
JUNE 26 • SUNDAY

PINNED 4:00pm – 5:00pm	Registration Check-in Opens	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 5:00pm – 8:00pm	Plenary followed by Welcome Reception <i>Presenters: Elke Weber</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)

B Biotechnology
 C Carbon Capture
 N Contributed Oral
 E Electrophotochemistry
 K Keynote
 P Plenary
S Social Business and Policy
T Thermal Chemistry

JUNE 27 • MONDAY

8:00am – 8:30am		Coffee and light breakfast	McCosh 50 (McCosh Hall Princeton, NJ 08544)
8:00am – 8:30am		Registration Check-in Open	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 8:30am – 9:30am	P	Electrochemical Modulation of Sorbents for Selective CO₂ Separation Processes <i>Presenters: T. Alan Hatton</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:45am – 10:00am	N	Carbon-negative materials in construction: carbonate plaster <i>Presenters: Ammar Elhoweris</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
9:45am – 10:00am	N	Enhanced CO₂ hydrogenation to C₂+ hydrocarbons over Fe oxide catalysts prepared by thermal decomposition <i>Presenters: Liane M. Rossi</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
9:45am – 10:00am	N	CANCELLED	Friend 006 (7799 William St, Princeton, NJ 08540)
PINNED 9:45am – 10:30am	K	The Influence of Microenvironment on the Electrochemical Reduction of CO₂ to C₂+ products <i>Presenters: Alexis Bell</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
10:00am – 10:15am	N	Evaluating the impact of using carbon-negative aggregates on the carbon footprint of concrete pavements <i>Presenters: Aryandokht Azari</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:00am – 10:15am	N	Enhanced cycling stability of metal oxide-perovskite composite in chemical looping CO₂ splitting <i>Presenters: Yikyem Kim</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
10:15am – 10:30am		Rescheduled to 6/28 11AM McCosh	Friend 006 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N	Ca-looping process using limestones and wastes of marble powder for CO₂ capture from industrial flue gas <i>Presenters: Carla I. Costa Pinheiro</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N	Investigation on key factors to design heterogeneous catalysts for production of formic acid from CO₂. <i>Presenters: Kwang-Deog Jung</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
10:15am – 10:30am	N	CANCELLED	Friend 006 (7799 William St, Princeton, NJ 08540)
11:00am – 11:15am	N	Hybrid thermo-electrochemical conversion of plastic wastes commingled with marine biomass to sequester carbon and produce hydrogen <i>Presenters: Jonah Williams</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:00am – 11:15am	N	Bulk Chemicals and Fuels without Fossil Precursors: Decarbonizing Manufacturing by Electrochemical Synthesis from Carbon Dioxide <i>Presenters: Charles Dismukes</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:00am – 11:15am	N	Catalytic hydrogenation of carbon dioxide to methanol with manganese pincer complexes: concept and mechanistic understanding <i>Presenters: David Kuss</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
PINNED 11:00am – 11:45am	K	The renewable energy/chemistry nexus: Advances, challenges and opportunities for energy conversion, storage, and utilization including carbon dioxide utilization <i>Presenters: Bill Tumas</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N	Simplified hydrophobic ODTMS functionalization on zeolite 13X for indoor CO₂ capture application <i>Presenters: Minjae Kim</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N	Earth-abundant molecular catalyst systems for the reduction of carbon dioxide <i>Presenters: Charles W. Machan</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)

