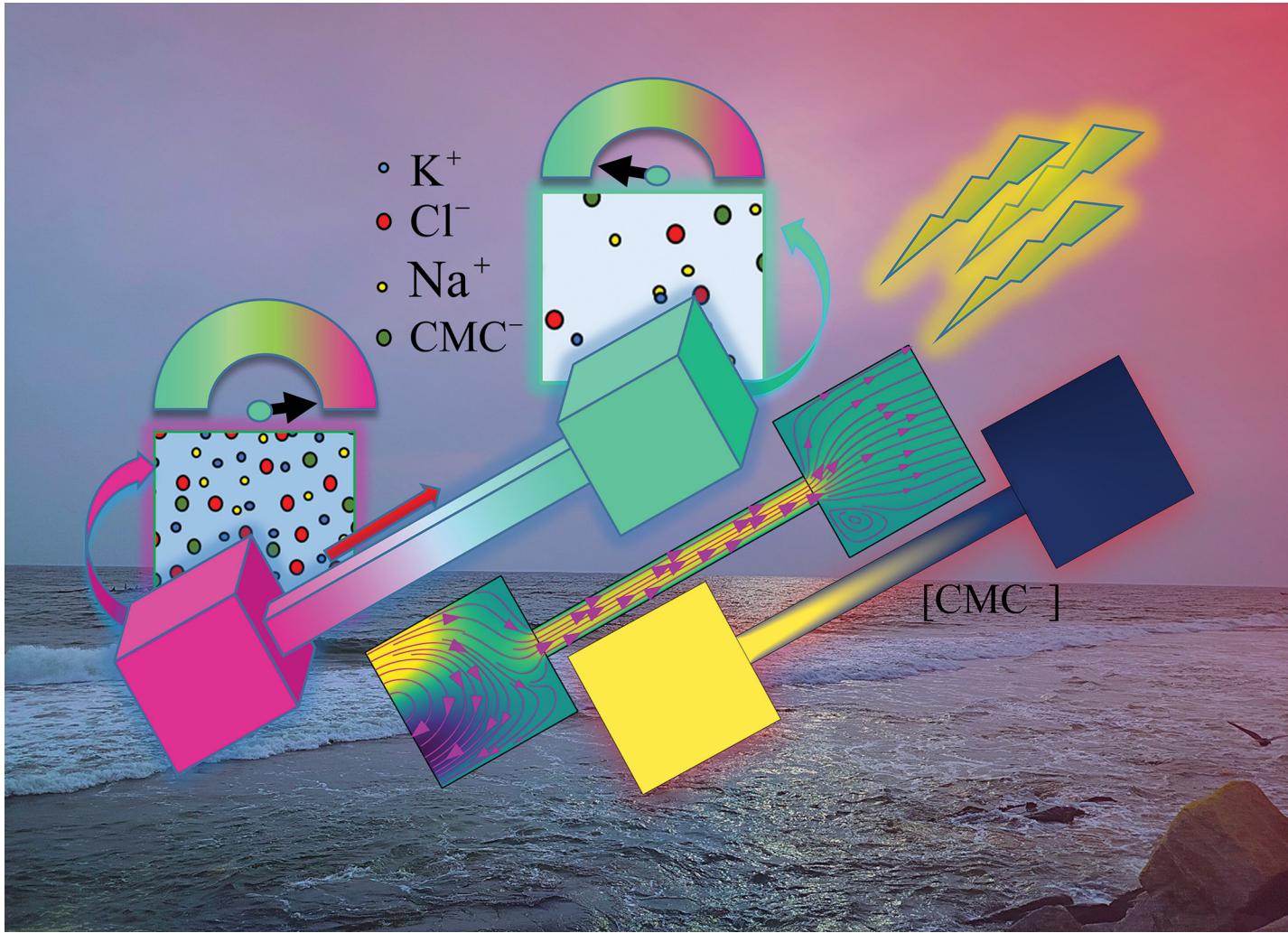


# EES Batteries

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Highlighting research from the group of Professor Pranab Kumar Mondal of the Phytofluidics, Microfluidics and Microscale Transport Processes Laboratory, Department of Mechanical Engineering, Indian Institute of Technology (IIT), Guwahati, India.

Towards the characterization of chemiosmotic flow of ionic liquids in charged nanochannels

This study examines the chemiosmotic flow characteristics of a semi-diluted NaCMC-KCl aqueous solution in a charged nanochannel. The local viscosity increases with the increase in polyelectrolyte concentration and decreases with augmented left-side reservoir salt concentration. Moreover, we established the critical bulk polyelectrolyte and left-side reservoir concentrations beyond which flow reversal occurs at greater nanochannel heights.

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### As featured in:



See Pranab Kumar Mondal et al.,  
*Phys. Chem. Chem. Phys.*,  
2025, **27**, 8692.