Dinosaurs at Southern

In 2016, the Department of Geology decided to acquire a museum quality, life-size replica of a Protoceratops andrewsi skeleton. There are obvious teaching advantages to being able to show paleontology students these types of replicas. But we also felt that this could be an outreach opportunity for the department, so we decided to give “her” a name and asked all SIU students for suggestions. The response was overwhelming. We received almost 800 suggestions from students all across campus. After a vote, the students chose to name our dinosaur, “Nanu”, an Egyptian name meaning “beautiful”. The project was such good PR for the department that in 2019 we decided to do it again. We acquired three juvenile Protoceratops to join Nanu and asked K-12 students throughout the state to help us name them. About 2000 students took up the challenge and submitted suggestions. Once again, we asked SIU students to vote for the winners, and Sachi, Ido and Ulla were christened. The names are also Egyptian. They mean “blessed child”, “labor”, and “prosperous”, respectively, and best of all, they spell out SIU! Naming individual dinosaurs is not really a scientific exercise, but as a way of promoting the geology program, both to SIU students and to younger students throughout the state, these projects succeeded beyond anything we could have hoped for. If you get the chance, come and visit them. They “live” in a case in front of Browne Auditorium in Parkinson now.
We have some rather exciting news to report for Geology at Southern Illinois University. In July of 2019, all of our programs became part of the School of Earth Systems and Sustainability, along with degree programs in Geography and Environmental Resources, the Environmental Resources and Policy Doctoral Program, and the Minor in Environmental Studies. The faculty in geology embraced this move with enthusiasm, recognizing the collaborative opportunities the School would provide in research and teaching. It is important for our alumni to recognize that none of our programs have changed. Our degrees still have the same requirements they have always had, with a rigorous background in the fundamental disciplines of geology. We still will graduate students that will go on to careers in the oil and gas industries, mining, and environmental geology.

I stepped down as Chair of the Department of Geology in June, 2019. It has truly been an honor and a privilege to serve the faculty in the Department and the University over the last 17 years. During my tenure as Chair I continued to teach, mainly courses in hydrogeology. A couple of years ago, however, I added geomorphology to my repertoire and look forward to teaching and finishing up some research in the future. Geology has an outstanding faculty, as you will see from articles and announcements in this newsletter. The faculty determine the quality of an academic program and we have a dedicated and accomplished faculty who will continue our tradition of excellence for years to come.

Steven Esling
Coordinator, Geology Programs
School of Earth Systems and Sustainability

It is my pleasure to serve as the first Director of the School of Earth Systems and Sustainability at Southern Illinois University. I was initially hired at SIU as a faculty member in Geography and Environmental Resources in 2006 and served as department chair from 2012-2019. As a physical geographer and climate scientist, I’ve long recognized the substantial overlap that exists between Geography and Geology. At the same time, the disciplines also have much to offer each other. Indeed, prior to the formation of the School of Earth Systems and Sustainability, our faculty recognized these benefits of collaboration and worked together within interdisciplinary academic programs, research projects, and other activities. I’m honored to have been chosen by our faculty and administration to lead an exceptional group of faculty, staff, and students. I look forward to serving the School of Earth Systems and Sustainability, along with all of its programs, in the coming years.

Justin Schoof
Director, School of Earth Systems and Sustainability
Professor, Geography and Environmental Resources
School of Earth Systems and Sustainability

Field camp participants, Glacier National Park
The department bids “Farewell” to Dr. John “Jack” Crelling
June 13, 1941–September 27, 2018

John Crawford Crelling, a renowned coal petrologist, passed away September 27, 2018. Jack, as he was known to family, friends, and colleagues from around the world, was a consummate professional, a dedicated teacher and mentor, and an insightful researcher. He was born in Philadelphia, PA on June 13, 1941. He received a B.A. in Geology in 1964 from the University of Delaware, and an M.S. (1967) and Ph.D. (1972) in Geology from The Pennsylvania State University. He was also a Captain in the Army Corps of Engineers (1968–1970) where he taught at the Army Engineer School (Ft. Belvoir, VA) and served in Vietnam where he commanded the 579th Engineer Detachment (Terrain Intelligence) and earned the Bronze Star.