11:15am – 11:30am	N	Carbon dioxide hydrogenation to formic acid – recyclable catalyst phase and self-separating product <i>Presenters: Kira R. Ehmann</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:30am – 11:45am	N	Project SUSTAIN: Using above-ambient pressure for CO2 refining and capture at scale with small footprint <i>Presenters: George Dowson</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:30am – 11:45am	N	Pb-catalyzed Electroreduction of CO2 to Methyl Formate <i>Presenters: Craig Grapperhaus</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:30am – 11:45am	N	Role of Solvent in the Hydrogenation of CO2 using Molecular Complexes <i>Presenters: John Linehan</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	Friend 006 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:45am – 12:15pm		Q&A Panel	Friend 101 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	CompSci 104 (35 Olden St, Princeton, NJ 08540)
12:15pm – 1:15pm		Lunch	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm		Bike Ride	
2:30pm – 4:30pm		Ice Cream Downtown	
2:30pm – 4:30pm		Soccer Game	Campbell Field (Campbell Field Princeton, NJ)
PINNED 7:00pm – 8:00pm	P	CO2 electro-reduction: Design principles for catalysts, interfaces, and systems <i>Presenters: Thomas Jaramillo</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
8:15pm – 8:30pm	N	Improving co-electrocatalytic activity for CO2 reduction at lower overpotentials through redox mediator tuning and catalyst design <i>Presenters: Amelia G. Reid</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 8:15pm – 9:00pm	K	Integrated carbon dioxide capture and conversion to renewable fuels such as methanol and methane <i>Presenters: Surya Prakash</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
8:30pm – 8:45pm	N	Direct synthesis of 1-butanol in high yields from CO2 utilizing cascade catalysis from a nickel enhanced (Cr2O3)3Ga2O3 system <i>Presenters: Steve Cronin</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
8:45pm – 9:00pm	N	Probing electrode-electrolyte interfaces of structured nano-scale electrolytes for combined CO2 capture and conversion <i>Presenters: Sara T. Hamilton</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:00pm – 9:15pm	N	Electrocatalytic Reduction of CO2 <i>Presenters: Karin Calvino</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:00pm – 9:15pm	N	A tutorial case study on the use of uncertainty analysis methods for techno-economic assessment of CO2 utilization technologies: The case of CO2 mineralization. <i>Presenters: Till Strunge</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
9:15pm – 9:30pm	N	Decentralized biochar production to profitably scale carbon removal and rural climate justice <i>Presenters: Kevin Kung</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:15pm – 9:30pm	N	How to build a successful technology start-up. <i>Presenters: Gael Gobaille-Shaw</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
9:30pm – 10:00pm		Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:30pm – 10:00pm		Q&A Panel	Friend 006 (7799 William St, Princeton, NJ 08540)

C Carbon Capture **R** Carbon Mineralization **N** Contributed Oral **D** Contributed Poster **E** Electrophotochemistry

K Keynote **P** Plenary **S** Social Business and Policy **L** Solid and Liquid State **T** Thermal Chemistry

JUNE 28 • TUESDAY

8:00am – 8:30am	Coffee and light breakfast	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 8:30am – 9:30am	P CO₂ as sustainable carbon source – From lab to market <i>Presenters: Simon Kaiser and Dennis Kramer</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:45am – 10:00am	CANCELLED	Friend 101 (7799 William St, Princeton, NJ 08540)
9:45am – 10:00am	N Implications on geological CO₂ mineralization: crystal structure changes and reaction kinetics of olivine carbonation <i>Presenters: Soyoung Choi</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
9:45am – 10:00am	N Plasma-enhanced conversion of CO₂ and CH₄ to high-value oxygenates using bimetallic catalyst <i>Presenters: Chunshan Song</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
PINNED 9:45am – 10:30am	K Commercializing CO₂ Utilization <i>Presenters: Kyle Teamey</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
10:00am – 10:15am	N Supported MgO sorbents promoted by ternary alkali metal salts for CO₂ capture: effect of CaCO₃ and CeO₂ addition <i>Presenters: Carla I. Costa Pinheiro</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:00am – 10:15am	N Enhanced H₂ recovery from renewable resources via carbon mineralization <i>Presenters: Prince Ochonma</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
10:00am – 10:15am	N Investigation of plasma–catalyst synergy in plasma-enhanced CO₂ hydrogenation on supported cobalt catalyst <i>Presenters: Xiaoxing Wang</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N CO₂ Capture over Chitosan impregnated over MCM-41 and SBA-15 Mesoporous Silicas <i>Presenters: Claudio J. A. Mota</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N Permanent carbon dioxide removal via chemical conversion to valuable non-combustible products <i>Presenters: Anthony O'Mullane</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
10:15am – 10:30am	N Heat transfer in a bench-scale methanol reactor <i>Presenters: Markus Laitinen</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
11:00am – 11:15am	N Oxygen stable electrochemical CO₂ capture and concentration through alcohol additives <i>Presenters: Jenny Yang</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:00am – 11:15am	N Finding a business case for CO₂ mineralization in the European cement industry <i>Presenters: Till Strunge</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:00am – 11:15am	N Environmental potential of CO₂-based polyoxymethylene ethers as diesel blends <i>Presenters: Simon Voelker</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 11:00am – 11:45am	K Project SUSTAIN: amine-free carbon dioxide capture and refining <i>Presenters: Peter Styring</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N Fabrication of hierarchically layer-by-layer frameworks composed of HKUST-1 and polyethylenimine-grafted SBA-15 for CO₂ capture enhancement <i>Presenters: Hyungseop Ahn</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N Sustainable processing of composite materials <i>Presenters: Daniel Kopp</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)

