



COLUMBIA ELECTROCHEMICAL ENERGY CENTER

Design, Study, and Implement Sustainable Energy Storage and Conversion

CEEC Fall Symposium Climate Solutions for Sustainable Energy, Chemicals, and Materials

September 24, 2025
Davis Auditorium, Schapiro CEPSR Building

The CEEC Fall Symposium will engage attendees with three session topics: 1) Scalable electrochemical tech in real-world settings; 2) Optimal operation of electrochemical devices; and 3) Critical materials: reducing dependence and securing supply chains. Keynote talks will look toward future challenges, opportunities, and emerging trends, and will be followed by panel discussions that delve into the technical barriers to large-scale deployment. At the end of each session, CEEC PhD students will present highlights from research done in collaboration with our industry partners. A poster session curated by CEEC's 65 PhD students and postdocs will be accessible all day to provide participants with opportunities to dive deeper into CEEC research.

8:30 – 9:00	Check-in / Continental Breakfast – Carleton Commons, Mudd Building
9:00	Symposium Sessions Begin – Davis Auditorium, Schapiro CEPSR Building
9:00 – 9:15	Welcome: George Deodatis – <i>Vice Dean for Research, Fu Foundation School of Engineering and Applied Science, Columbia University</i> CEEC Intro and Overview of Day: Alan West – <i>Director, CEEC; Professor, Chemical Engineering, Columbia University</i>
9:15 – 10:00	Session I – Scalable Electrochemical Tech in Real World Settings Dan Esposito, Moderator – <i>Associate Professor, Chemical Engineering, Columbia University</i> Keynote: Jeff Engler – <i>Founder and CEO, Wright Electric</i>
10:00 – 10:20	Break (20 mins) – Carleton Commons
10:20 – 10:30	Columbia Climate School and the CEEC Alexis Abramson – <i>Dean, Columbia Climate School, Columbia University</i>
10:30 – 11:20	Panel I – Current state of RD&D Juliana Carneiro, Moderator – <i>Assistant Professor, Chemical Engineering, Columbia University</i> <ul style="list-style-type: none">• Vijay Modi – <i>Professor, Mechanical Engineering, Columbia University</i>• Julia Hestenes – <i>Lead Scientist, Thalo Labs</i>• GJ Ia O' – <i>Founder and CEO, Tyfast Energy Corp.</i>



- 11:20 – 11:40 **Lightning Talks** (4 x 5-minute talks by CEEC PhD students): Carneiro Group, Esposito group, Modi group, Chen group
(Group photo outside CEPSSR)
- 11:40 – 1:00 **Lunch and Poster Session I – Carleton Commons**
- 1:00 – 2:00 **Session II panel – Optimal operation of electrochemical devices**
Bolun Xu – *Assistant Professor, Earth and Environmental Engineering, Columbia University*
- Dan Steingart – *Director, CEEC; Chair and Professor, Earth and Environmental Engineering, Columbia University*
 - Andreas Bentzen – *CTO, T1 Energy, Inc.*
 - Christina Chang – *Advisor, Lowercarbon Capital*
 - Judith Lattimer – *Director, Energy Conversion Technologies, Giner Labs*
- 2:00 – 2:20 **Lightning Talks** (3 x 5-minute talks by CEEC PhD students): Marbella-Steingart group, Yang group, Xu group
- 2:20 – 2:40 **Break (20 mins) – Carleton Commons**
- 2:40 – 3:25 **Session III – Critical Materials: Increasing Production and Securing Supply Chains**
Alex Urban, Moderator – *Assistant Professor, Chemical Engineering, Columbia University*
- Keynote – ‘Perspectives on Resources and Innovations for Energy Security’**
Dawn Wellman – *Strategic Program Manager, Copper R&D, Rio Tinto*
- 3:25 – 3:45 **Break (20 mins) – Carleton Commons**
- 3:45 – 4:35 **Panel III – Current state of RD&D**
Pengbo Chu, *Earth and Environmental Engineering, Columbia University*
- Lauren Marbella – *Associate Professor, Chemical Engineering, Columbia University*
 - Hideki Furusawa – *Principal Engineer, JX Advanced Metals Corporation*
 - Satish Rao – *Managing Director, Clareo*
- 4:35 – 4:55 **Lightning Talks** (4 x 5-minute talks by CEEC PhD students): Marbella group, Steingart group, Urban group, West group
- 5:00 – 7:00 **Reception and Poster Session II – Carleton Commons**
- 7:00 **Departures**

