



<https://uky.zoom.us/j/81749900749>

9-10am

OPENING PLENARY

DR. CAPUCINE DUPONT

Senior Lecturer-Researcher in Bioresource Technology, IHE Delft Institute for Water Education

From waste to biochar added-value materials in the Food-Energy-Water nexus context

10-10:30am

COFFEE BREAK

10:30-12pm

KEYNOTE SPEAKERS

10:30-11am

PROF. AKINBODE ADEDEJI PH.D., CQE-ASQ

Carnegie Fellow & Associate Professor of Food Process Engineering,
University of Kentucky Department of Biosystems and Agricultural Engineering

The Age of 'ALT' Proteins: Impact on Water and Energy Conservation

11-11:30am

SAMUEL KELTY

Chemical Research Engineer, LG&E and KU

Kentucky's Clean Energy Successes, Opportunities, and Challenges

11:30am
- 12pm

PROF. LINDELL ORMSBEE PH.D., P.E., P.H.,
D.WRE, F.ASCE, F.EWRI

Director, Kentucky Water Resources Research Institute
Professor, University of Kentucky Department of Civil Engineering

The Importance of a Systems Approach for Addressing Water Challenges

12-1:00pm

LUNCH

1-2pm

AFTER LUNCH PLENARY

J O N A T H A N W E B B

Founder & CEO, AppHarvest

Leveraging Kentucky's Renewable Resources for the Betterment of People and Planet

2-3pm

POSTER SESSION

3-4pm

CLOSING PLENARY

P R O F . A L I C E A G O G I N O

Roscoe and Elizabeth Hughes Chair in Mechanical Engineering

Professor, University of California – Berkeley Department of Mechanical Engineering

Innovations in Food, Energy Water Systems:

STEM Training for Actionable Research and Global Impact

POSTERS

"Quantitative Microbial Risk Assessment for Urban Stormwater Reuse After Treatment Through a Bioretention System"

– Isaac Oluk, UK Department of Civil Engineering.

"A Systematic Literature Review of Wetland Treatment Systems Used to Treat Runoff Mixtures from Urban and Agricultural Landscapes" – Emily Nottingham, UK Department of Biosystems and Agricultural Engineering.

"Regulatory Mechanisms of the LBD40 Transcription Factor in Arabidopsis Embryogenesis"

– Sanjay Joshi, UK Department of Plant & Soil Sciences.

"The Attrition Study of Bauxite Oxygen Carrier for Chemical Looping Combustion with In-Situ Carbon Capture and Power Generation" – Neng Huang, UK Center for Applied Energy Research.

"Support Effects of Ni-Catalysts Promoted with Fe or Cu in the Catalytic Deoxygenation of Tristearin"

– Great Umenweke, UK Center for Applied Energy Research & Department of Chemistry.

"Incentivizing Plastic Waste Collection for Conversion to Clean Cooking Fuel to Empower Women in Developing Countries"

– Betsy Beymer-Farris, UK Department of Environmental and Sustainability Studies.

"Electrochemical Characterization of P450 BM3_{oxy} Enzyme" – Josiel Barrios Cossio, UK Department of Chemistry.

"Evaluating the Economic Costs and Optimal Machinery for Cover Crops in Kentucky" – Robert Ellis, UK Department of Agricultural Economics.

"Lignin Valorization via Reductive Depolymerization Using Promoted Nickel Catalysts and Supercritical Conditions"

– Julia Parker, UK Center for Applied Energy Research & Department of Biosystems & Agricultural Engineering.

"Parallel Fabrication of Polymeric UF Membranes Using Green Solvents for Water Purification"

– David Lu, UK Department of Chemical Engineering.

"Ozonolysis of Phenolic Aldehydes" – Reagan Patton, UK Department of Chemistry

"Summer Lovegrass/Teff: An evaluation of forage and seed traits in Eragrostis Tef" – Eric Luteyn, UK Department of Plant & Soil Sciences.

"Enhanced Rocking Chair Capacitive Deionization for Accelerated Water Desalination"

– Emmanuel Ohiomoba, UK Center for Applied Energy Research.

"Bacterial Community Dynamics during Distilled Spirits Fermentation: Influenced by Mash Recipes and Fermentation Processes" – Shuang Liu, UK Department of Plant & Soil Sciences.

"Macro Changes with Microorganisms: A Multi-Disciplinary Investigation into The Effectiveness of Micro-Algae Biofertilizer in the Remediation of Mined Land Spoil" – Kent Pham, UK Department of Plant & Soil Sciences.

"Integration of Polyethylene Terephthalate (PET) and Bio-Derived Solvents in Polymeric Ultrafiltration Membranes"

– Alex Williams, UK Department of Chemical Engineering.

"Synthesis and Application of Biochar-Based Membranes in Water Treatment"

– Abelline Fionah, UK Department of Chemical Engineering.

"Assessing The Filtering Potential of Freshwater Bivalves Using 16s rRNA Gene Sequencing and Gut Microbiome Analysis" – Mary Foley, UK Department of Biology.

"Functionalization of Polyether Ether Ketone Membranes for Improved Performance in Water Treatment"

– Laura Brady & Kate McLarney, UK Department of Chemical Engineering.