and occurs readily for hypersaline concentrations. These findings highlight a critical challenge for membrane distillation, despite its strong potential for treating hypersaline feeds.

Image reproduced by permission of Joel Parayil Jacob and Raju Kumar Gupta from *Nanoscale Horiz.*, 2026, **11**, 478.

As featured in:



See Joel Parayil Jacob and Raju Kumar Gupta, *Nanoscale Horiz.*, 2026, **11**, 478.