Following his Ph.D. studies, Jack worked for five years in charge of the Coal and Coke Section at the Homer Research Laboratory, Bethlehem Steel. Here, Jack developed his life-long research interest in coals and the controls on coke quality and properties. This was a significant step in his development as a researcher and, incidentally, an interesting segue from his graduate studies where his M.S. research had been on the coal/coke petrology of natural coals in the Purgatoire River valley, and his Ph.D. on igneous petrology of dikes in the Spanish Peaks area in southern Colorado. While at Bethlehem Steel, Jack conducted research on the effects of coal weathering on coke quality. This early work led the way for many projects on coking as he moved on in 1977 to a teaching position in the Geology Department at Southern Illinois University Carbondale (SIUC).

Jack worked his way up the ranks at SIUC, from Assistant Professor (1977–1981), to Associate (1981–1987), to Full Professor (1987–2006). Following his retirement, he held the position of Research Professor (2006–2018). During his time at SIUC, Jack developed a world-class coal laboratory, working over the years with many faculty within the department (including Professors Dutcher, Jobling, Krueger, Anderson, and Rimmer), many research associates (including Bill Huggett, Dave Bensley, Tim Pratt, Brian Cardott, and MaryAnn Malinconico), along with numerous visitors to his lab from the around the world. Jack recognized the importance of visiting other labs (such as at the University of Utah and Imperial College, London, UK) and hosted many visitors to his lab in Carbondale. He had collaborators in the United Kingdom, France, Spain, Canada, Pakistan, Japan, China, the Czech Republic, and the Netherlands, among others. He developed a strong association with the University of Newcastle-upon-Tyne in the UK, especially with Dr. Harry Marsh and his research group, with Jack visiting Newcastle several times and spending a memorable sabbatical there in 1991. The visits were reciprocated when Harry Marsh had an extended stay in Carbondale in the early 1990’s.

Over the years, Jack developed a broad-ranging research program that included studies on western coals, spectral fluorescence, coking coals and cokes, reactivity of coals and coal macerals, and properties of chars, carbons, and graphites. Perhaps one of his most important efforts was the establishment of a density-gradient centrifugation (DGC) laboratory. This is a technique borrowed from the biological sciences and allows separation of pure macerals (and other carbon components) based on their different densities. Today, primarily as a result of Jack’s efforts, SIUC runs the only DGC lab in the US (and possibly worldwide) that is currently dedicated to coals, kerogens, and other carbon materials.

During his career, Jack published close to 120 peer-reviewed papers, meeting proceedings, short-course notes, and book chapters; he also co-edited three book volumes, one of which “Applied Coal Petrology” (with Isabel Suárez-Ruiz) was awarded the 2009 Ralph Gray Award for Outstanding Book in Coal and Organic Petrology by The Society for Organic Petrology. Jack also had an exceptional funding record to support his
research, bringing in close to $6.4 million in over 70 grants. His significant contributions to our science were recognized by numerous international organizations: Jack was honored with the 2001 Cady Award (Coal Geology Division of the Geological Society of America), the 2002 Joseph Becker Award (Ironmaking Division of the Iron and Steel Society of AIME), the 2007 Reinhardt Thiessen Medal (International Committee for Coal and Organic Petrology), and the 2015 Castaño Award (The Society for Organic Petrology). Similarly, at SIUC his research was recognized and he was awarded the 1987 Outstanding Researcher Award from the College of Science.

Jack also played important roles in the leadership of our national and international professional organizations. He was involved with The Society for Organic Petrology (TSOP) since the early days, serving in several leadership roles including President. He was also heavily involved in the leadership of the Coal Geology Division of the Geological Society of America. His contributions to these and other groups led to Outstanding Service Awards from The Society for Organic Petrology (2004), American Chemical Society Fuel Chemistry Division (1994, 2003), and the Geological Society of America Coal Geology Division (1995).

