

International Conference on Bioenergy and Biofuel 2026

MARCH 23-25, 2026 | Hilton Boston Back Bay, Boston, USA

Tentative Program

DAY – 1, March 23, 2026

08:30 - 09:15	Registrations
09:15 - 09:30	Opening, Welcome Note by Conference Chair Dr. Blake A. Simmons
	Plenary Talks
	Session Chair: Blake A. Simmons, Lawrence Berkeley National Laboratory, USA
09:30 - 10:00	Plenary Talk: Regenerative Agroenergy Systems: A Reality-Based Approach to Bioenergy and Biofuels Bruce E. Dale, Michigan State University, USA
10:00 - 10:30	Plenary Talk: Economics of Bioproduction and the Supply Chain Design and Policy David Zilberman, University of California, Berkeley, USA
10:30 - 11:00	Plenary Talk: The Future of Biorefining: General Perspectives and a Report from the Field Lee R. Lynd, Co-founder and CTO of Terragia Biofuel Inc, USA
11:00 - 11:30	Coffee Break
11:30 - 12:00	Plenary Talk: Flying the Future: Advances in Aviation Fuels at the Joint BioEnergy Institute (JBEI) Blake A. Simmons, Lawrence Berkeley National Laboratory, USA
12:00 - 12:30	Plenary Talk: Biochar from Biomass and Waste: Fundamentals and Applications Yong Sik Ok, President of the International ESG Association, South Korea
	Biofuels for Transportation: Powering a Low-Carbon Future
	Session Chair: Lee R. Lynd, Co-founder and CTO of Terragia Biofuel Inc, USA
12:30 - 12:55	Keynote Talk: Catalytic Biographite Production and Techno-Economic Evaluation for Lithium-Ion Battery Applications Sunkyu Park, North Carolina State University (NCSU), USA
12:55 - 14:00	Lunch Break
14:00 - 14:25	Keynote Talk: A New Nitrogen Cycle in Biofuel Agriculture Steven Singer, Advanced Research Projects Agency-Energy (ARPA-E), USA
14:25 - 14:45	Invited Talk: Staying Productive Under Pressure: Systems Evaluations of β-carotene Production in <i>Yarrowia Lipolytica</i> Under Continuous Fermentation Yinjie J. Tang, Washington University, USA
14:45 - 15:05	Invited Talk: The potential of a Residue-Based Sustainable Aviation Fuel (SAF) Economy in the US Midwest Angela Isabella Scafidi, World Resources Institute, USA
15:05 - 15:25	Invited Talk: From Land To Sea: Converting Food Waste Fermentation to Marine Fermentation Anga Hackula, University of Maryland, USA
15:25 - 16:00	Coffee Break
	Session Chair: Anga Hackula, University of Maryland, USA
16:00 - 16:20	Invited Talk: Just Add Sea Water: A Biological and Chemical Process for Conversion of Organic Wet-Waste to Fuels, Fertilizers, Epsom Salts, and Esters Smith Pittman, Colorado State University, USA
16:20 - 16:40	Invited Talk: Trends in Global Mitigation Policies: Potential Impact on Biofuel Demand

