

Vol. 1 Issue 1 January – March 2023

# FAULTED DIGEST

## AIPG Colorado Section Publication

Vol. 1 Issue 1 January – March 2023

### Special 1<sup>st</sup> Edition Release of the 'Faulted Digest'

Brought to you by AIPG Colorado





# President's *The Message*

March 2023

I am extremely excited to serve the Colorado Section as President this year! For those of you I have not had the pleasure of meeting yet, here is a little bit about me:

I was born in Colorado and grew up camping and hiking in our beautiful state. Back when I was a kid, we used to be able to drive up the road at Dinosaur Ridge and climb out on the footprints (I'm so glad that's not allowed anymore, though). I remember being in awe that the Front Range was once a beach environment and tried piecing together how the mountains were formed, and the beach layers containing the footprints were tilted up at the angle they sit today. I, unfortunately, did not go to college right out of high school, but I experienced working in many different industries, eventually working my way into small business management. In 2011 I decided that I wasn't happy with where I was in my career and decided to finally realize my lifelong dream of becoming a geologist. I began my undergrad stint at Metropolitan State University of Denver in the spring semester of 2012, and my now 10-year-old daughter was born the following fall semester. Needless to say, it made things interesting! Those who know me know that Ayda is typically my sidekick when it comes to all things geology and AIPG. I graduated from MSU Denver in 2016 and went on to get my Master of Science in Global Energy Management at the University of Colorado Denver. I have been working in the energy industry since.





My involvement with AIPG so far includes the following:

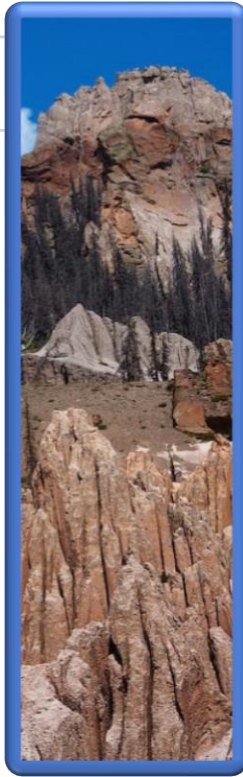
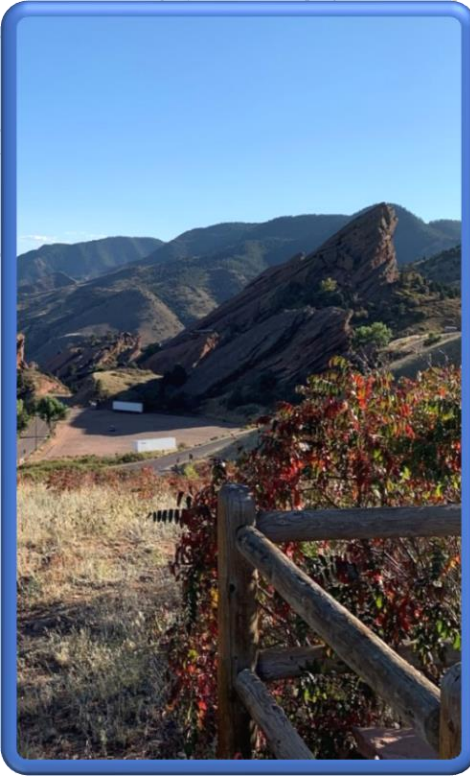
- Co-founding the MSU Denver Student Chapter in 2013 (recipient of the Student Chapter of the Year Award in 2016)
- Serving as a Student Member liaison to the Colorado Section 2013 – 2016
- Colorado Section Treasurer 2017-2018
- Colorado Section President-Elect 2020 and 2022
- Colorado Section President 2021 and this year
- National Executive Committee Early Career Professional representative 2020, Past Early Career Professional 2021
- National Executive Committee Advisory Board Member 2022

I am incredibly passionate about AIPG and am very proud of the wonderful network of members we have here in Colorado. I invite you to reach out to me if you have any thoughts or questions about the Colorado Section or if you would like to get involved in any way. My phone number is 720-394-4270, and my email address is [davey.jessica7@gmail.com](mailto:davey.jessica7@gmail.com). I look forward to meeting you if I haven't already!

