

A Robust and Inexpensive Iron-Air Rechargeable Battery for Grid-Scale Energy Storage

Lead: University of Southern California, Loker Hydrocarbon Research Institute

Sub-Awardee: Jet Propulsion Laboratory, California Institute of Technology

PI: Prof. Sri Narayan, USC,

Co-Is: Prof. G. K. Surya Prakash (USC) and Dr. Andrew Kindler (JPL)

Advantages of Iron-Air Battery Technology:

- Extremely Low Cost,
- Abundantly available raw materials
- Environmentally friendly

Challenges:

Reducing hydrogen evolution at the iron electrode

Developing efficient catalysts for the air electrode

Increasing cycle life of the Air Electrode

Preventing carbonation of the electrolyte

