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SGE in the News

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On Tuesday, April 23rd, 2019, seven students in Marietta College’s Petroleum Engineering and Geology Department were initiated into the Iota Alpha chapter of Sigma Gamma Epsilon. The students began working on their petition in late February 2019, and quickly received support from both the faculty and staff of Marietta College and their respective department. By the time we had finished our petition and site visit, the spring semester was nearly over, but we still had our goal to get all of our petitioning students initiated before the semester came to an end. Therefore, at 7:00 PM, on the 23rd, our petitioning students enjoyed a casual initiation ceremony with some pizza, drinks, and socialization preceding it. The ceremony was relatively short and small since our chapter was established very late in the spring semester, but it was nonetheless enjoyable and a celebration of our students’ wonderful accomplishment.

We had seven petitioning students, all of whom were present for the meeting and initiated on this evening. Most of the students are majoring in geology, and they are as follows: Alexandra Kirsch, Legacy Barger, Brittany Martin, and Casey Gossett; however, we also have a few who are majoring in petroleum engineering: Madison Crawford and Sequoya Yates. The last petitioning member Elizabeth Sweda, is a double major in both geology and petroleum engineering. We hope, in the future, to include not only geology and petroleum engineering students in our chapter, but also environmental science and environmental engineering students as well. The Earth Sciences represent a wide reaching field of study, and we want to facilitate and encourage this representation and in the Iota Alpha chapter at Marietta College.

After the food, we held our officer elections. Alexandra Kirsch (’20) was unanimously nominated and elected chapter President by the other petitioning members (6). Madison Crawford (’20) was elected chapter Vice President, Elizabeth Sweda (’20) was elected chapter Secretary, and Legacy Barger (’20) was elected chapter Treasurer. After these elections, our students were ready to begin the initiation ceremony. For this, we used the shortened version of the Traditional Initiation Ceremony. The chapter President and Vice President read through the ceremonies together, sharing the
responsibilities of the reading. Our students were initiated and our chapter advisor, Dr. Tej Gautam took a group photograph of our very first initiates into the Iota Alpha chapter.

In the future, we hope to make our Sigma Gamma Epsilon initiations more celebrated by involving more faculty members and planning a much larger event; this year we were sadly pressed for time and could not adequately prepare for a larger event. Marietta College’s geology students are small in number compared to the petroleum engineering students, but having an established chapter of SGE gives us an opportunity to become a bigger, more prominent presence on campus. Earth Science is a rich, diverse field, with abundant opportunities for humanity to learn about our Earth and our relationship to it as humans. The Iota Alpha chapter has two goals for our future at Marietta College: we want to recognize student success and achievement in the Earth Sciences, and we also want to promote our geology department to even more people across campus through the establishment of this chapter. We are so proud of our petitioning students and are excited to have the Iota Alpha chapter on our campus.

Marietta College Sigma Gamma Epsilon: Iota Alpha Chapter

Pictured (left to right): Brittany Martin (‘21), Elizabeth Sweda (‘20), Sequoya Yates (‘20), Madison Crawford (‘20), Alexandra Kirsch (‘20), Legacy Barger (‘20), Casey Gossett (‘21).

National President of Sigma Gamma Epsilon
I was born in Baltimore, Maryland to Rose Marie and Joseph Francis Burns, Sr. with three older brothers and one younger one. Growing up with a keen interest in the outdoors and the natural environment, it was not until after I graduated with a degree in English/Fine Arts and spent several years in the business world that I decided that I needed to redirect my career and life. Many of the jobs that I performed and found that I really enjoyed centered on teaching – instructing people how to use software, teaching new staff the procedures of the office, etc. As such, I realized I really wanted to be a teacher – specifically, a university professor. About this time in my life, I was also actively engaged in technical climbing. As such, I was up close and personal with many rock formations – if you are clinging to bits of them to prevent yourself from dying, you start to become a little curious about them, especially tensile strength. This culminated in my deciding to pursue my doctorate in Geology, which I obtained from the University of Wyoming in 2006.

I initially began teaching at Wyoming when I was graduate student, as the faculty would all leave during the summer to pursue their various research projects and no one was left to teach the Introductory Geology classes that were being offered. Senior graduate students were given the opportunity to take these on, and I took advantage of this to hone my classroom skills. While ABD, I applied for and obtained a one year sabbatical replacement position at St. Lawrence University in Canton, NY that lasted for three years. While there, I took on several students to work on a variety of undergraduate research projects ranging from a study of ash borer beetles in Colorado to a scanning electron microscope (SEM) study of V-pits in quartz grains. Although not required to take on students for research because of my contract, I feel undergraduate research is
a vital experience for a student, one that greatly prepares any budding geologist to a life of dedication to our science. I had an excellent undergraduate research experience when I was at CA State University, Sacramento under the direction of Dr. Tim Horner and have always striven to give my students a similar foundation in their careers.

After St. Lawrence, I moved to Charleston, IL to teach in the Geology and Geography Department at Eastern Illinois University. I am the resident Sedimentologist/Stratigrapher and have taken on almost a dozen students working on projects more closely related to my discipline. Two projects have received more attention than most. The first is an on-going study of the evolution of the Penn/Perm basins in/around Wyoming. Previous research all indicate that sediments were singularly provided by the uplift of the Ancestral Rocky Mountains. My dissertation work on the Casper Formation (Laramie Range) demonstrates that there were two source areas contributing to the basin – the Ancestral Rocky Mountains to the southwest and an unnamed uplift to the northeast. Subsequently, I have had students sampling additional basins nearby to unravel the source(s) of their sediments to investigate this further. The second multi-year project that is culminating in the coming year or so is an investigation into the morphological changes along the Little Wabash River (south central IL). This river runs through land that is primarily agricultural with average farm sizes of 10 acres and annual gross revenues per county in the ~$10 million range. Over the course of decades, meanders have altered the landscape, carving into cropland and turning tillable soil into unusable prairie land. Having now spent ten years at EIU, I have now both obtained my tenure as well as just recently taken over the reins of command by becoming the Chair of the Department in July, 2017. That, coupled with being elected President of SGE this past Fall, should make for an exciting as well as busy time ahead. I look forward to serving this society well and hope to inspire more students to research as well as dedication to Sigma Gamma Epsilon.

Central Province, National Vice President of Sigma Gamma Epsilon
I grew up in Cedar Falls, Iowa and when I entered college I had no knowledge of geology. I always liked science but didn’t take a geology course in high school because it wasn’t a college prep course. Then I took a course in physical geology during my first semester at the University of Northern Iowa and I was hooked. I completed my B.S. in Geology in 1988 and went to Indiana University where I earned my graduate degrees (M.S. 1990, Ph.D. 1994). I accepted a job offer from Western Illinois University in August, 1994 and have been happily teaching geology here since then. I have taught a wide variety of courses at WIU, such as Introduction to the Earth; Oceanography; Mineralogy; Hydrogeology; Geologic Field Methods; Summer Geology Field Camp; Energy and Earth Resources, Introduction to Environmental Studies; and Seminar in Environmental Studies. I have conducted research in the areas of surficial processes (streams, wind-blown sand) and hydrogeology. I have served as the faculty advisor for the Delta Psi Chapter of Sigma Gamma Epsilon since 2000. Some of my other professional activities include serving as treasurer of the Illinois Groundwater Association and chairing the McDonough County Groundwater Protection Education Committee.