The Colorado Section Executive Committee is planning some fun events for the year, including summer field trips and picnics. Please keep an eye on your email or our Section's website (<https://aipg-cosection.org/>) for notices and more information as we coordinate activities and add dates to our calendar. The Colorado Section switched to a Star Chapter-hosted website last year, which centralized all of our communications and event hosting. If you are not receiving our emails, please check your spam folder and save our email addresses as contacts to ensure you don't miss out on any of our upcoming opportunities.

Thank you for being involved in our amazing organization, and I look forward to seeing you at an upcoming event!

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**H**ello, first and foremost, I am truly honored and grateful to AIPG Colorado for choosing me as their Newsletter Editor. I look forward to an exciting and long-lasting journey with this group of remarkable individuals!

To start, there is a need for pictures. It is strongly encouraged that everyone send high-definition, clear pictures they may have taken in Colorado to be used in the new newsletter. This is also an opportunity for others to see your beautiful photos! Please include the location of where the photo was taken and what it is we are looking at.

Next, we want your stories and adventures! Any articles, letters, and publications would be appreciated. Any informative pieces, publications, or interesting articles that are noteworthy and related to general geology or Colorado geology would make a great filler to our newsletter!

Thank you again for having me here; I'm looking forward to the next edition of the newsletter!

Christina Tiggemann  
*AIPG Colorado Newsletter Editor*

## EDITOR'S NOTE

Faulted Digest. Volume 1, Issue 1 is published four times a year. This newsletter is distributed free to members. **Paid Subscriptions:** \$1 million. Please send check or money order to Christina's home address along with a baby t-rex.


A copy of our newsletter will also be available <https://aipg-cosection.org/content.php?page=news>.

**Submission Information:** Pictures, letters, announcements, etc... must be received by the editor the 2<sup>nd</sup> to last week of the following months: March, June, September & December. **Email preferred to:** [christina.tiggemann@gmail.com](mailto:christina.tiggemann@gmail.com). **Formats Accepted:** .doc, .docx, .pdf, .png, .jpg, .jpeg.

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*\*\*The opinions expressed are those of the authors and not the Colorado Section officers unless clearly stated otherwise.\*\**





# 2023 Executive Committee



Jessica Davey is a geologist and is Vice President of Land and on the Board of Directors for Desert Mountain Energy. She received her undergraduate degree in Applied Geology from MSU Denver and her Masters in Global Energy Management from the University of Colorado. Jessica possesses geological field experience in Ireland, Germany, and the United States and has provided geologic, land, and regulatory support on projects in Australia, Europe, Africa, South America, and throughout the oil and gas basins of the United States and Canada. Jessica is passionate about well-rounded economic and feasibility studies in oil and gas and

minerals development projects and has presented at several conferences, including AIPG Annual Conferences on topics including resource evaluation, environmental studies, and business and professional ethics.

Jessica has served the Colorado Section and National Executive Committee since 2013 and serves as the ongoing sponsor of the MSU Denver Student Chapter and the newly forming University of Colorado Boulder Student Chapter.

*President*  
Jessica Davey



# President - Elect

Joe Brinton

Joe Brinton has over 20 years of experience in domestic and international mining and drilling. Drilling experience includes international greenfield mineral exploration, domestic coal

exploration drilling, coalbed methane evaluation, and directional drilling for mine degasification and mine dewatering. Mining experience includes mine pillar stability analyses, mine ventilation analyses, mine planning, due diligence reviews, resource modelling, reserve/resource reporting, and supervision of day-to-day mining

Mr. Brinton is fluent in both English and Spanish and is a certified professional geologist with the American Institute of Professional Geologists and is a Qualified Person per SK-1300 mineral reporting standards.



Ryan is an Associate Geologist with SLR International Corporation. He has spent his entire career working in the Mining industry from ore control geology to exploration and now as a consultant resource geologist. In his career, Ryan has worked throughout North, Central and South America on various types of deposits. "Geology excites me due to the vast variety it holds. No matter what you do within the field, there is always more to learn and more to discover."

Secretary  
Ryan Rodney



## Treasurer Deb Gomez

Deb Gomez was born and raised in the Chicago area. She got her BS in Geology at the University of Southern California and a MS in Geology at Northern Arizona University. Deb fell in love with Geology

her sophomore year at USC when she changed her major from biology to geology and never turned back.

