Chemical Engineering

Poster Session
8:00 AM – 12:00 PM
Salisbury Labs 402

Encapsulation and Characterization
Of Bacteriophage Loaded in Liposomes
Julia Afthim, Dylan Rapoport, Wasef Raza
Advisor: Christina Bailey-Hytholt

Assessing Gene Expression in Trophoblast Cells after Delivery of Nucleic Acid Loaded Nanoparticles
Michela Benazzi, Matthew Shea
Advisor: Christina Bailey-Hytholt

Fouling in a Diffusiophoretic Water Separations System
Albert Foun, Sam Qu, Maheer Quasem
Advisor: Andrew Teixeira

Pharmaceutical Catalysis:
Continuous Flow Enantiopurification Reactor Design
Griffin Carloni, Zachary Carney, Robert Dec
Advisor: Andrew Teixeira

Photocatalytic Degradation of Tetracycline using Batch and Flow Reactors
Michelle Barboza, Brent Ditzler
Advisor: Andrew Teixeira

Metallic Alloy Design for Additive Manufacturing
Patrick Devine, Grace Fitzpatrick-Schmitt
Advisor: Danielle Cote (ME)

High Energy Density Magnesium-Air Battery for Shipping, Rail & Aviation Electrification & Grid Storage
Kurt Lindenthal, Edward Miller, Tyler Riggs, Jacqueline Simon Villacis
Advisor: Adam Powell (ME)

Modeling Interactions Between Carbon Dioxide & Biomolecules
Nathan Demers
Advisor: Aaron Deskins

Modeling Carbon Nitride Materials
Naomasa Tanaka
Advisor: Aaron Deskins

Surface Passivation of Hydride Fuel Cell for Process Safety
Abigail Calistra, Nathan Crock, Kristen Soden
Morgan Watson
Advisor: Stephen Kmiotek

Beverage Industry Optimization Project 1
Katelyn Bergeron, Edward Carrillo, Emily Donovan
Jessica Goode, Henry Liro, Lucas Wilson-Wuestefeld
Advisor: Stephen Kmiotek

Analysis of Pesticide Content in Cannabis Extract
Abigail Cummings, Adam Lee, Brandon Nieto, Reya Singh
Advisor: Stephen Kmiotek

CO2 Removal by Moss
Derek Baker
Advisor: Stephen Kmiotek

High Energy Passive Solar Systems
Sarah Abatiello, Emma Driscoll, Effelia Loscouski, Sydney Smith, Jade Veth
Advisor: Stephen Kmiotek

Degradation of Per- and Poly - fluoroalkyl Substances via Advanced Oxidation Processes
Development of Module
for Fire Dynamics
Alexis Clark, Katherine Lacroix, Shayla Nguyen
Advisor(s): Stephen Kmiotek, John Bergandahl (CE)

Residential PFAS Sources
Christopher Harvill, Katherine Lacriox
Advisor: John Bergandahl (CE)

Characterization of a Well-Type HPGe Detector Using Standard
John Alonzo

Valorization of Stranded Natural Gas
Elitumaini Swai
Advisor(s): Nikolaos Kazantzis, Michael Timko

*Not Presenting*
An Exploration of Tea Tannis Impact on Mouthfeel in Wine
Cameron Cronin, Toni Vigliotti
Advisor(s) Elizabeth Stewart, Eric Young

Techno-Economic Analysis of Ammonia Production in the Presence of Uncertainty
William Garvey, Paul Jasmin
Nikolaos Kazantzis

Lab Development of Electrical Resistance Heating for Soil Remediation
Rainier Vaughn
Advisor(s): David DiBiasio, Kristen Boudreau