GRADUATE STUDIES

Striving for a sustainable world



RESEARCH FOCUS AREAS

- Atmospheric physics and chemistry
- Bioremediation
- Electrochemical processes
- Interface and colloid science
- Nanotechnology
- Renewable energy
- Semiconductor manufacturing
- Soft materials
- Water treatment and reuse

AFFILIATED CENTERS & INSTITUTES

- Center for Environmentally Sustainable Mining
 Engineering Research Center for Environmentally
 Benign Semiconductor Manufacturing
- Institute for Energy SolutionsSuperfund Basic Research Center
- Sustainable Bioeconomy for Arid Regions Center
- Water & Energy Sustainable Technology Center

EMPHASIS ON RESEARCH

\$5.5M

Research expenditures

DEGREES

- · PhD Chemical Engineering
- · PhD Environmental Engineering
- MS Chemical Engineering
- MS Environmental Engineering
- ME Environmental Engineering



66 Courses were to the point and directly related to our field of work, and UA Engineering faculty are highly knowledgeable and always there to help. 99

- Mojtaba Azadi Aghdam, WEST Center research assistant



FUNDING OPTIONS
THROUGHOUT DEGREE
LIFECYCLE

APPLICATION DEADLINES

- Fall: January 15
- Spring: June 30

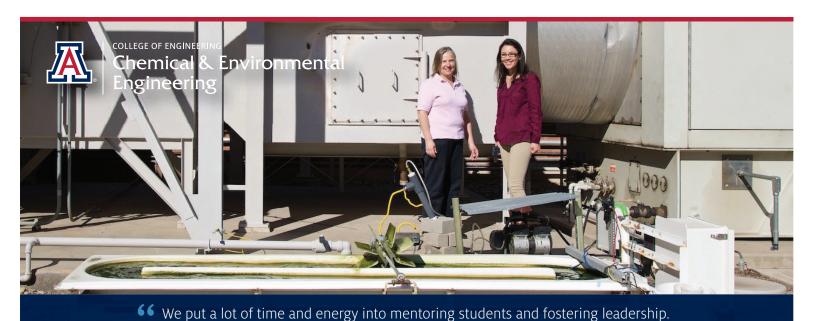
CONTACTS

Adam Printz, Associate Professor

Chemical Engineering Graduate Committee Chair aprintz@arizona.edu 520.626.6769

Reyes Sierra, Professor

Environmental Engineering Graduate Committee Chair rsierra@arizona.edu 520.626.2896



That is a very important part of our job. ***

- Kim Ogden, professor and director of the Institute for Energy Solutions

Faculty Expertise

Andrea Achilli - achilli@arizona.edu

membrane processes for water separation - desalination and water reuse technologies - forward osmosis and membrane distillation systems

Bob Arnold - rga@arizona.edu

filtration and aquifer water reuse • trace organic chemicals in products derived from treated wastewater

Jim Baygents – baygents@arizona.edu

electrochemical water treatment

Paul Blowers - blowers@arizona.edu

life cycle assessment • applied quantum chemistry • student learning and retention

Jim Farrell - farrellj@arizona.edu

contaminant transport through soil and groundwater • abiotic transformations of chlorinated solvents

Jim Field - jimfield@arizona.edu

microbiology of inorganic contaminant biotransformation • anaerobic biodegradation of hazardous pollutants

Dominic Gervasio - gervasio@arizona.edu

concentrated solar power • electrolytes for DC power supplies • nonplatinum catalysts

Roberto Guzmán - guzmanr@arizona.edu

nanobiotechnology • affinity interaction technology • synthesis and modification of polymers

Kerri Hickenbottom – klh15@arizona.edu

concentrate management - membrane processes for resource recovery from waste streams - life cycle assessment

Vicky Karanikola - vkaranik@arizona.edu

optimization of materials, energy and cost for sustainable water and wastewater treatment • membrane processes at water-energy nexus • sensors for environmental applications

Anthony Muscat - muscat@arizona.edu

semiconductor surface cleaning \bullet semiconductor quantum dots \bullet nanoporous noble metals

Greg Ogden – gogden@arizona.edu

biofuel

Kimberly Ogden - ogden@arizona.edu

bioreactors for algae • removal of organics and metals from streams • water recycling and reuse

Minkyu Park – minkyupark@arizona.edu

advanced oxidation

Ara Philipossian – ara@arizona.edu

planarization processes and post-planarization cleaning processes in integrated circuit manufacturing

Adam Printz - aprintz@arizona.edu

solar energy ullet polymeric materials ullet mechanical and chemical stability of flexible electronics

Eduardo Sáez – esaez@arizona.edu

fate, transport and treatment of trace contaminants in water - transport of metals and metalloids by dust and aerosols

Suchol Savagatrup - suchol@arizona.edu

responsive soft materials \ast biochemical sensors \ast interfacial and colloidal behaviors of complex emulsions

Farhang Shadman - shadman@arizona.edu

nanoscale manufacturing • green semiconductor processing • water purification, reclamation and recycling

Reyes Sierra - rsierra@arizona.edu

anaerobic wastewater treatment and biological nutrient removal • microbial transformation of metals and metalloids

Shane Snyder - snyders2@arizona.edu

environmental analytical chemistry • water treatment technologies • emerging contaminant characterization • disinfection byproducts • bioassays

Armin Sorooshian - armin@arizona.edu

aerosol composition, size and water uptake • aerosol-cloud-precipitation interactions • cloud chemistry