Deb's geologic career has been split evenly between oil and gas and environmental geology. She has enjoyed the mix of working in the field looking at the rocks and bringing that information back to the office for interpretation. In the last several years she has enjoyed international oil and gas exploration projects which has taken her on some awesome experiences both in the field and in the venture capital arena.

Currently semi-retired, does some geologic consulting and considers Colorado home.



Christina Tiggemann is a senior at MSU Denver. She will earn her Bachelor of Science degree in Geology and certification in Water Studies this May 2023. Some noteworthy projects she has completed are Recycled Water Systems in Denver, Ocean Desalination & Climate Change, and San Rafael Swell Geology & Resources. Current research involves the depositional environments and timing of the Springdale & Wingate Formations and if the two correlate.

Christina currently works as a PLM Analyst observing and verifying the presence of asbestos minerals in various materials.

Christina has helped to re-establish the geology club at MSU and is its current acting president. She is a member of the AIPG, GSA, RMAG, and NSLS.

Christina would like to continue her academic career after completing her Bachelor's by attending graduate school.

## Newsletter Editor Christina Tiggemann



# Leg/Reg Chair

Mike Bowers

Michael Bowers is an Environmental Geologist with the Denver based firm, A.G. Wassenaar, Inc. with a BS in Applied Geology from MSU Denver. He has been involved with the Colorado Section of AIPG since 2016 and has served as the Legislative and Regulatory Officer since 2022.

Michael possesses Geologic field experience in the US and Germany, and has provided geological, environmental, and regulatory support throughout Colorado. He is passionate about diversified energy portfolios and creative



Andrew T. Jones, PG, is a Project Geologist for Plexus Scientific Corporation. He is a licensed Professional Geologist in the Commonwealth of Kentucky. Andrew earned his Bachelor of Science in Geology and a Certificate in Geographic Information Systems from Western Kentucky University. He is also currently pursuing a Professional Science Masters in Environmental Geology at the University of Kansas. Andrew is an experienced geologist in both geotechnical and environmental geology in the East, Midwest, Great Plains, and Mountain West of the United States. Some projects that Andrew has been involved in include high-resolution site

characterizations at active and formerly used Department of Defense sites in Georgia, Florida, Colorado, and North Dakota.

Andrew helped found the AIPG Student Chapter at Western Kentucky University, and served as the Chapter's first President. During his undergraduate and following graduation, Andrew was an active member of the Kentucky Section. Andrew is currently a member of the National Advisory Board of AIPG and also served in 2019. He has also served as Colorado Section President-Elect in 2021, President for 2022, and is an Advisor for 2023.

*Advisor*  
Andrew Jones



*Advisor*  
John Fontana

John is an AIPG certified professional geologist (CPG #11985), an NGWA certified well driller, and a licensed water well driller in several states. He is President/CEO and owner of Vista GeoScience LLC,

headquartered in Golden, Colorado, and is a business owner and manager with 40 years of experience. John started his career as a wellsite geologist, then became involved in geochemical exploration services, and later in environmental site investigation and remediation services. At Vista GeoScience, he oversees environmental and geotechnical drilling, optimized in-situ remediation, vapor intrusion investigations, and advanced site characterization services at DOD, DOE, and commercial sites across the country. He has also managed environmental and geochemical laboratories, international geochemical exploration services, and has provided expertise in stray gas migration issues. John has co-authored well over a hundred presentations, keynotes, and papers in these fields, and has presented at nationally recognized conferences and workshops across the country and internationally.



Douglas Peters has over 40 years of experience in geology and mining, including applications of remote sensing and GIS technologies. Doug has both private and public company management experience. Doug is the owner of Peters Geosciences LLC, a management, remote sensing, and GIS consultancy in Lakewood, Colorado which began business in 1996. Prior to that, he worked as a Principal Investigator on mining and environmental projects at the U.S. Bureau of Mines Denver Research Center. Doug received M.Sc. degrees in Geology and Mining Engineering from the Colorado School of Mines and a B.Sc. in Earth and Planetary Sciences from the University of Pittsburgh.

