

Energy Harvesting from Ocean Salinity Gradient using Capacitive Reverse Electrodialysis

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Speaker

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Abstract

- Irreversible faradic reactions in reverse electrodialysis (RED) are an emerging concern for scale-up, reducing the overall performance of RED and producing environmentally harmful chemical species.
- Capacitive RED (CRED) has the potential to generate electricity without the necessity of irreversible faradic reactions.
- The CRED system with eliminating irreversible faradic reactions achieved a maximum power density (1.6 W m^{-2}) from synthetic seawater (0.513 M NaCl) and freshwater (0.004 M NaCl).

The seminar will be in English.