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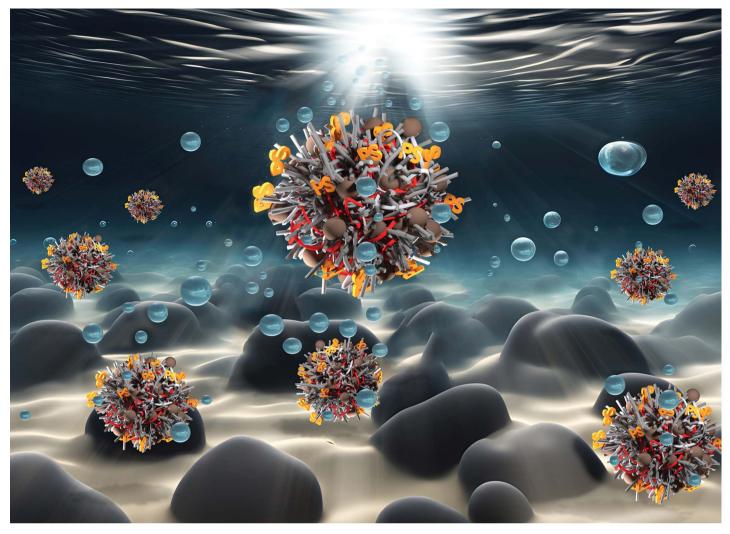
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Showcasing research from Professor Felix H Schachers laboratory, Institute of Organic Chemistry and Macromolecular Chemistry, Friedrich-Schiller-Universität, Jena, Germany.

Hybrid nanoreactors formed by interpolyelectrolyte complex formation: a colloidal platform for light-driven catalysis

This study introduces micellar interpolyelectrolyte complexes (IPECs) as soft matter matrices and photocatalytic nanoreactors visible light-driven hydrogen evolution. These IPECs are formed by polydehydroalanine-based graft copolymers with opposite charges, and variation of the charge ratio ( $Z_{(\pm)}$ ) allows to tailor size, net charge, and stability. Especially the latter was shown to significantly influence the efficiency of hydrogen production. Herein, we employ a combination of Eosin Y as photosensitizer and platinum nanoparticles as catalysts, but these systems could be used also for different combinations.