Doug is an AIPG Certified Professional Geologist (#8274), and has served on the Colorado Section Executive Committee multiple times and multiple positions (including three times as President). He is a licensed Professional Geologist in Pennsylvania, Utah, Washington, and Wyoming. Doug also presently serves as President and CEO of TUVERA Exploration Inc. and President of Magma Gold Corp., in charge of property evaluations and all company operations and exploration activities.

*Advisor*  
Doug Peters



# Welcome All

## Advisor Lawrence Snee

Lawrence W. (Larry) Snee has a Ph.D. in geology and is a certified professional geologist (CPG-11085) with more than 40 years of experience on a broad array of US government, academic, and

foreign projects. He is a specialist in field geology, mineral resource assessment, petrology, geochemistry, isotope geology, structural geology, tectonics, economic geology, and the geology of world gemstone deposits, and he has been a manager of over 100 scientists, technicians, and administrative personnel in the U. S. Geological Survey (USGS). He was an assistant professor at Oregon State University for three years and a research geologist with the U.S. Geological Survey for 27 years. He supervised more than 50 graduate students, both U.S. and foreign at OSU and the USGS, and he has hosted two Fulbright Fellows from Pakistan and a post-doctoral fellow from China.



# Thank You for your Commitment



# Early Career Professional Spotlight



*Kyle Reamer*

## Education:

- The University of Tulsa, Bachelor's Degree in Geoscience, Earth and Environmental Science with Honors

## Professional Experience:

- Geosyntec Consultants (Current)  
*Staff Geologist Groundwater Remediation Group*
- GeoEnvironmental Division, Soils Group (2021-2022)
- Rocky Mountain Group (RMG) Engineers and Architects  
*Staff Geologist*
- Lithochimeia Environmental Geoscience Consulting (2020)  
*Geospatial Analyst and Geologist Intern*

## Professional Organization Involvement:

- Early Career Professional Member ECP-0901 of AIPG and CO Section Member. Involvement has mainly been attending AIPG webinars and Colorado section events.
- Currently serve on the Executive Board for the University of Tulsa Department of Geosciences Alumni Advisory Board
- Member of the National Eagle Scout Association



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## Why I Want to be a Geologist

The great outdoors has also interested me ever since being involved with the Boy Scouts of America. Spending time on countless camping and backpacking trips all over the country inspired me to pursue a fulfilling career studying, learning, understanding and changing the world we live in for the better.

Over the course of my academic studies and professional career, I have been able to make a meaningful impact to the natural processes that dictate the environment around us. Helping to prepare people for natural disasters such as flooding, various geologic hazards and landslides. Being able to have a real and lasting impact on the community has been a joy to be a part of.

Geology is expansive and seemingly never ending with opportunities in countless practice areas as well as the job settings it consists of. Whether that be in government agencies, non-profits, environmental consulting firms, or industry. No matter what peaks my interest, there will always be something out there that I can be involved in and work with. The study of earth, its materials, structure and processes will never go away (at least not in my lifetime), so I like to think of it as job security in a sense. Versatility in the study provides ample areas to make an impact for an exciting yet often challenging career path.

One of the biggest upsides and a core contributing factor to being a geologist is the opportunity to be in the field (a lot). Having an office job is great but does your job also pay you to be outside?

As I have already mentioned, geology is an expansive field and with that, many emerging technologies are created year after year to further the study of geology which increases efficiency and understanding, and bolsters a company's business practices. Regardless of where a geologist works, there is always opportunities to spend time learning and using computer software programs to create reports, analyze research and perform calculations.

Being a geologist also offers a wide variety of career advancement opportunities. With more education and professional licenses and certifications, a geologist can have the chance to expand their reach in their professional career with fresh and inspiring projects, positions and research work.

I currently work in the environmental consulting arena which has allowed me to work on many large and small scale, local and national projects where I am able to make a tangible impact on the subsurface environment through remediation and reclamation projects while also keeping our clients within environmental regulatory compliance ensuring that we are all great stewards to our world.


Involvement within professional organizations and associations is an integral part of being a geologist to be able to network, learn about past or present projects and hear about compelling research that could further progress the study of geology. My involvement within AIPG has been very fruitful and certainly inspires me to continue to pursue my career goals.

