Welcome to the Kappe Environmental Engineering Labs at Penn State University!

We are developing new methods of producing Clean Energy

Such as biological generation of hydrogen and microbial fuel cells producing electricity from waste

We develop many processes to clean wastes from our air, soil and water
Your tour is about to begin…
Farzaneh Rezaei, PhD student in Dr. Bruce Logan’s group, researches Microbial Fuel Cells with Dr. Logan.
Dr. Shaoan Cheng, Post-Doc in Dr. Logan’s group, researches new electrode materials for Microbial Fuel Cells
Dr. Shaoan Cheng, Post-Doc in Dr. Logan’s group, holds a Microbial Fuel Cell he built as it powers a fan on top
Jung Rae Kim, PhD student in Dr. Logan’s group, researches MFC’s in a constant temperature room.
Yi Zuo, PhD student in Dr. Logan’s group, researches the design of Microbial Fuel Cells
Karl Shellenberger, PhD student in Dr. Logan’s group, prepares biological media for Microbial Fuel Cells
Dr. Shaoan Cheng, Post-Doc in Dr. Logan’s group, researches biohydrogen production
Dr. Huilian Ma, Post-Doc in Dr. Logan’s group, uses the Atomic Force Microscope to research bacterial adhesion.
Charles Winslow, PhD student in Dr. Logan’s group, prepares biological media for bacterial adhesion research
Mary Ann Lora Robinson, MS Student in Dr. Rachel Brennan’s group, researches chitin for bioremediation of nitrate in groundwater.
Hua Cai, MS Student in Dr. Rachel Brennan’s group, researches bioremediation of contaminated soils
Daniel Tai, PhD student in Dr. Brian Dempsey’s group, researches iron oxidation coupled with nitrite reduction.
Jeff McDonough, MS student in Dr. Bill Burgos’ group, studies biological iron reduction.
Hui Tan, PhD student in Dr. Bill Burgos’ group, prepares media for biological iron reduction research
Melissa Russell, MS student in Dr. Brian Dempsey’s group, analyzes uranium solutions for bioremediation research.
Judodine Patterson, PhD student in Dr. Fred Cannon’s group, analyzes perchlorate in groundwater samples by IC.
Jen McElhoe, PhD student in Dr. Rachel Brennan’s group, analyzes groundwater bioremediation samples by HPLC.
Dave Jones, Project Assistant, analyzes alcohol and fatty acid byproducts from Microbial Fuel Cells by GC.
Tinina Thompson, MS student in Dr. Fred Cannon’s group, analyzes groundwater samples for TOC
Porosimeters, used by Dr. Fred Cannon’s group to research activated carbon for cleaning air and water
Je-Hun Jang, Post-Doc in Dr. Brian Dempsey’s group, analyzes colorimetric samples by UV/Vis spectrometer.
Thermogravimetric analyzer, used by Dr. Fred Cannon’s group to research activated carbon in waste treatment
Yujue Wang, PhD student in Dr. Fred Cannon’s group, uses GC to research advanced oxidation processing of coal pyrolysis.
Adam Redding, PhD student in Dr. Fred Cannon’s group, extracts groundwater contaminated with MTBE for GC analysis.
Zhiyong Ren, PhD student in Dr. Jay Regan’s group, researches MFC’s in a constant temperature room.
Ah-Young Cho and Sok-Hee Jung, MS students in Dr. Jay Regan’s group, prepare biological samples.
Fluorescence microscope used by Dr. Jay Regan’s group for identifying bacteria in bioremediation research
Gel electrophoresis equipment used by Dr. Jay Regan’s group to analyze bacterial DNA samples for bioremediation
Dr. Jay Regan teaches CE 479 Environmental Microbiology lab each fall semester
CE 479 Environmental Microbiology lab
CE 479 Environmental Microbiology lab
Dr. Bill Burgos teaches CE 475 Water Quality Chemistry lab each spring semester
CE 475 Water Quality Chemistry lab
CE 475 Water Quality Chemistry lab
This concludes your tour of the Kappe Lab facilities
The tour will now begin again