11:15am – 11:30am	N	The extraordinary future of CO₂ as raw material for E-fuels, Solar-Fuels, RF-NBO, and Biofuels <i>Presenters: Michele Aresta</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:30am – 11:45am	N	CO₂ absorption using aqueous NH₃: novel dynamic modeling of experimental outcomes for the improvement of capture system <i>Presenters: Federico Atzori</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:30am – 11:45am	N	Production of high purity calcium carbonates with controlled polymorphs from alkaline industrial wastes via carbon mineralization <i>Presenters: Ning Zhang</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:30am – 11:45am	N	Electrifying the Production of Sustainable Aviation Fuel: The Risks, Economics, and Environmental Benefits of Emerging Pathways Including CO₂ <i>Presenters: Josh Schaidle</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:45am – 12:15pm		Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:45am – 12:15pm		Q&A Panel	Friend 101 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	Friend 006 (7799 William St, Princeton, NJ 08540)
12:15pm – 1:15pm		Lunch	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm		Orange Key tour of Princeton University	
2:30pm – 4:30pm		Poster Session <i>Presenters: Yikyem Kim, Rebecca Evans, Kailyn Cohen, Daniel Harrison, Amelia G. Reid, Anne-Christine Kick, Chunshan Song, Claire J Nelson, Daniel B. Nothaft, Diandian Zhao, Dongjae Kim, Elisabete M. Assaf, Hyeon Seok Kim, José Mansur Assaf, Katie Kloska, Kyle Kersey, Luiz H. Vieira, Matheus Horstmann Fernandes, Peter Styring, Qi LIU, Seyeon Park, Soyoun Choi, Stephanie S. Cordova, Xiaolong Wu, Xinyang Jiang, Yuanchunyu (Iris) Lin</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm		Princeton Cemetery Tour	
2:30pm – 4:30pm	D	Amine-based polymers for reversible CO₂ reduction and formate-oxidation electrocatalysis <i>Presenters: Andrew Hakim</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Boosting the production of higher alcohols from CO₂ and H₂ over Mn and K modified iron carbide <i>Presenters: Chunshan Song</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Carbon dioxide as a sustainable source of carbon – pathways to industrial application <i>Presenters: Dominik Blaumeiser</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Combined CO₂ capture and conversion to CO using NOHMs and non-noble metal chalcogenide in a flow cell <i>Presenters: Xiaolong Wu</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Comparative experiments on indirect carbonation of [ultra]mafic rocks and paths to scale <i>Presenters: Daniel B. Nothaft</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Developing a photothermally driven carbon capture system using nano-particles and solar energy <i>Presenters: Katie Kloska</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Dialing Molecular Electrocatalytic Reduction Onset Potentials with a mer-Quinoline-Derived Ligand Series <i>Presenters: Daniel Harrison</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Electrons2Chemicals (E2C): when science meets gaming <i>Presenters: Peter Styring</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Encapsulation of nanoscale organic hybrid materials in electrospun polymer/ceramic fibers for direct air capture of CO₂ <i>Presenters: Kyle Kersey</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Enhancement of CO₂ conversion in reverse water gas shift chemical looping using nano-cast mesoporous La_{0.8}Sr_{0.2}FeO₃ <i>Presenters: Yikyem Kim</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D	Geomimicry enhanced wellbore cements for mitigation of leaky wellbores <i>Presenters: Cody Massion</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)

