Professor Jenny Yang wins two awards to research carbon capture in order to combat climate change

Yang’s work involves collaborations in California and across the country.
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Professor Jenny Yang's students are busy working on climate change solutions.

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Professor Jenny Yang of the UCI Department of Chemistry works to understand how we can use advances in inorganic chemistry to solve one of the biggest challenges we face in the 21st century: climate change. Her work, which draws inspiration from nature, involves designing new catalysts to generate carbon neutral fuels, and using electrochemistry to capture CO2 for utilization or storage. Recently, Professor Yang received $55,000 from the Scialog Corporation under Scialog's Negative Emissions Science Initiative to collaborate with colleagues from Arizona State University and

the University of Pittsburgh on a project called “Novel Membrane Design for Hybrid Ocean Capture and Desalination.” The funding will help them “develop new electroactive molecules to integrate direct ocean capture of carbon with seawater reverse osmosis, enabling the synergistic co-production of clean drinking water and CO_2 for storage in a single process,” said Yang. Professor Yang also just received funding from the University of California, which awarded $20 million in grants to a collaborative effort across all 10 UC campuses to help the state meet its climate change goals. Alongside colleagues from five other UC campuses and the Lawrence Livermore and Lawrence Berkeley National Labs, Yang will be working on the “development of clean, renewable fuels from captured CO_2,” she said. The work will help develop new ways of diverting CO_2 into clean, renewable fuels and other useful products.

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