

2017 Undergraduate Summer Research Program

Water desalination through reactive extraction

Madeleine Hamrick, chemical & petroleum engineering

Advisor: Eric Beckman, chemical engineering

Pittsburgh Water Microbiome

Austin Kuntz, bioengineering

Advisor: Kyle Bibby, civil & environmental engineering

Additive manufacturing of energy-saving and energy producing materials

Colleen Hilla, materials science & engineering

Advisor: Markus Chmielus, mechanical engineering & materials science

Development of Next Generation Nano-Antimicrobials

Cole D'Aurizio, mechanical engineering

Advisor: Leanne Gilbertson, civil & environmental engineering

Unlocking energetically efficient water oxidation for ozone disinfectants

Angela Leo, chemical & petroleum engineering

Advisor: John Keith, chemical & petroleum engineering

Machine Learning Blueprints for Green Chelating Agents

Ethan Henderson, chemical & petroleum engineering

Advisor: John Keith, chemical & petroleum engineering

Black silicon etching for solar cells

Maxwell Lindsay, materials science & engineering

Rafael Rodriguez, materials science & engineering

Advisor: Paul Leu, industrial engineering

Electrochemistry for sustainable energy conversion and storage

James Hughes, chemical & petroleum engineering

Dean Miller, chemical & petroleum engineering

Advisor: James McKone, chemical engineering

Integrating Sustainable Design in Engineering Education

Kaleigh Smith, mechanical engineering

Advisor: David Sanchez, civil & environmental engineering

Desalination using polymer crystallization

Joseph Hamm, chemical & petroleum engineering

Advisor: Sachin Velankar, chemical engineering

Feeding a Growing World: Towards a Novel Process for Ammonia Synthesis

Eric McElhinny, chemical & petroleum engineering

Kendra LaVallee, chemical & petroleum engineering

Advisor: Goetz Vesper, chemical & petroleum engineering

Automated growth of two-dimensional materials for green electronics

Joji Bronner, computer engineering

Advisor: Feng Xiong, electrical and computer engineering

2-D and nanomaterials for Energy Applications

Connor Herring, chemical & petroleum engineering

Advisor: Minhee Yun, electrical and computer engineering