Jack was equally renowned as a teacher, earning the SIUC College of Science's Outstanding Teacher Award in 2006. He presented extremely well organized and well received classes at SIUC, and his teaching portfolio included a wide variety of courses from introductory geology, to courses on planetary geology, coal geology, coal petrology, and even terrain analysis and forensic geology. He also took new graduate students and helped them develop their own teaching skills as they became Teaching Assistants. During his time at SIUC, over 40 students worked on theses and dissertations in the areas of coal petrology and organic geochemistry at SIUC; close to 30 of them were Jack's advisees and they have gone on to successful careers in industry and government. As part of his efforts to share his knowledge, Jack developed and presented numerous short courses and workshops in organic petrology and coal geology. He also developed the first on-line atlas of coal and carbon petrology, one that continues today as "Crelling's Petrographic Atlas of Coals and Carbons"

https://coalandcarbonatlas.siu.edu/.

Even in retirement, Jack continued to be active and came into the department on a regular basis. He would give guest lectures in Organic Petrology and Coal Geology, and was always available to talk with students about their research projects.

Beyond remembering Jack for his scientific and academic contributions, we will also remember him for his strong sense of family. He loved to talk about his life-long partner, best friend and wife Betty, his wonderful sons Ian and Jamie, and in recent years would delight in sharing the latest pictures of his grandchildren Emma and Matheson. Jack seemed to hit the right work-life balance with diverse outside interests including a long-standing love of Sherlock Holmes, his beliefs (he was a life-long Episcopalian), and time spent with many friends and family. Those of us in the department here at SIUC will miss not only his scientific insights, but also his friendship and mentorship.


A Special Issue of the International Journal of Coal Geology in memory of Dr. Crelling is in its final stages of publication. It can be can be found at: https://www.sciencedirect.com/journal/international-journal-of-coal-geology/special-issue/107K1XL4GCC

A copy of Dr. Crelling's CV can be found here.
Faculty Spotlight: Dr. Sally Potter-McIntyre

I joined the faculty of Southern Illinois University Carbondale in the fall of 2013 as an Assistant Professor after completing my Ph.D. at University of Utah in 2013. I first acquired experience teaching at Colorado Mesa University and was a field geologist at the Energy and Geoscience Institute at the University of Utah prior to arriving here. At Southern, I have established a solid curriculum and have made major contributions as a research scientist and in service to the Department and my profession.

I teach upper level and graduate level courses in sedimentology, stratigraphy, and petroleum geology including Sedimentology and Stratigraphy, Petroleum Geology, and Field Camp. I also developed a new course “Field Experience on the Colorado Plateau” where students spend spring break backpacking and learning about depositional environments.

In 2017, I began a collaboration with Dr. Steve Tedesco of Running Foxes Petroleum to provide Masters students with a Petroleum Geology research track. This program uses data and guidance from Steve and students use donated industry standard software (Petrel, Interactive Petrophysics, BasinMod, Surfer) to interpret the data. As of 2018, two students were enrolled and on track to graduate in Spring 2019. The program is off to a successful start!

In early 2018, I received a large grant from NASA to study magmatic intrusions into sulfur-rich sediments on the Colorado Plateau as an analog to similar processes on Mars. The goal of this is to determine the habitability of these environments when they were in the subsurface – environments that are now exposed and more easily studied than the current subsurface. The idea is that the subsurface was the longest-lived habitable environment on Mars, and it is even possible that it is currently habitable! However, accessing the subsurface on Mars is beyond our technical capabilities, so studying features that once were in the subsurface, but are now exposed, can provide insights into the subsurface environment. This work was previously funded by a National Geographic Society Committee for Research and Exploration grant.

“I also developed a new course “Field Experience on the Colorado Plateau” where students spend spring break backpacking and learning about depositional environments.”
I also received the NASA Astrobiology Institute (NAI) Early Career Collaboration Award to study the occurrence of the diagenetic minerals, jarosite and alunite, in southern Utah. Based on laboratory studies, these minerals are thought to precipitate an extremely low pH (1-2) and are unstable in fluids over pH5, where they recrystallize to more stable phases in a matter of weeks. However, the discovery of these minerals as diagenetic cements begs the questions of how did they get there and why are they still there. These minerals are fairly ubiquitous on Mars and have been used to interpret depositional and diagenetic environments; therefore, this research has the potential to change the paradigm of how we think of ancient martian environments.

