

CNM Workshop 3: CO₂ Capture and Conversion into Value Added Products

Monday, May 2, Morning

- 9:00 – 9:05 Welcome
- 9:05 – 9:35 Ted Sargent (Northwestern University)
CO₂ Electroreduction to Fuels and Chemicals
- 9:35 – 10:05 Ah-Hyung Alissa Park (Columbia University)
Structure and Transport Behaviors of Liquid-like Nanoparticle Organic Hybrid Materials Designed for Combined CO₂ Capture and Conversion
- 10:05 – 10:35 Di-Jia Liu (Argonne National Laboratory)
Challenges and Design Principle for Electrocatalytic Conversion of CO₂ to C₂₊ Chemicals
- 10:35 – 10:45 Questions and Break
- 10:45 – 11:15 Alan Hatton (Massachusetts Institute of Technology)
Electrochemical Control of CO₂ Separation Processes
- 11:15 – 11:45 Matteo Cargnello (Stanford University)
Nanocrystal-based Catalysts for CO₂ Hydrogenation to Fuels and Chemicals
- 11:45 – 12:15 Francesca Toma (Lawrence Berkeley National Laboratory)
(Photo)electrocatalysis at Work
- 12:15 – 12:30 Questions and Closing Remarks

Tuesday, May 3, Morning

- 9:00 – 9:05 Welcome
- 9:05 – 9:35 Akihiko Kudo (Tokyo University of Science)
Photocatalytic CO₂ Fixation Using Water as an Electron Donor
- 9:35 – 10:05 Andrew Bocarsly (Princeton University)
Electrocatalytic Formation of Useful Organics and Fuels from CO₂ Using Binary Alloys
- 10:05 – 10:35 Maria Chan (Argonne National Laboratory)
Modeling and Characterization of Cu₂O Surfaces
- 10:35 – 10:45 Questions and Break

10:45 – 11:15 Yimin Wu (University of Waterloo)
Semiconductor Assisted Photocatalysis for CO₂ Reduction to Liquid Solar Fuels

11:15 – 11:45 Karen Mulfort (Argonne National Laboratory)
Title TBA

11:45 – 12:15 Nikolai Gaponik (Technische Universitaet Dresden)
*Nanocrystal Aerogels as Emerging Self-supporting Catalysts for
CO₂ Photoconversion*

12:15 – 12:30 Questions and Closing Remarks