***The American Institute of Professional Geologists - Colorado Section is proud to have Kyle as an Early Career Professional member!***

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# 2022 Rex Monahan Geological Scholarship Winners

Image Courtesy of: Terri Cook – 5280 Magazine – Wheeler Geologic Area

## About the Scholarship

The Colorado Section's Rex Monahan Geological Scholarship Fund was started by generous gifts from Rex Monahan of Sterling, CO. Subsequently, donations from individual members and from the Section's Treasury have increased the principal in the fund to over \$40,000. The Section generally awards two \$1,000 scholarships each year, one to an undergraduate and one to a graduate student. Awardees must be registered at a Colorado college or university with a recognized geoscience program and be a Student member of AIPG.

The Section selects recipients for the Rex Monahan Geological Scholarship from Colorado applicants to National AIPG's undergraduate and graduate scholarship programs. Therefore, students who wish to be considered for the Colorado Section's scholarship must apply through the National AIPG scholarship program. It is not necessary to specify that you wish to be considered for the Rex Monahan Geological Scholarship as any student from a Colorado college or university will be automatically considered.



# Undergraduate Winner

## Nick Coscarella

Ever since a young kid, I have always enjoyed the outdoors and have always admired rocks and fossils. Like many other kids, I would enjoy collecting rocks that looked cool, but my interest for the specimens I collected was deeper beyond the cool appearance. I would always ponder about where the rocks that I collected came from because I thought it was particularly interesting learning about how the samples I collected were formed. I started to develop a keen sense for identifying different rocks and fossils at a young age and little did I know this would benefit me immensely in my future endeavors. Once I started progressing through school and began taking science classes, I became captivated with studying geology because it explains the entire history of Earth. I began to realize that geology is much more than simply studying rocks, and I realized how much geology has influenced modern science and the world today.

Now that I am an undergraduate student at MSU Denver, my passion and ambition to learn more about the vast science of geology has only grown exponentially. As a senior and preparing to graduate next spring, I have become engrossed with learning about the job opportunities within geological engineering, hazard mitigation, and exploration geology. Exploration geology is so fascinating because not only are new discoveries made each day, but mineral exploration is largely why humans are capable of developing modern technology and machinery utilized worldwide today. One phenomenon I have been researching recently within the realm of exploration geology is kimberlite pipes in northern Colorado. These rare, unique, and cold eruptions generate weakly resistant, ultramafic rock. Some of these outcrops have been known to be diamondiferous, so it's alluring to think that additional diamonds may be found within Colorado soon. Also, not only



*"I began to realize that geology is much more than simply studying rocks, and I realized how much geology has influenced modern science and the world today."*



do other types of geologists, such as hydrologists, deal with the quality, quantity, and transportation of Earth's most valuable resource (water), but geologists are immensely needed to study and prepare for adverse natural events such as earthquakes, tsunamis, and volcanic eruptions. Along with monitoring natural disasters, geologists are responsible for engineering infrastructure that mitigates against significant events. Structures such as levees can be implemented to help prevent flooding and material such as rock netting can be bound to loose rock along major highways to prevent debris from falling onto the road. The more geology courses I take, the more evident it becomes how important geologists are in everyday life and how crucial they are to human survival and to the advancement of society.

From extracting minerals and resources that advance modern civilization to predicting and mitigating against some of nature's most deadly natural forces, geology

is a fundamental and pivotal science that is crucial to modern life. As job opportunities in geology continue to grow and emerge into the future, it is exhilarating and motivating knowing that I have chosen a major that is enjoyable and that is so important. Planetary geology is also going to be huge leading into the future, and it is intriguing to think how space exploration and new mineral discoveries could significantly change technological development and current living conditions. Geologists are required in a wide array of job applications, and they substantially contribute to the development of cell phones, saving lives from natural disasters, developing more efficient energy sources, and geologists constantly work with the physical world to reveal the past and innovate technology. As an ambitious scientist, choosing a career in the field of geology seems like the best choice to not only make a difference, but to play a significant role in the future of human development.