Another project in my lab focused on paleogeography and was sponsored by the American Chemical Society Petroleum Research Fund. This research used a combination of traditional field and lab techniques combined with detrital zircon geochronology to differentiate the effects of climate from tectonics in changed depositional environments. It was shown that a late stage pulse of tectonic uplift of the Ancestral Rockies caused stream piracy that diverted water to the Central Colorado Trough during the Middle Jurassic, created a hypersaline lake system that persisted into the Late Jurassic. In addition to the western Colorado work, similar techniques were used to determine that the Mississippi River was likely flowing through Illinois during the Maastrichtian (~70Ma).

During the years 2016-2018, I gave several international invited and/or keynote talks. I participated in a workshop called Cosmic Perspective of Earth: A Planet Permeated and Shaped by Life – Implications for Astrobiology and the Earth Life Science Institute (ELSI) at the University of Tokyo, Japan. I gave the keynote address at the 4th International Geobiology Conference in Wuhan, Hubei, China and also gave an invited talk at the workshop, Search for life: from Early Earth to Exoplanets in Quy Nhon, Vietnam.

My students have been busy too! Teams of five students participate in the American Association of Petroleum Geologists Imperial Barrel Award competition every spring. This competition involves taking a dataset and interpreting it in six weeks using donated industry-standard software. Students are then flown to Pittsburg to present their findings to a panel of industry judges. It is an exceptional opportunity for students to learn important skills of time management, project management, teamwork, networking, professionalism, and, of course, geology!
Alexandra Apgar

“The Department of Geology has not only fueled my passion for a professional career in paleontology, but provided me the means and the knowledge to excel while doing so. My love of all things prehistoric started when I was a child, and stayed with me all throughout school. However, I’d never been afforded the opportunity to learn more about the subject until I began attending Southern Illinois University. Thanks to the guidance of professors such as Dr. Henson, Dr. Anderson, Dr. Ishman, and Joe Devera, I gained valuable information about my career and learned to be a leader. I recently assisted Zach Seaman, a graduate student with his research utilizing Ground Penetrating Radar. He helped me understand how I might use similar technology for my own research. My hard work earned me an internship position at the Wyoming Dinosaur Center the summer before my junior year. For three months, I received hands-on training in field excavation, fossil preparation, and public relations, while also conducting field research with Zach and Dr. Henson. My goal for the coming year is to analyze the field data to determine if ground penetrating radar can aid in the discovery of subsurface fossils and bone beds. As a child, all I ever wanted was to study the dinosaurs I loved - and now, thanks to Southern, that dream is quickly becoming a reality.”

Kailey Seaman

“The Department of Geology has not only given me the tools I needed to become a professional geologist, but the passion to crave more understanding of the world around me. My research with Dr. Sue Rimmer in the field of organic petrology started my sophomore year of my bachelor’s degree, when I was introduced to the fluorescence of liptinite macerals in relation to maturation of coals and organic-rich shales. My eyes lit up when I saw how these particular macerals glow under the UV light of a microscope, and I immediately wanted to know more. This is when Dr. Rimmer graciously took me under her wing, and this started a fire that couldn’t be put out. After two more years of research in my Junior and Senior year I went on to pursue my Master’s Degree with Dr. Rimmer in organic petrology. After analyzing the difference in fluorescence parameters with increasing maturation between liptinite macerals, I still have many unanswered questions about how their intensities and wavelengths change. My goal for the next year is to answer how and why these parameters change between liptinite macerals in the Illinois Basin. What started as a class project, turned into research that I will pursue for the remainder of my professional career because I love it so much.”
Current Staff

Dana Wise, Office Manager; William Huggett, Researcher.

Current Faculty
(first date is the year of the degree, the second date is the year they joined Southern)


James Conder, Associate Professor, Ph.D., Brown University, 2001; 2008. Geodynamics, seismology.

Steven P. Esling, Associate Professor and Chair, Ph.D., University of Iowa, 1984; 1982. Hydrogeology, Quaternary stratigraphy.

Lea Gilbertson, Lecturer, M.S., Western Washington University, 1994; 2014. Teaches courses in Petrology, Structural Geology, and Introductory Geology.

Harvey Henson, Assistant Professor and Interim Director, STEM Education Research Center, Ph.D., Southern Illinois University, 2015; 1989. Geophysics, Science Education, STEM Outreach.


