

Converting CO₂ into Something Useful

Curtis P. Berlinguette

Departments of Chemistry and Chemical & Biological Engineering
The University of British Columbia
Vancouver BC, Canada
Cberling@chem.ubc.ca

The primary mission of our program is to use renewable energy to convert feedstocks into higher value products. One key theme is the development of (photo) electrocatalytic reactions that render products with economic value. This presentation will outline our proof-of-principle methodologies for mediating interfacial redox processes driven by light or electricity that produce chemicals people will actually pay for while using reaction conditions where breakdown of the active materials is avoided. This effort includes, but is not limited to, the conversion of CO₂ into products at the high current densities needed for commercialization.