*"The more geology courses I take, the more evident it becomes how important geologists are in everyday life and how crucial they are to human survival and to the advancement of society."*



# Undergraduate Winner

## Christina Tiggemann

I want to be a geologist because I want to be a part of something much larger than myself. The Earth has billions of years of history right below our feet, from being a giant fireball to being a giant snowball. We all have a connection to this planet and should commit to keeping it safe and learning from it. It is my goal to explore what makes Earth tick. As part of my geologic career, I plan to peel back the layers of history, discover what lies inside each, and explore the environment, the species, and the transformations from era to era. Becoming a part of this field allows me to educate myself about why certain things have happened and will happen; this could be anything from what drives tectonic movement beneath our feet or what will cause the next extinction—all these phenomena and so much more, fuels my interest in geology. With an open mind and the heart of an explorer, I welcome geology into my life.

As I have navigated to this new career in the earth sciences, I know I will need to overcome many challenges. This challenge inspires me as I want to participate in something significant. One challenge I have experienced as of late is leadership and commitment. I like to embrace this type of challenge as I know it puts me into a role of influence and guidance. Upon the knowledge that our

university was missing its geology club, I was surprised and took it upon myself to relight that flame. Building a whole new foundation has been an enormous task to undertake. It took commitment, motivation, and passion, and I said, "I will do it!" To that end, I very much did. We have over 200 recruits, university re-recognition, and a vast interest in the geologic field. That challenge was just a small measure of what it means to be a part of the geology world. It provides hands-on, challenging, and genuine worldly experiences that cannot be forgotten but valued.

*"With an open mind and the heart of an explorer, I welcome geology into my life."*

Geology is more than rocks and dirt; it's a journey. The thought that our world was, at one point, a large mass of nothing but volcanic activity without a molecule of water to be found is mind-blowing. Many questions ran through my





head when I made this discovery. I find myself learning something new every day about how our planet came into existence and ultimately thinking about the chemistry, the process, how long it took to form, and the impacts of it all. This is how I knew I was in the right place. If something doesn't challenge my mind or teach me something new every day, it's not for me. Geology offers this invitation to question and learn and always tells a story. Every rock I walk over, climb on, and sometimes get stuck in my shoes tells me about a piece of our past.

Geology can be a rewarding job, not only for myself but for the benefit of others. I would love to be a part of an advancement in the geologic field that helps protect life!

It's astounding how many lives geologists can save by studying some of Earth's natural processes. I enjoy the thought that I may be able to be a part of a group that helps save lives one day. As geologists, we have the tools to help guide us to a general timeframe of when something could happen—this allows us to warn communities in potential impact areas and to save many from harm. With new technology and developments, we may even be able to predict the next eruption in the future, and I can only hope to be a part of the team that has the first discovery of this kind of equipment.

Lastly, nothing compares to the feeling I get when I'm out in the field and discover something new and have an awe-inspiring moment. I've had this experience only on a few occasions but anticipate many more. Upon completing a visit to the Colorado Plateau, my first real experience in the field, my world completely flipped. I never knew what was waiting out in the world until I stood on top of it, looking thousands of feet down at the Colorado River from Dead Horse Point. At that moment, I knew I was on the right path in geology. If I'm not being inspired by what's in front of me, like a giant canyon beneath my feet or even a tiny pebble, I'm not in the right place.

With a future that will provide me with challenges, discovery, and numerous successes, I devote myself to waking up every day and telling myself, "I will." I will make the latest discovery, and I can, and I will be a great geologist.

*"If I'm not being inspired by what's in front of me, like a giant canyon beneath my feet or even a tiny pebble, I'm not in the right place."*



# Jenn Davis

## Graduate Winner

A lot has changed about my academic path through the geological sciences since the first geology class I took the fall of my sophomore year at Miami University.

Since that first class, I was hooked on geology. I was fascinated that there was so much to learn about the Earth and the world around us. What started as a simple desire to understand the physical features of the Earth that I love to hike, climb, ski, and do every other outdoor activity on turned into something I couldn't stop studying. The more I took classes, the more I realized that there is so much to learn in geology and that our understanding really just scrapes the surface.