Scott E. Ishman, Professor, Ph.D., The Ohio State University, 1990; 1999. Paleoecology, Cenozoic paleobiology, foraminifera.

Liliana Lefticariu, Associate Professor, Ph.D., Northern Illinois University, 2004, 2007. Isotope geochemistry, environmental geochemistry.

Sally Potter-McIntyre, Assistant Professor, Ph.D., University of Utah, 2013; 2013. Sedimentology and Stratigraphy.

Laura O'Connell, Adjunct Professor, Ph.D., Queen's University, Ontario, 2016; 2015. Carbonate Sedimentology, Marine Geology.

Sue M. Rimmer, Professor, Ph.D., The Pennsylvania State University, 1985; 2009. Coal geology and petrology, source-rock geochemistry.

John L. Sexton, Professor, Ph.D., Indiana University, 1974; 1986. Geophysics, seismic reflection and refraction.

Emeritus Faculty

Richard Fifarek, Charles O. Frank, Stanley Harris, John Marzolf, Paul Robinson, James Staub, and Jay Zimmerman.

Faculty and Staff

With over three years since our last newsletter, we have some changes to report on our faculty and staff in Geology. Dr. Eric Ferré left in 2018 to take a position as Director of the School of Geosciences at the University of Louisiana at Lafayette. Dr. Justin Filiberto is now the manager of Geology and Petrology at the Lunar and Planetary Institute in Houston, also departing in 2018. Both of these gentlemen will be greatly missed.

Mona Martin, our office manager, took another position at the University. Dana Wise now manages the office in Parkinson. Some of you may remember her as the longtime office manager of the Environmental Resources and Policy Program.

Tamara Broadnax was a GIS specialist in the department, but she left early in 2019.

Joe Devera and Brett Denny both work for the Illinois State Geological Survey, but are assigned to the southern Illinois region. They continue to serve on graduate student committees in the Department and Joe continues to teach our introduction to field geology course each spring as an adjunct instructor. They mentor many of our students and provide internship and employment opportunities as well. Their efforts have significantly improved our programs.

Visiting Scholars, Post-Doctoral Researchers, and Graduate Students

The Department hosts many visitors from across the country and around the world to collaborate with our faculty and use our research facilities:

Sue Rimmer hosted Kuo Li, a Ph.D. candidate from College of Geoscience and Surveying Engineering, China University of Mining and Technology, Beijing, China. She also worked with Qiaing Wei, another Ph.D. candidate from College of Geoscience and Survey Engineering, China University of Mining and Technology, Beijing, China.
Harvey Hensen

I rejoined the Department of Geology in January 2016 as Assistant Professor and now hold a tenure-track joint appointment in Geology (College of Science) and in Curriculum and Instruction (College of Education and Human Services) where I teach science education to pre-service teachers. I also serve as the Interim Director of the new STEM Education Research Center (https://stemedresearch.siu.edu/), which is off to a great start. In fact during 2018, several collaborators and I obtained five external grants worth $13,006,334 from state and federal agencies.

Most of you will remember me from my early years as a graduate student or research support staff person in the Department. I began serving at SIUC in August 1985 as a graduate research assistant with John Sexton and I served full-time in the Geology Department in a research staff position from 1989 to 2008. I then served as Assistant Dean of the College of Science from 2008 to 2016. I mentor undergraduate and several graduate students in science education and geology, and have a long history of collaborations and partnerships with local, state and national STEM educators. I serve on multiple boards and committees that seek to advance STEM education and research. My research includes pre-service science teaching, teacher professional development, science education assessment, earthquake seismology, and applied geophysics. I have published and presented numerous papers on my research, and I have brought over $26M in external funding to support students, faculty, programs and research at Southern.

Lea Gilbertson

My name is Lea Gilbertson. I first joined SIU Geology as an instructor for Fall semesters, 2014 and 2015 to teach mineralogy and ore deposits as the department transitioned between Dr. Rich Fifarek and Dr. Daniel Hummer. I recently returned in Fall 2018 and am now in my second year here. I earned my undergraduate degree in geology and music education at University of Minnesota-Morris and my Master’s degree at Western Washington University in Bellingham, WA. My thesis focused on the geochemistry and optical properties of tourmaline as a potential prospecting mineral.