	Linda Schmid, Joint BioEnergy Institute, USA
16:40 - 17:00	Invited Talk: Engineering Yield Traits for De Novo Domestication of Biofuels Crops
	Jennifer C. Fletcher, University of California, Berkeley, USA
17:00 - 17:20	Invited Talk: Distillable Amine Solvents Enable Efficient Pretreatment of Diverse Single and Mixed Lignocellulosic Feedstocks
	Xueli Chen, Lawrence Berkeley National Laboratory, USA
17:20 Onwards	Networking Cocktails
DAY – 2, March 24, 2026	
Biomass to Feedstocks	
Session Chair: Yuansheng Hu, UCD School of Civil Engineering, Ireland	
09:30-10:00	Plenary Talk: Foundations for Circular Biomanufacturing: Engineering Energy, Food, Materials and Pharmaceuticals for Life Beyond Earth
	Adam Paul Arkin, University of California, USA
10:00-10:25	Keynote Talk: Reimagining Biomass Conversion: Pathways to Advanced Fuels, Bioproducts, and Energy Materials
	Noppadon Sathitsuksanoh, University of Louisville, USA
10:25-10:50	Keynote Talk: Biomimetic Compartmentalization of Catalysts for Bioenergy and the Bioeconomy
	Cheryl Kerfeld, Michigan State University, USA
10:50 -11:15	Coffee Break
Session Chair: Clay Wheeler, University of Maine, USA	
Session Chair: Cheryl Kerfeld, Michigan State University, USA	
11:15-11:40	Keynote Talk: Systems Biology Approaches to Strain Engineering
	Aindrila Mukhopadhyay, Lawrence Berkeley National Laboratory, USA
11:40 - 12:00	Invited Talk: Genome-Engineering of Industrial Diploid Yeast for Lignocellulosic Biofuels
	Amit Ghos, Indian Institute of Technology Kharagpur, India
12:00-12:20	Invited Talk: Neutron-Enabled Insights into Biomass Pretreatment for Biofuels
	Hugh Neill, Oak Ridge National Laboratory, USA
12:20-12:40	Invited Talk: Bio-Innovations for a Resilient, Circular Bioeconomy
	Mary Blanchard, University of Wisconsin - Madison, USA
12:40-13:00	Invited Talk: Biomass Blends for Flexible, Economically Stable, and Scalable Biomanufacturing
	Nawa Baral, Lawrence Berkeley National Laboratory, USA
13:00 -13:50	Lunch Break
Biomass Supply in Sustainable & Circular Economics	
Session Chair: Aindrila Mukhopadhyay, Lawrence Berkeley National Laboratory, USA	
13:50-14:15	Keynote Talk: Advanced Quantification of Fugitive Methane Emissions in Wastewater Treatment Plants
	Elsayed Elbeshbishy, Toronto Metropolitan University, Canada
14:15-14:35	Invited Talk: Valorization of Lignocellulosic Biomass to Produce Biohydrogen
	Young Eun Song, Lawrence Berkeley National Laboratory, USA

14:35-14:55	Invited Talk: Innovations in Community Bioenergy: California's Experience, Prospects, and National and Global Implications David Wells Roland-Holst, University of California, Berkeley, USA
14:55-15:15	Invited Talk: Hydrogenases as Enablers of Redox-Driven Biomanufacturing Justin Panich, Lawrence Berkeley National Laboratory, USA
15:15-15:35	Invited Talk: Auto-Floating Microalgae – An Alternative Way for Cultivating Easily Harvestable Microalgal Biomass Yuansheng Hu, UCD School of Civil Engineering, Ireland
15:35 - 15:55	Coffee Break
	Session Chair: Amit Ghos, Indian Institute of Technology Kharagpur, India
15:55-16:15	Invited Talk: Scaling Up the Forest Bioeconomy: From Thermal Deoxygenation to Sustainable Fish Feed Clay Wheeler, University of Maine, USA
16:15-16:35	Invited Talk: From Genes to Gigawatts: Bridging Biological Innovation and Climate Investment in the Bioenergy Transition Jillian Chase, Azolla Ventures, Massachusetts, USA
16:35-16:55	Invited Talk: Coupling Pretreatment and Solvent Recovery to Enable Closed-Loop Biomass Deconstruction Md Maksudur Rahman, Joint Bioenergy Institute (JBEI) and Sandia National Laboratories, USA
16:55 - 17:35	E - Poster Presentations
16:55 - 17:05	Title: Liquid Chromatography and Mass Spectrometry Analysis of Volatile Alkaline Protic Solvent Pretreated Lignocellulosic Hydrolysate Emine Akyuz Turumtay, Lawrence Berkeley National Laboratory, USA
17:05 - 17:15	Title: Directed Evolution of Conjugative Plasmids Thien Vu, Lawrence Berkeley National Laboratory, USA
17:15 - 17:25	Title: Impact of Pyrolysis Temperature on the Pore Structure and Surface Area of Bamboo-Derived Biochar for Sustainable Applications Hung-Lung Chiang, National Yunlin University, Taiwan
17:25 - 17:35	Title: An Unconventional Study: Replacing all Crude Oils with Fuels from Cellulosic Biomass (CWF) Chiara Berretta, Massachusetts Institute of Technology, USA
	DAY – 3, March 25, 2026
	Biorefining at the Heart of the Circular Economy
	Session Chair: Smith Pittman, National Laboratory of the Rockies, USA
09:30-10:00	Plenary Talk: Biofuels: A Paradigm of Present and Future (Online) Rafael Luque Alvarez de Sotomayor, King Saud University, Saudi Arabia
10:00-10:20	Invited Talk: Green Power for Data Centers Using Napier Grass Based Biogas-Hydrogen Pathway Ganapathy Arumugam, Enhanced Biofuels and Technologies LLC, USA
10:20-10:40	Invited Talk: Application of LC-MS Based Metabolomics Analysis to Bioenergy Research