In my junior year of college, I was immersed into the geology program at Miami University. I took all kinds of classes that the school offered from mineralogy to structural geology to petrology to tectonics and all kinds of classes in between. One subject really stood out to me at this time: paleontology. What kid didn't love dinosaurs growing up? I felt like paleontology was a way to fulfill my childhood dreams, even if my focus was not on dinosaurs per say. I quickly joined a paleontology

focused research group at Miami, and I started building my own project on understanding Mesozoic marine ecosystems. The research work, while time consuming and sometimes difficult, pulled me in and I couldn't help but feed into my curiosities and found myself constantly working on the various aspects of my research project instead of other work, seemingly more frivolous work such as Spanish homework or film studies reading.

In my senior year, I started taking more senior undergraduate/graduate student level courses in the department. That Fall of 2019, I took a class whose name intrigued me called Isotope Geochemistry with my favorite professor from my igneous and metamorphic petrology the year before. This isotope geochemistry class was taught with a focus on its application to planetary materials, which was a sub-field I previously did not realize existed. Throughout the course, the professor

*"The way I knew geology was the career path for me was that I found I never get bored."*



lectured about applications to Earth, meteorites from other planetary bodies, and the samples she worked with, Apollo samples. I could not contain my excitement about the material in this course and I immediately joined her lab group and began a research project about Apollo samples and understanding their magmatic pasts in addition to my paleontology research project. I adored my new planetary geology research and seeing the end of my undergraduate career on the horizon and not wanting my learning about these cool samples to end, I applied to graduate programs in this field. In 2020, I graduated with my undergraduate degree, and I started my PhD graduate program at the University of Colorado Boulder. Since then, I've had the chance to work with more Apollo samples and to follow my various interests in cosmochemistry throughout my time here.

My favorite thing about geology has been constantly finding different aspects of the geological sciences that intrigue me. I love hearing about my fellow graduate students' work, hearing new ideas my PhD advisor has about my projects and her own projects, and attending colloquium talks held by the department. The way I knew geology was the career path for me was that I found I never get bored. Have there been times where I found reading papers to be a daunting task? Yes! Has writing sometimes absolutely fried my brain? Of course! But I have never wanted to give up. Despite the tough days of being a graduate student and struggling with impostor syndrome, my love for my research carries me through. Once I realized that, I knew that I chose the right career.

*"My favorite thing about geology has been constantly finding different aspects of the geological sciences that intrigue me."*



# James Gutoski

## Graduate Winner

Why do I want to be a Geologist? Honestly, I can't see myself doing anything else. I feel better posing the question "Why don't you want to be a Geologist" to others. I consider myself quite lucky to have grown up with a father who was a geology teacher. My youth was spent climbing outcrops all over the Midwest. I spent my summers looking for *Calymene celebra* trilobites in the Niagara Dolomite and native copper in Keweenawan basalts. Some of my best childhood memories involve walking the shores of Lake Superior looking for agates, banded iron formations, and rugose corals. My young impressionable mind was filled with questions, and my father willingly answered as many as possible. My love of geology has only grown stronger as I grow older.

*"Geology makes the most beautiful scenery, and I can never get enough."*

I spent ten years as a well-site geologist before deciding to return to school. I would describe that job as "the greatest job ever when I wasn't doing it." Work life was rough, and the days were long, but when the job was finished, I had the opportunity and freedom to go wherever my geological curiosity took me. Geology makes the most beautiful scenery, and I can never get enough. My friends' joke that I never miss the opportunity to ruin an incredible hike by pointing out the geology and talking about it incessantly. No one has turned down an invitation to hike yet, so they must secretly enjoy it, and maybe they have even learned something.

What I cherish the most about being a geologist is the people you meet along the way. The geology culture is so unique, and I find it easier to interact with someone covered in weeks' worth of outcrop dust and sweat than someone in a suit. That sweat, dust, and grime come from a passion for learning, and I can relate to that.



My decision to return to school was influenced by a desire to teach and share my passion for geology. My curiosity means I will always be a student at heart, but I am at a point where I can begin to shape and mold young minds the way countless teachers developed mine. It would be selfish not to share the joy and happiness that geology has given me. I will never run out of mountains to climb and questions to ask, so that's why I want to be a geologist.

