



## Chemical Engineering Department Design Presentations

Friday, April 16, 2021

### Junior Design Presentations

10:00 am – Welcome

10:05 am – Predicting Silica Nanoparticle Sizes from the Traditional Stöber Process– John Dofflemeyer, Mario Marquez, Brandon McReynolds

10:25 am – Biomaterial Tissue Mimic for Dolphin Hearing – Destiny Crawford, Jennifer Gamboa-Gil, Catherine House, Monica Ramirez

10:45 am – Biogas to Syngas Scale Up – Madeline Finale, Muriel Olander, Jalen Salas, Kaoru Shimada

11:00 am – Dispersion of Titanium Nitride Nanoparticles in a Transparent Monolithic Silica Glass- Taylor Le, Arscenia Lucero, Bianca Perez-Nunez, Shane Risolio

11:20 am – Optimization of Poly(3-alkylthiophene) Crystallinity Through Alkyl Side Chain and Annealing Temperature – Chase Kennard, James Ruff, Hunter Wilkinson

### Senior Design Presentations

12:55 pm - Welcome

1:00 pm – Insulin Production Plant - Connor Cole, Chase Ferrone, Kilkee Flynn, Kavon Mojtabai, Cameron Zielinski

1:30 pm – Synthesis of Dimethylamine from Methanol and Ammonia – Kamryn Gordon, Christopher Lafferty, Danielsen Moreno, Ian Roberson

2:00 pm – Industrial Production of Hydrogen Peroxide: Anthraquinone (AO) Process – Christopher Catanach, Santana Floe, Idalis Hernandez, Adam Lopez

2:30 pm – Direct Hydration of Propylene to Isopropanol – Brian Ortiz, Aaron Plant, Madelyn Rich, Sorcha Sterrit

3:00 pm – Nitrobenzene by the Nitration of Benzene – Morelia Cuevas, John Davies, Nicole Penners, Dalton Wright