2:30pm – 4:30pm	D Highly efficient low temperature CO₂ conversion via modified oxide scaffold <i>Presenters: Seyeon Park</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Highly nucleophilic Rh(-I)-complexes in the electrocatalytic reduction of CO₂ and their potential use in follow-up chemistry <i>Presenters: Anne-Christine Kick</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Image processing software helps to visualize carbon mineralization <i>Presenters: Xinyang Jiang</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Improving co-electrocatalytic activity for CO₂ reduction at lower overpotentials through redox mediator tuning and catalyst design <i>Presenters: Amelia G. Reid</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Investigating the effect of SnO₂/Bi-based MOF on the CO₂ reduction electrocatalytic performance towards formate <i>Presenters: Pooya Hosseini-Benhangi</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Investigation of Innovative Reactor Design for Carbon Capture Using Microwave and Fluidization <i>Presenters: Dongjae Kim</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Lowering the ruthenium metal content for direct air capture using dual functional materials (DAC-DFM) with improved preparation methods <i>Presenters: Yuanchunyu (Iris) Lin</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Modeling of the process of upgrading of lignite by hydrothermal treatment combined with carbon dioxide capture processes <i>Presenters: Qi LIU</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Olivine carbonation and alteration behaviors under acidic to alkaline pH conditions and different fluid chemistry for geological CO₂ storage <i>Presenters: Soyoung Choi</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Optimization of Ni-doping on LaCoO₃ to maximize CO₂ conversion and CO selectivity in RWGS reaction <i>Presenters: Yikyom Kim</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Optimizing injection strategies for CO₂ storage and mineralization in basalt through multiphase subsurface reservoir simulations <i>Presenters: Claire J Nelson</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Potential of Carbon Dioxide utilization from biomethane production in Europe <i>Presenters: Stephanie S. Cordova</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Promoting propane dehydrogenation with CO₂ over PtFe Bimetallic Catalyst by eliminating the non-selective Fe(0) phase <i>Presenters: Chunshan Song</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Rapid thermal synthesis of high-entropy alloy nanoparticle catalysts uniformly embedded in metal oxide layers for ultra-stable thermal reduction of CO₂ gas <i>Presenters: Seyeon Park</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Supported Cu catalysts on UiO-66 for methanol production by CO₂ hydrogenation: effect of Cu loading <i>Presenters: José Mansur Assaf</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D The Key Role of [Mn(bpy)(CO)₃]₂ in CO₂ Photoreduction to CO <i>Presenters: Rebecca Evans, Kailyn Cohen</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Tuning CO₂ capture using the substituent effects in anilines <i>Presenters: Berk Delibas</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D Upcycling of waste cementitious materials through CO₂ mineralization <i>Presenters: Diandian Zhao</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
2:30pm – 4:30pm	D VIS-NIR spectral broadening monitoring from an Nd:YAG in-situ CO₂ deposition onto a solid metal substrate <i>Presenters: Jesus A Hinojosa</i>	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
8:15pm – 8:30pm	N Green, ambient, highly efficient CO₂ capture and simultaneous mineralization to functional carbonates <i>Presenters: Dharmjeet Madhav</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)

8:15pm – 8:30pm	N Potential production capacity of synthetic Fischer-Tropsch/methanol fuels using captured CO2 from industrial and power sources <i>Presenters: Hernan E. Delgado</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
8:30pm – 8:45pm	N Anion exchange membranes: CO electroreduction <i>Presenters: Bjorn Hasa</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
8:30pm – 8:45pm	N Dynamic structural evolution of iron catalysts during CO2 hydrogenation to hydrocarbons <i>Presenters: Chunshan Song</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
8:45pm – 9:00pm	N Electrocatalysis for Carbon Dioxide Utilization <i>Presenters: Feng Jiao</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
8:45pm – 9:00pm	N CANCELLED	Friend 006 (7799 William St, Princeton, NJ 08540)
9:00pm – 9:15pm	N Wet chemical synthesis and spectroscopic/electrochemical characterization of metal oxides nanocomposites aimed to CO2-H2O photocatalytic coprocessing <i>Presenters: Davide Michele Stefano Marcolongo</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:00pm – 9:15pm	N Efficient CO2 utilization by Sorption-Enhanced DME Synthesis (SEDMES) <i>Presenters: Soraya Sluijter</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
9:15pm – 9:30pm	N Scaling zero-gap CO2 electrolysis: from lab-scale and impure CO2 feeds to kW-scale demonstration <i>Presenters: Kai junge Puring</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:15pm – 9:30pm	N Synergistic effect of B-site elements in La2NiFeO6 double perovskite for CO2 conversion in redox cycles <i>Presenters: Yikyeom Kim</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
9:30pm – 10:00pm	Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:30pm – 10:00pm	Q&A Panel	Friend 006 (7799 William St, Princeton, NJ 08540)

