

CHEMISTRY Departmental Seminar

Spring 2022 CHEM 285/191 Schedule Tuesday at 4:30-5:45PM Duncan Hall 250 April 12th, 2022

Dr. Andrew J. IngramDirector of Process Chemistry and Catalysis
Gevo

Sustainable Systems to Produce Fuels and Chemicals

Gevo is on a mission to reduce greenhouse gas (GHG) emissions with sustainable alternatives and commercialize the next generation of advanced, bio-based renewable transportation fuels and chemicals with the potential to achieve zero or negative carbon emissions. Our groundbreaking Net-Zero plants aim to disrupt a linear "take, make, waste" model by integrating together all aspects of production, maximizing value and efficiency while minimizing waste. Gevo's circular systems approach starts with sustainable feedstocks, such as corn, grown via low carbon agriculture techniques. We then decarbonize the manufacturing process by capturing renewable carbon and eliminating reliance on fossil energy, harnessing wind energy and green hydrogen to supply electricity to our Net-Zero plants. To authenticate our net-zero claims, Gevo has partnered with Blocksize Capital to create Verity Tracking, a blockchain technology for tracking sustainability, building trust, and setting the highest standards for the industry. This system is expected to enable a level of sustainability assurance that has not yet been seen. Ultimately, this creates high-value protein to supplement the food system and drop-in hydrocarbon fuels, all with a net-zero (or better) carbon intensity.

For more information: Prof. Muller at <u>gilles.muller@sjsu.edu</u> or Prof. Wang at <u>ningkun.wang@sjsu.edu</u>