I enjoy working with students at all stages in their geologic journey, and I teach a variety of courses, including introductory geology courses, Igneous and Metamorphic Petrology, and Structural Geology. Although my interests in geology and earth science are broad, including climate change and earth and energy resources, my main interests are mineralogy and igneous and metamorphic petrology. Prior to teaching at SIU, I’ve been a "Geology Vagabond", teaching courses from petrology and mineralogy to earth resources and climate change at several universities across the country. I’ve enjoyed teaching in the SIU geology department, working with great colleagues, and teaching our enthusiastic and engaged students.

Other than teaching geology, I enjoy exploring the beauty of the Shawnee National Forest, photography, road biking, the Vikings (SKOL), and my two kitties, Gracie-Bean and Poofy-Lars.

Laura O’Connell

I have been a part of SIU Geology since 2016, when I was hired as an instructor for a variety of courses including upper level/graduate level ’Process Geomorphology’, and introductory geology electives for non-science majors and future educators. It was a blast to teach at SIU and I was hooked! I was relatively new to the area and teaching geomorphology among the superb field sites of southern Illinois gave me an excuse to explore and share what I discovered with my students in outdoor labs each week. Now, I do the bulk of my teaching at John A. Logan College and am still an active researcher at SIU.
I am a carbonate sedimentologist/marine geologist. I earned my undergraduate degree in Marine Science and Geology at the University of Miami in Florida ("The U"). I then attended Queen's University, Ontario, Canada for my Master's and Doctorate degrees in Geology. My research focuses on seafloor habitats and sediments of the modern day and how they can be used to learn about the past oceans and climate. I mainly focus on non-tropical carbonate deposits, which have not been as extensively studied as tropical ones. I am currently working on some of the most northern modern marine carbonate sediments ever discovered, in Alaska! I am also publishing a paper on coralline algae as water energy indicators in southern Australia. While at SIU, I have also branched out into terrestrial carbonates, working on some freshwater spring precipitates in Utah with Dr. Sally Potter-McIntyre and her graduate student, Jason Williams. I have been proud to represent the Salukis at multiple conferences, including GSA Annual Meetings around the USA and the Bathurst Meetings of Carbonate Sedimentologists in Europe.

**Faculty Accomplishments**

Dr. Sally Potter-McIntyre won the College of Science Early Career Faculty Excellence Award in 2018. This award recognizes faculty within their first five years for excellence in scholarship, teaching, and other professional activities. Sally joined us after holding an appointment as a lecturer at Colorado Mesa University. She quickly found support for her research from the American Chemical Society Petroleum Research Fund, National Geographic, as well as programs sponsored by NASA and NSF. Sally has diverse research interests in sedimentology, sedimentary diagenesis, basin analysis, geochemistry of terrestrial environments, geobiology, Mars sedimentology, astrobiology, and the sedimentary and geochemical records of life. Sally took over our required course in Stratigraphy and Sedimentology, and revived our course in Petroleum Geology; developed new courses in fracking and the advanced sedimentology of the Colorado Plateau, and now teaches half of our summer field course. She has developed and mentored a team for the Imperial Barrel Competitive, arranged for donations of over a million dollars of industry software for student use, and mentors the student chapter of the AAPG at Southern. She has not only involved masters and doctoral student in research, but also many of our undergraduate students. Sally has been invited as a keynote speaker with full travel support to international conferences in China, Japan, and Vietnam to present her research. She was promoted to Associate Professor with Tenure in 2019.

