

ASC 2020 - VIRTUAL UNDERGRADUATE STUDENT POSTER COMPETITION

WINNERS

Group 01 Catalysis & Reaction Engineering

1	Eric Musa	University of Michigan	<i>Optimized Machine Learning Potential Reconstruction for Enhanced Catalysis Research</i>
2	Jeffrey Hoffmann	University of Pittsburgh	<i>Lifespan Characterization of Oxidized NiFe Catalysts for Alkaline Oxygen Evolution Reaction</i>

Group 02 Computing and Process Control

1 (tie)	Stephen Quiton	University of Southern California	<i>A Matrix Completion Algorithm to Recover Modes Orthogonal to the Minimum Energy Reaction Path</i>
1 (tie)	Maya Desai	Rowan University	<i>Development of Wastewater Treatment Networks Using the P-Graph Approach</i>

Group 03 Education & General Papers

1	Leonor Teles	University of Rochester	<i>Stroke Prediction Using Carotid Artery CFD Simulations</i>
2	Vedika Shenoy	University of California - Santa Barbara	<i>Designing and Characterizing a 3D Printed Staggered Herringbone Mixer</i>

Group 04 Environmental

1	Kevin Pataroque	Case Western Reserve University	<i>Elucidation of Radical Species in an Electrolytic Non-Equilibrium Plasma-Water System</i>
2	Austin Lehr	Rowan University	<i>Multi Objective Approach to Designing Solvent Recovery Pathways Via Economic and Environmental Metrics</i>

Group 05 Food, Pharmaceutical & Biotechnology I

1	Ann Metzloff	Cornell University	<i>Development of a New Generation of Robust pH-Responsive Fluorescent Proteins for Use in Intracellular Imaging Studies</i>
2	Ishmamul Hoque Sadab	Bangladesh University of Engineering and Technology, Bangladesh	<i>A Molecular Docking Approach to Identify Effective Stilbene Derivatives Against the Main Protease of Sars Cov-2</i>

Group 06 Food, Pharmaceutical & Biotechnology II

1	Isabella Bowland	Georgia Institute of Technology	<i>Histochemical Analysis to Investigate the Efficacy and Safety of Suprachoroidal Injection in Rodents Using Microneedles</i>
2	Caroline Hamric	University of Florida	<i>Evaluating the Role of Fetal Decm on Macrophage Polarization in 2D</i>

Group 07 Food, Pharmaceutical & Biotechnology III

1	Shay Ladd	Michigan State University	<i>Modeling the Impact of Cerebrospinal Fluid Flow on Waste Clearance in the Brain</i>
2	Kiana Ramirez	Rowan University	<i>Using Predictive Analytics for Diagnosis of Patients with Irritable Bowel Syndrome</i>

Group 08 Fuel, Petrochemical & Energy I

1	Sasha Neefe	Lafayette College	<i>Interesterification of Vegetable Oils Using Ferric Sulfate: Biodiesel Yield and Cloud Point Analysis.</i>
2	Marissa Martine	Rowan University	<i>Optimizing Pipeline Flushing Processes for Efficient Lube Oil Blending and Packaging Operations</i>

Group 09 Fuel, Petrochemical & Energy II

1	Sarah Ben-Yoseph	Georgia Institute of Technology	<i>A Zinc-Based Alloy Anode Approach for Suppressing Hydrogen Evolution in Aqueous Battery Anodes</i>
2	Joseph McManus	City College of New York	<i>Synthesis of Exfoliated Graphite Cathodes with Improved Ionic Conductivity and High-Rate Capacity for Aluminum-Graphite Batteries</i>

Group 10 Materials Engineering & Sciences I

1	Josephine Surel	Hope College	<i>Exploring Halide Perovskite Structural Tunability to Design Materials for Dynamic Photovoltaic Windows</i>
2	Brandan Taing	University of California - Los Angeles	<i>Simulation of Battery Cycling of Different Electrode Architectures Using Porous Electrode Theory</i>

Group 11 Materials Engineering & Sciences II

1	Nicholas Sbalbi	University of Massachusetts - Amherst	<i>Structural Characterization of Nematic Colloids at Liquid Crystal-Air Interfaces Prepared Via Photopolymerization</i>
2	Julia McKay	University of Pittsburgh	<i>Predicting Ligand Removal Energetics in Thiolate-Protected Nanoclusters from Molecular Complexes</i>

Group 12 Materials Engineering & Sciences III

1	Uma Kokilepersaud	University of Maryland	<i>Electroadhesion of Polyelectrolyte Hydrogels to Plant Tissue</i>
2	Matthew Santoso	University of Texas - Austin	<i>Quantitatively Investigating the Relationship between Rheology of Polymer Solutions and Their Resulting Membrane Morphology.</i>

Group 13 Materials Engineering & Sciences IV

1	Daniela Rivera-Mirabal	University of Puerto Rico - Mayaguez	<i>Molecular Dynamics Simulations of Polypeptoids Reveal the Effects of Chemistry and Topology on Local Water Behavior</i>
2	Jennifer Fang	North Carolina State University	<i>Zero-Powered, Non-Invasive, Long-Term Sweat Sampling By Biomimetic Osmotic Principles</i>

Group 14 Separations

1	Dylan Kulbacki	Case Western Reserve University	<i>Membrane Absorbers for the Rapid Purification of Medical Isotopes</i>
2	Joelle Scott	Case Western Reserve University	<i>Electrospun Membrane Adsorbers for Radiochemical Separations</i>