	Edward Baidoo, Lawrence Berkeley National Laboratory, USA
10:40-11:00	Invited Talk: Dynamic Two-Phase Anaerobic Digestion Biorefineries: An Investigation of Technical and Economic Feasibility
	Rajas Shinde, Agriculture and Food Development Authority of Ireland , Ireland
11:00-11:30	Coffee Break
	Session Chair: Edward Baidoo, Lawrence Berkeley National Laboratory, USA
11:30-11:50	Invited Talk: Combined Algae Processing: Progress, Potential, and Pathways Forward
	Matthew Wiatrowski, National Laboratory of the Rockies, USA
11:50-12:10	Invited Talk: Kinetic Modeling of Dilute Alkaline Deacetylation for Scalable Lignocellulosic Bioenergy Systems
	Smith Pittman, National Laboratory of the Rockies, USA
12:10-12:30	Invited Talk: Harnessing the Abiotic-Biotic Interface for CO2 Conversion
	Deepika Awasthi, Lawrence Berkeley National Laboratory, USA
12:30-12:50	Invited Talk: Sugarcane Biomass Utilization: Technical Potential and Implementation Gaps (Online)
	Joaquín Mario Ortiz, National Institute of Agricultural Technology, Argentina
12:50 -13:40	Lunch Break
	Comparing Biomass Processing Depots to Supply Large Biorefineries
	Session Chair: Bruce E. Dale, Michigan State University, USA
13:40-14:00	Invited Talk: Requirements for Biofuels to Replace Crude Oil: Soil Sustainability, Hydrogen and Cellulosic Biomass
	Charles Forsberg, Massachusetts Institute of Technology , USA
14:00 - 14:20	Invited Talk: Renewable Energy and Circular Animal Agriculture in the U.S (Online)
	Wei Liao, Michigan State University, USA
14:20-14:40	Invited Talk: Toward Carbon Negativity—Innovative Pathways in Biofuel Systems(Online)
	Jorge Antonio Hilbert, Energy & Environment Consulting Services, Argentina
14:40-15:00	Invited Talk: Lessons from Organizing Biomass Logistics in Africa: Keep it Simple is the Success (Online)
	Fabrizio Sibilla, S&C Best, Italy
15:00-15:20	Invited Talk: Decentralized Supply Chains for Electrobiofuels (Online)
	Chris Saffron, Michigan State University, USA
15:20-15:45	Coffee Break
	Session Chair: Bruce E. Dale, Michigan State University, USA
	Session Chair: Rajas Shinde, Agriculture and Food Development Authority of Ireland , Ireland
15:45-16:05	Invited Talk: Engineering Anaerobic Microbial Systems for Carbon Valorization: From Arrested Anaerobic Digestion to CO₂ Gas Fermentation for Acetate Production (Online)
	Angana Chaudhuri, Washington State University, Pullman, USA
16:05-16:25	Invited Talk: Hybrid Electrochemical-Biological Approach to Upcycle Food Waste into Aviation fuel (Online)
	Beenish Saba, The Ohio State University, USA
16:25-16:45	Invited Talk: Integrated Biorefineries: Maximizing Value from Waste Through Multi-Product Platforms(Online)
	Jayant Keskar, Enpro Envirotech Pty Ltd, Australia

16:45-17:05	Invited Talk: Green Criminology in Malaysia's Palm Oil Industry: Deforestation, Ecological Footprints, and Corporate Environmental Responsibility (Online)
	Intan Salwani Mohamed, Universiti Teknologi MARA (UiTM), Malaysia

17:05 - 17:15 Closing