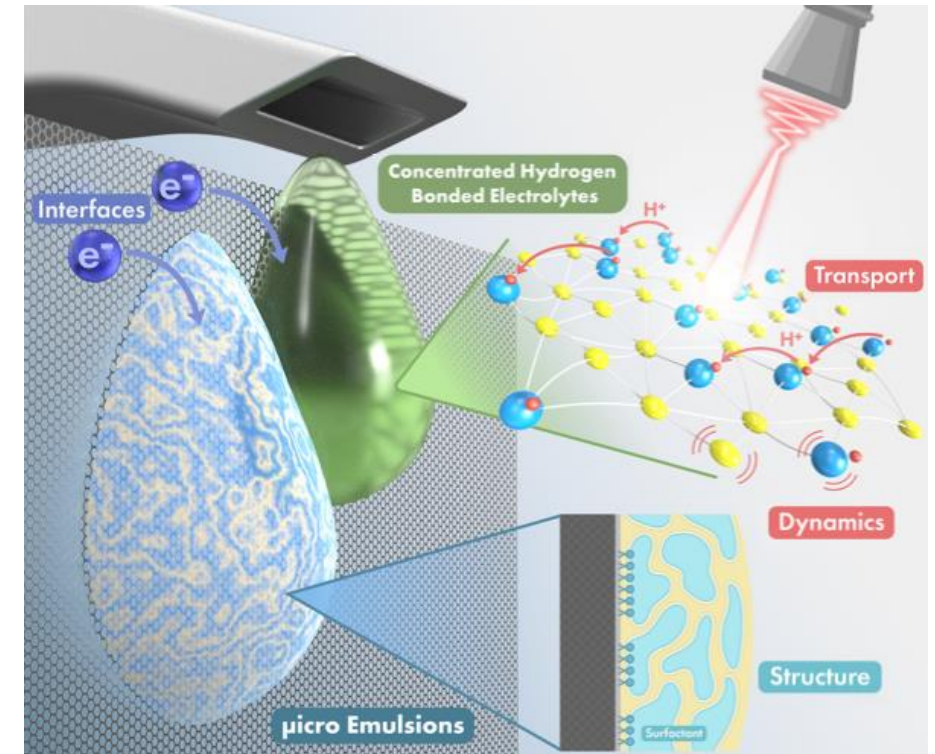


Breakthrough Electrolytes for Energy Storage and Systems (BEES2)

Burcu Gurkan (Case Western Reserve University); Class: 2018-2026

MISSION: To uncover the transport mechanisms of ions, protons, redox species, and electrons in nano to meso scale structured electrolytes in the bulk and at the electrode-electrolyte interfaces to achieve high energy and power density in next generation energy storage systems.

RESEARCH PLAN: BEES2 aims to advance electrolytes discovery to achieve safer and more efficient performance in the next generation energy storage and chemical transformation technologies that are critical for decarbonization and storage of energy harvested from sunlight, wind, and other renewables. An integrated research approach utilizing team expertise in electrochemistry, synthesis, modeling and theory, and physical/chemical structure and property characterization is employed to explore the electrolyte science.



<https://engineering.case.edu/research/centers/breakthrough-electrolytes-for-energy-storage>

