

Beyond Peptide Materials: Aerogel Composites for the Electrochemical Reduction of CO₂

The electrochemical reduction of CO₂ is an attractive method to produce renewable fuel and chemical feedstock using clean energy sources. Formate production represents one of the most economical target products from this reaction but is primarily produced using post-transition metal catalysts that require comparatively high overpotentials. This lecture will provide details of work by members of the Kraatz team to use different materials to address high onset potentials and formate and CO formation. In addition to metal aerogels and nanoparticles, examples will be presented describing the use of composite materials and their properties.