**Dr. Ken Anderson** was awarded in the University Teaching Excellence Award in 2019. This award recognizes faculty for outstanding contributions to the teaching mission of the university. Ken is a world class organic geochemist, who has papers published in the most prestigious scientific journals. He is an inventor, and his inventions have attracted the attention of domestic energy companies as well as those in Europe and Australia. He teaches courses in his research specialties; organic geochemistry and low temperature geochemistry, but he has also stepped out of his comfort zone and teaches courses in Earth through Time and Geomythology. It became clear in just a few years that Ken made Earth through Time into what may very well be the best course in the Department. Originally, Geomythology was an interdisciplinary core curriculum course. Ken modified the course and turned it into the only humanities course taught by a member of the faculty in the College of Science. The class now has a university-wide reputation, with large enrollments, significant positive feedback from the students, and an excellent reputation with advisors across campus. Recently Ken developed an online version of Geomythology. He didn't just convert his lecture course into an online course by recording his lectures and posting his notes, however. He took considerable time and care (more than two years) and completely redesigned the course so that it best fit the online environment.
Dr. Daniel Hummer consulted the American Museum of Natural History in New York on the scientific and aesthetic aspects of a new exhibit on mineral evolution. He wrote the content brief that summarizes the seven major stages of mineral evolution from the Big Bang to the present day, which served as the starting outline for the content of the exhibit. He then edited drafts for the exhibit narrative, and worked with museum staff to select appropriate mineral specimens for the exhibit that best represent the seven states of mineral evolution. He worked with museum scientists and visual design experts to develop a visual display depicting the timeline of mineral evolution. This is an extremely high profile project that promises to bring considerable recognition to Daniel and to Southern Illinois University.

Dr. Sue Rimmer and her collaborators received the 2019 Dal Swaine Award, (Best Refereed Paper in Coal and Hydrocarbon Source Rock Geochemistry), from The Society for Organic Petrology (TSOP) for: Hower, J.C., Berti, D., Hochella, M.F., Rimmer, S.M., and Taulbee, D.N., 2018, Submicron-scale mineralogy of lithotypes and the implications for trace element associations: Blue Gem coal, Knox County, Kentucky. International Journal of Coal Geology, v. 192, p. 73-82.

Alumni News

Stuart Neiman I am in semi-retirement now after more than 45 years of environmental geology and am working only on several projects for long time clients for environmental compliance and remediation efforts. Is anyone at SIU doing any research on the EVO remediation technique so commonly used now by DoD sites impacted by chlorinated solvents in near surface deposits? Please let me know (amerenvcon@gmail.com). I finished my career as an environmental program manager for the USAF at several sites, both CONUS and OCONUS.

Andrew Scott I have been a practicing hydrogeologist in Arizona for over 10 years, principally serving the groundwater supply industry, and secondarily in environmental remediation. However, the recession really impacted the water supply industry and after several years of intermittent project work, I was facing layoff in 2016. Late last year, I was fortunate to enter a position with the US Bureau of Reclamation in Yuma, Arizona. Our focus is managing the groundwater resources of the region to maintain acceptable water levels for agriculture and to manage water deliveries from the Colorado River. As you may be aware, drought conditions in the West have heightened concerns over the distribution of water supplies, and options that in the past would seem impractical, might now be on the table. This represents a challenging dynamic of river and groundwater management in the area.

Joe Genslinger I have been a full-time instructor at Lewis and Clark Community College since 2014 and am also the Physical Science Coordinator. I am up for tenure and promotion to Associate Professor this semester (2017). I hope all is well there and look forwards to getting back down to Carbondale soon.

Garden of the Gods, southern Illinois
In Memoriam

We received news that Jules Dubar passed away in 2009. Dr. Dubar taught at Southern from 1951 to 1953 and from 1954 to 1957. He then moved on to teach at the University of Houston until 1962. He became an associate professor and director of graduate studies at Duke University from 1962 to 1964. He was a senior research associate with Esso Production from 1965 to 1967, then returned to academia as chair and professor of geoscience at Morehead State University until 1981. Dr. Dubar worked as an exploration manager for International Resource Development Corporation until 1982, then as a research scientist and technical editor, University of Texas, Bureau of Economic Geology until he retired in 1992. Dr. Dubar had numerous federal grants and 63 authored and coauthored publications spanning journal articles, edited memoirs, systematic monographs, guidebooks, bulletins, geologic maps, abstracts, and popular books. His main interests were in stratigraphy, sedimentology, and paleontology. The primary focus of his research was on the Cenozoic mollusks of the Atlantic and Gulf Coastal Plain Provinces and their relationship to changing depositional environments.


We also received news that Justin Beasley (B.A., 2004) died in October of 2019. He worked at Jacobs Environmental, but recently took a position with the Environmental Protection Agency.

Since our last newsletter: Links for grant activity for the faculty in the department, a list of faculty publications, a list of our graduates, a list of our scholarship recipients, and a list of completed theses and dissertations in the department.