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JUNE 29 • WEDNESDAY

8:00am – 8:30am	Coffee and light breakfast	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 8:30am – 9:30am	P The Carbon Circular Economy (CCE): Transition from fossil-C to renewable-C (biomass and CO₂) driven by chemo- and bio-catalysis <i>Presenters: Angela Dibenedetto</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:45am – 10:00am	N Enhancing CO₂ adsorption and working capacity of 10% “Na₂O”/γ – Al₂O₃ granules through doping and novel pretreatment <i>Presenters: Mark Goldman</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
9:45am – 10:00am	N Heat it, Press it, Twist it: Hidden parameters for electrochemical carbon dioxide reduction in zero-gap electrolyzers <i>Presenters: Lucas Hoof</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
9:45am – 10:00am	N Choosing the right kinetic model for techno-economic analyses of CCU processes – the case of CO₂ hydrogenation to methanol <i>Presenters: Judit Nyári</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
PINNED 9:45am – 10:30am	K What Needs to be True for the scaling of CCU in the Chemicals Industry <i>Presenters: Robert Kumpf</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
10:00am – 10:15am	N Dual function materials (DFMs) for CO₂ direct air capture (DAC) and catalytic conversion to renewable methane <i>Presenters: Monica J. Abdallah</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:00am – 10:15am	N Double DBD plasma catalytic CO₂ hydrogenation to methanol and ethanol <i>Presenters: Chunshan Song</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
10:00am – 10:15am	N CO₂ Utilization in Electrochemical Power Sources <i>Presenters: Elod Gyenge</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
10:15am – 10:30am	N Use of statistical process control (SPC) in analysis of CO₂ capture system performance <i>Presenters: Reynolds Frimpong</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N Mechanistic study on conversion of carbon dioxide into formic acid promoted by ionic liquid <i>Presenters: Taofeeq Bello</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N CO₂ redox flow battery: An investigation of the membrane and bifunctional electrocatalysts towards enhancing the battery performance <i>Presenters: Pooya Hosseini-Benhangi</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:00am – 11:15am	CANCELLED	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:00am – 11:15am	N Encapsulation of Nanoscale Organic Hybrid Materials (NOHMs) Within Electrospun Polymeric Nanofibers for Direct Air Capture <i>Presenters: Jeffrey Xu</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:00am – 11:15am	N Development of a novel ‘hub and spoke’ framework for the holistic sustainability assessment of complex chemical supply chains <i>Presenters: Alex JK Newman</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
PINNED 11:00am – 11:45am	K Challenges Facing Carbon Utilization Technologies <i>Presenters: Nick DeCristofaro</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N Natural carbon capture in ultramafic bodies: Sink or source of greenhouse gas? <i>Presenters: James Leong</i>	Friend 101 (7799 William St, Princeton, NJ 08540)

11:15am – 11:30am	N	Increasing the CO2 reduction activity of cobalt phthalocyanine by modulating cobalt nucleophilicity by varying σ-donor strength of axially coordinating ligands <i>Presenters: Kevin E. Rivera Cruz</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:15am – 11:30am	N	TEA & LCA guidelines for CCU version 2.0 <i>Presenters: Stephen McCord</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:30am – 11:45am		CANCELLED	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:30am – 11:45am	N	Feasibility study on biocontrol of cement industry CO2 emissions <i>Presenters: Aryandokht Azari</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:30am – 11:45am	N	Increasing the basicity of a CO2 capture and reduction complex <i>Presenters: Christine Phipps</i>	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	Friend 006 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	Friend 101 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:45am – 12:15pm		Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
12:15pm – 1:15pm		Lunch	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
1:30pm – 1:45pm	N	Direct air capture of CO2 via adsorption and cooling <i>Presenters: Ted von Hippel</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
1:30pm – 1:45pm	N	Toward net-zero carbon fuels through carbon capture, utilization, and sequestration: a life-cycle analysis <i>Presenters: Eunji Yoo</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
1:45pm – 2:00pm	N	Ionic liquid-based CO2 absorption technology for direct air capture <i>Presenters: Tobias Stegmaier</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
1:45pm – 2:00pm	N	Comparative Life Cycle Assessment of industrial CO2 mineralization using different feedstock materials <i>Presenters: Finn-Erik Digulla</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
2:00pm – 2:15pm	N	Development of encapsulated Metal Organic Frameworks (MOFs) for Direct Air Capture with water rejection <i>Presenters: Xiaoyang Shi</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
2:00pm – 2:15pm	N	Sustainability risk assessment for chemical production: the definition of sustainability risk assessment metrics and the development of a risk-based screening tool <i>Presenters: Edward Platt</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
2:15pm – 2:45pm		Q&A Panel	Friend 101 (7799 William St, Princeton, NJ 08540)
2:15pm – 2:45pm		Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
3:30pm – 4:00pm		Group Photo	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
4:00pm – 4:15pm		Meet for buses to Grounds for Sculpture	Frick Atrium (Frick Chemistry Laboratory, Princeton, NJ 08544)
		Banquet at Grounds for Sculpture	
PINNED 4:00pm – 10:00pm			

