

# RYAN G. ANDRIS

681 Wimbledon Lane, Hatfield, PA 19440 267-421-7776 rga25@drexel.edu

## EDUCATION

### **PhD Candidate, Materials Science and Engineering, Current**

Drexel University  
GPA: 4.00/4.00

### **Master of Science, Petroleum Engineering, May 2016**

University of Texas at Austin  
GPA: 3.70/4.00

### **Bachelor of Science, Geology, August 2014**

Minor in Chemistry  
University of Pittsburgh  
GPA: 3.86/4.00

## ACADEMIC EXPERIENCE

### **PhD Candidate, Drexel University**

**September 2018 – May Present**

- Synthesizing cathode materials for applications in energy storage and capacitive deionization

### **Graduate Research Assistant, University of Texas at Austin**

**September 2014 – May 2016**

- Performed pore-scale numerical modeling of methane hydrate growth in shallow oceanic sediments to enhance knowledge of methane hydrate systems
- Studied the diffusive and advective flow of methane dissolved in the pore fluid of shallow sediments and how it is impacted by changing porosity

### **Undergraduate Research Assistant, University of Pittsburgh**

**January 2011 – April 2013**

- Assisted with the geochemical reconstruction of lake histories using metals preserved in sediment
- Worked with sediment cores to reconstruct droughts in western North America
- Used techniques such as sieving, decanting, and bleaching in order to prepare carbonate samples
- Executed lost on ignition processes to measure calcite and organic matter in sediment
- Learned magnetic susceptibility meter processes, ICP preparation, and gamma spectrometer procedures

## INDUSTRY EXPERIENCE

### **Manufacturing Engineer, Pratt & Whitney**

**January 2017– August 2018**

- Responsible for the Air Pressure Plasma Spray cell operation and application of thermal barrier coatings
- Program IRC5 robots to execute thermal spray cycles for hot section turbine vanes using RAPID
- Project lead for the acquisition of a \$700 thousand robotic cell designed to reduce rough clean and polish cycle time by an average of 33% per part.

### **Production Engineering Intern, Range Resources Corp.**

**May – August 2015**

- Used Spotfire to study two well pad turn-on events to identify offset well production issues related to completion and production operations (e.g. frac-hits and shut-ins)
- Accounted for over 800 MMcf of decreased production in pipeline due to well turn-on effects which impacted future well planning and helped to optimize current assets
- Established a work flow for identifying negative gas volume impacts due to new wells entering pipeline

**Database and Geological Intern, Chevron Corp.**

**May – August 2013**

- Developed proficiency in GeoGraphix and ArcGIS
- Used well log evaluation to create three dimensional isochore maps across the Marcellus region to increase knowledge of subsurface formation depths to assist with drilling efficiency

**Database and Geological Intern, Chevron Corp.**

**May – August 2012**

- Compiled wireline logging data trade tables for inter-company communication and joint venture operation
- Documented data gathered from over 600 well checks performed by landmen to assist with well permit applications and safety procedures

## **LEADERSHIP**

**President, The University of Pittsburgh AAPG Student Chapter**

**September 2013 – April 2014**

- Increased chapter membership 100% (from 20 to 40 members)
- Worked to get students involved in local geologic societies for networking and industry education
- Coordinated with similar student organizations to give our members exposure to future scholastic and professional opportunities
- Organized a resume building work-shop using advice from industry recruiters

**Undergraduate Teaching Assistant, University of Pittsburgh**

**January 2012 – April 2014**

- Taught a recitation once a week to six General Chemistry students
- Reviewed lecture material from the past week while gauging the students' knowledge and comprehension
- Determined and catered to a student's specific learning style

## **SKILLS AND CERTIFICATIONS**

- Extensive experience with one dimensional numerical modeling using principles of linear algebra
- Software: Matlab, Geographix, ArcGIS, Spotfire, Matlab, NX CAD, Microsoft Office
- Proficient in RAPID
- Basic knowledge of Python
- Proficient in Italian – oral and written
- Strong communication skills – oral, written, and presentation

## **ACCOMPLISHMENTS**

- First author, Methane Transport and Accumulation in Coarse-Grained Reservoirs in the Terrebonne Basin, Northern Gulf of Mexico, presented at the International Conference on Gas Hydrates, 2017
- Completed thesis, The Effect of Restrictive Diffusion on Hydrate Growth, 2016
- Presented The Effect of Restrictive Diffusion on Hydrate Growth at Gordon Research Conferences: Natural Gas Hydrate Systems, Galveston, Texas, 2016
- Recipient, John and Kelli Weinzierl Endowed Presidential Fellowship in Petroleum Engineering, 2015
- Recipient, S.P. Yates Memorial Endowment for Graduate Fellowships in Petroleum Engineering, 2014
- Recipient, University of Pittsburgh Scholarship, 2010 – 2014