



KU DEPARTMENT OF CHEMICAL &
PETROLEUM ENGINEERING

Fall 2020 AIChE Events

Sunday, November 15th | 9:00 - 4:00PM (PST)

AIChE / ASC Student Recruitment Fair [[attendee guide](#)]

Wednesday, November 18 | 3:00 - 5:00PM (PST)

AIChE Reception with 4 breakout rooms [[Zoom meeting details](#)]

- Alumni

- Grad School Q&A

- REU Q&A

- Faculty Search

Two faculty positions (tenure track assistant professor and assistant teaching professor)

Learn more about the department @ cpe.ku.edu | Link to Faculty Position Postings @ jobs.ku.edu



Come Find Us During the Conference!

Monday, Nov 16th

Valerie L. Pringle

8 am - 9am PST / 10 am - 11 am CST | Presentation | 53h
"How pH Can Impact the Interfacial Properties of a Monoclonal Antibody and How This Can Lead to Aggregation during Bioprocessing"

Ethan A. Finberg

8 am - 9am PST / 10 am - 11 am CST | Presentation | 184d
"Separation of Azeotropic Refrigerant Mixtures Using Extractive Distillation with Ionic Liquid Entrainers"

Kalin R. Baca

8 am - 9am PST / 10 am - 11 am CST | Presentation | 184d
"Separation of Azeotropic Refrigerant Mixtures Using Extractive Distillation with Ionic Liquid Entrainers"

Aaron M. Scurto

8 am - 9am PST / 10 am - 11 am CST | Presentation | 37b
"High-Pressure Viscosity and Density of HFC and HFO Refrigerants in a Synthetic Polyol Ester Lubricant Oil"

Bridgette Befort (Notre Dame)

8 am - 9am PST / 10 am - 11 am CST | Presentation | 16g
"Molecular Modeling to Aid the Separation of Azeotropic Mixtures of High Global Warming Potential Hydrofluorocarbon Refrigerants Using Ionic Liquids"

Ruyi Zheng

8 am - 9am PST / 10 am - 11 am CST | Poster | 3ax
"Determining the Phase Boundary of Gas Hydrates Using a Novel Unified Equation of State"

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Come Find Us During the Conference!

Tuesday, Nov 17th

Susan M. Stagg-Williams

8 am - 9am PST / 10 am - 11 am CST | Presentation | 69a

“Redesigning a First Year Introduction to Chemical Engineering Course to Integrate a Lab Component”

Ankit Verma

8 am - 9am PST / 10 am - 11 am CST | Presentation | 711c

“Development of a Closed-Loop Process for Separation and Recovery of Li and Co from LiCoO_2 ”

Nicholas Reding (2)

8 am - 9am PST / 10 am - 11 am CST | Presentation | 203d

“Effect of Particle Morphology on Metal Dust Deflagration Severity and Explosion Protection Design”

8 am - 9am PST / 10 am - 11 am CST | Presentation | 203c

“Consequence Prediction for Dust Explosions Involving Interconnected Vessels Using Computational Fluid Dynamics Modeling”

Alejandro Garcadiago del Rio (Notre Dame)

8 am - 9am PST / 10 am - 11 am CST | Presentation | 479g

“Process Design Under Uncertainty for Novel Separations of Azeotropic High Global Warming Potential Hydrofluorocarbon Refrigerants Using Ionic Liquids”

Thursday, Nov 19th

Gbemisola Ojo

8 am - 9am PST / 10 am - 11 am CST | Poster | 512f

“Optimization of Renewable Ammonia Production Via Electrochemical Reactions”

Murilo Toledo Suekuni

8 am - 9am PST / 10 am - 11 am CST | Poster | 161u

“Application of Low-Field Nuclear Magnetic Resonance (LF-NMR) for the Mesh Structure Characterization of Poly(Ethylene Glycol Derivative Hydrogels)”

Kalin R. Baca

8 am - 9am PST / 10 am - 11 am CST | Poster | 514a

“Project Earth: Environmentally Applied Research Towards Hydrofluorocarbons”

Andrew D. Yancey

8 am - 9am PST / 10 am - 11 am CST | Presentation | 16g

“Azeotropic Fluorocarbon Refrigerant Mixture Separations Using Porous Material”

Ankit Verma

8 am - 9am PST / 10 am - 11 am CST | Poster | 517n

“Recycling of Cathode of Lithium-Ion Batteries: A Unique Application of Oxalate Chemistry”

Joseph M. Scalet

8 am - 9am PST / 10 am - 11 am CST | Poster | 162ab

“Influence of Degree of Acetylation on Physical Properties of Biomimetic Chitin Films”

Ruyi Zheng

8 am - 9am PST / 10 am - 11 am CST | Presentation | 632d

“Phase Behavior of High-Pressure CH_4 - CO_2 Gas Hydrates in NaCl Solutions”

Wednesday, Nov 18th

Anoop Uchagawakar

8 am - 9am PST / 10 am - 11 am CST | Presentation | 730d

“Investigating Promoter Effects in Bimetallic Mo-Nb Silicates for Enhanced Olefin Metathesis”

Hooman Hosseini

8 am - 9am PST / 10 am - 11 am CST | Presentation | 270e

“Multi Scale Flow Observation and Stability Measurement for Environmentally Friendly Waterless Fracturing Using Supercritical CO_2 Foam”

Abby N. Harders

8 am - 9am PST / 10 am - 11 am CST | Poster | 351af

“Separation of Hydrofluorocarbon Azeotropic Mixtures Using Polymeric Membranes”

Tugba Turnaoglu

8 am - 9am PST / 10 am - 11 am CST | Presentation | 544a

“The Flory-Huggins Parameters of Binary Ionic Liquid Mixtures with Ammonia”

Kalin R. Baca

8 am - 9am PST / 10 am - 11 am CST | Presentation | 544h

“Separation of Hydrofluorocarbon Mixtures Using Ionic Liquids”

Juan J. Bravo Suárez

8 am - 9am PST / 10 am - 11 am CST | Presentation | 175h

“Vapor Phase Ethanol Selective Oxidation to Acetaldehyde and Acetic Acid on Gold Catalysts”

Friday, Nov 20th

Nan Wang and Akash Anand

8 am - 9 am | Presentation | 629f

“The Influence of Low Voltage Electric Fields on Lipase Catalyzed Triglyceride Hydrolysis”

Gbemisola Ojo

8 am - 9 am | Presentation | 759a

“Optimization of Renewable Ammonia Production Via Electrochemical Reactions”

Murilo Toledo Suekuni

8 am - 9 am | Presentation | 557d

“Surface Area Determination

of Kevlar® Particles in Suspensions Containing Iron Impurities Using Low-Field Nuclear Magnetic Resonance Relaxometry”

Rajkumar Kore

8 am - 9am PST / 10 am - 11 am CST | Poster | 513er

“Acidity Measurement of Haloalkane Acids and Their Effects on Catalytic Activity”

Ankit Verma

8 am - 9am PST / 10 am - 11 am CST | Presentation | 731e

“Synthesis and Characterization of Improved Energy Materials from Spent Lithium-Ion Battery Cathodes”