JUNE 30 • THURSDAY

9:45am – 10:00am	N	Optimization and analysis of biorefineries with carbon capture as a source of CO₂ for utilization <i>Presenters: Caleb H. Geissler</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
9:45am – 10:00am	N	CO₂-based value chains for polymer products <i>Presenters: Simon Kaiser</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
9:45am – 10:00am	N	CeO₂-decorated α-Fe₂O₃ nanorings for CO₂ conversion to dimethyl carbonate <i>Presenters: Claudio J. A. Mota</i>	Maeder 002 (86 Olden St Princeton, NJ 08540)
PINNED 9:45am – 10:30am	K	Computational Modeling of Artificial Photosynthesis Components <i>Presenters: Mehmed Ertem</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
10:00am – 10:15am	N	Investigation of Sorbent Regeneration Technology based on Non-Thermal Energy Transfer for CO₂ Capture <i>Presenters: Dongjae Kim</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
10:00am – 10:15am	N	Life cycle analysis of emerging CO₂ utilization technologies: challenges and current best practices <i>Presenters: Michelle Krynock</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
10:00am – 10:15am	N	New frontier on the use of nanocatalysts without activation step: a case study on a Cu-CuO/ZnO/ZrO₂@SBA-15 nanocatalyst for CO₂ reuse <i>Presenters: Mauro Mureddu</i>	Maeder 002 (86 Olden St Princeton, NJ 08540)
10:15am – 10:30am		CANCELLED	McCosh 50 (McCosh Hall Princeton, NJ 08544)
10:15am – 10:30am	N	National Academies Congressionally Mandated Study on Carbon Utilization Infrastructure, Markets, and RD&D <i>Presenters: Emily A. Carter</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
10:15am – 10:30am	N	Single Cu atom on hydroxyapatite catalyst for CO₂ hydrogenation to methanol <i>Presenters: Wai Ming Hui</i>	Maeder 002 (86 Olden St Princeton, NJ 08540)
11:00am – 11:15am	N	Crowd Oil: HVAC-Integrated DAC <i>Presenters: Dominik Heß, Roland Dittmeyer</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:00am – 11:15am	N	Intuitive materials design for solar thermochemical carbon dioxide splitting <i>Presenters: Robert B. Wexler</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:00am – 11:15am	N	Towards closing materials cycles in mining, steel, and cement making by harnessing CO₂ emissions for carbon mineralization <i>Presenters: Hassnain Asgar</i>	Maeder 002 (86 Olden St Princeton, NJ 08540)
PINNED 11:00am – 11:45am	K	Deployment of CCU Technologies into Markets: Global, Regional, Local <i>Presenters: Susan Fancy</i>	Friend 006 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N	Artificial photosynthetic CO₂ reduction through purple membrane re-engineering with nanostructures <i>Presenters: Elena A. Rozhkova</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:15am – 11:30am	N	Climate impact analysis of various carbon pathways for onboard carbon capture systems in shipping <i>Presenters: Elin Malmgren</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)
11:15am – 11:30am	N	CO₂ Utilization integrated with Valuable Elements Recovery by pH Swing Assisted Carbonation of Industrial Wastes <i>Presenters: Seokyoong Moon</i>	Maeder 002 (86 Olden St Princeton, NJ 08540)
11:30am – 11:45am	N	Elucidating the paths of CO₂ in gas diffusion electrodes for electrochemical CO₂ reduction <i>Presenters: Matthias Heßelmann</i>	Friend 101 (7799 William St, Princeton, NJ 08540)
11:30am – 11:45am	N	Carbon capture and utilization: The hidden industrial decarbonization strategy? <i>Presenters: Kristina Fuerst</i>	McCosh 50 (McCosh Hall Princeton, NJ 08544)

11:30am – 11:45am	N CANCELLED	Maeder 002 (86 Olden St Princeton, NJ 08540)
11:45am – 12:15pm	Q&A Panel	Friend 006 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm	Q&A Panel	Friend 101 (7799 William St, Princeton, NJ 08540)
11:45am – 12:15pm	Q&A Panel	CompSci 104 (35 Olden St, Princeton, NJ 08540)
11:45am – 12:15pm	Q&A Panel	McCosh 50 (McCosh Hall Princeton, NJ 08544)
12:30pm – 12:45pm	Closing Remarks	McCosh 50 (McCosh Hall Princeton, NJ 08544)