



Distributed Electrochemical Production of High-Value Renewable Commodities

Guest Editors:

Dr. Luca Mastropasqua

Advanced Power and Energy
Program, Department of
Mechanical and Aerospace
Engineering, University of
California, Irvine, CA 92697, USA

lm1@aep.uci.edu

Prof. Dr. Jacob Brouwer

Advanced Power and Energy
Program, Department of
Mechanical and Aerospace
Engineering, University of
California, Irvine, CA 92697, USA

jb@aep.uci.edu

Deadline for manuscript
submissions:

28 February 2023

Message from the Guest Editors

We invite you to make submissions to this Special Issue of *Electrochem* focused on “Distributed electrochemical production of high-value renewable commodities.” This Special Issue seeks novel research contributions in, but not limited to, the following areas:

- Electrochemical reduction of CO₂ into renewable plastic precursors;
- Electrochemical depolymerization of plastics into renewable fuels;
- Electrochemical smelting or direct reduction of metal ores into renewable metals;
- Electrochemical recovery of e-waste;
- Electrochemical production of renewable cement;
- Electrochemical reduction of N₂ for renewable fertilizers and energy carriers.

Keywords

- CO₂ electrochemical reduction
- depolymerization of plastics
- direct reduction of metals
- electrochemical smelting
- green cement
- green ammonia
- green fertilizers
- green chemistry