*"The geology culture is so unique, and I find it easier to interact with someone covered in weeks' worth of outcrop dust and sweat than someone in a suit."*



CO Section Annual  
Dinner

# RECAP

Guest Speaker  
Colorado State  
Geologist  
Matt Morgan

February 24, 2023

## Colorado Section Annual Dinner Recap

Jessica Davey, MEM-3242

2023 Colorado Section President

The Colorado Section hosted the 2023 Annual Dinner on February 24 at The Lobby restaurant in Denver. We had a great turnout, with representation across the state and student members through CPG members in attendance.

The evening began with an informal networking/social hour accompanied by complimentary drink tickets and yummy appetizers; the food at The Lobby never disappoints.



The speaker for the evening was Matthew Morgan, our new Colorado State Geologist, who gave a wonderful presentation on the history of the Colorado Geological Survey. I hadn't realized that the first geologists to hold the role of Territorial Geologist for Colorado were unpaid! We also learned that there was a gap in time from around 1925 to 1967, where there was nobody heading up the CGS at all until the CGS was reformed under the Colorado Department of Natural Resources.



Thank you to everyone who joined us for the event; each of you helped make it a very memorable evening!

*Above:* The evening gathered momentum quickly, adding to the excitement of the night's festivities.

*Right:* AIPG encourages networking to help expand careers, education, and general knowledge. And what a fantastic night to mingle and meet with peers and students!





Above: Matt shares the brief but unique history of the first former State Geologist, dating back to 1874!

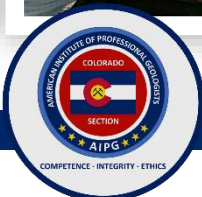
Right: The Lobby did not dis-satisfy when it came to the food; thank you for your dedication and hard work!



A sizeable part of who makes up AIPG is our fabulous student members. This year, we had an excellent turnout with members from Colorado School of Mines and Metropolitan State University of Denver.



For any who could not attend, we encourage you to visit <https://coloradogeologicalsurvey.org/> for more information on CGS.



Named in 1865 by Eugene N. Riotta (native of Elberfeld, Germany) for Friedrich Adolph Hübner [May 17, 1830?, Königsberg, East Prussia (now Kaliningrad, Russia) -?], German mining engineer and metallurgist from Freiberg, Saxony.



# Monthly Mineral

## *Hubnerite*



### Physical Properties of Hübnerite

- Luster:** Adamantine, Resinous, Metallic
- Transparency:** Transparent, Translucent
- Color:** Yellow-brown, reddish-brown, blackish brown, black, red (rare)
- Streak:** Greenish-grey, yellow to reddish-brown
- Hardness:** 4 - 4½ on Mohs scale
- Comment:** Directional
- Tenacity:** Brittle
- Cleavage:** Perfect, Perfect on {010}
- Parting:** On {100} and {102}
- Fracture:** Irregular/Uneven
- Density:** 7.12 - 7.18 g/cm<sup>3</sup> (Measured)  
7.234 g/cm<sup>3</sup> (Calculated)



# National EVENTS



## **AIPG Lunch & Earn Webinar Series — Groundwater Issues Encountered in Mining Projects**

**March 28, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1720550&group=>

**March 21, 2023**

## **AIPG Webinar — Content learning outcomes from geological virtual field trips**

<https://aipg.org/events/EventDetails.aspx?id=1712433&group=>

## **AIPG Texas Webinar Series — Recharge Enhancement and Multiport Well Monitoring of the Edwards Aquifer**

<https://aipg.org/events/EventDetails.aspx?id=1733314&group=>

## **AIPG Town Hall with Jon Arthur, AIPG Member, AGI Executive Director**

**April 4, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1719772&group=>

## **AIPG IL/IN Section Spring Meeting**

**April 13, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1732662&group=>

## **AIPG Texas Section Field Trip**

**April 20, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1703158&group=>

## **AIPG Northeast Regional Section Meeting and Field Trip** **May 5-6, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1690484&group=>

## **AIPG Webinar: The Grand Scottish Tour: A Discussion of Scotland** **May 24, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1730033&group=>

## **Adventure Geology Tours** **Iceland, Trip 1** **July 6-18, 2023**

## **Adventure Geology Tours** **Iceland, Trip 2** **July 25-Aug. 6, 2023**

<https://aipg.org/news/news.asp?id=619521>

## **Michigan Section's 12th Environmental Risk Management Workshop**

**June 13-14, 2023**

[https://www.multibriefs.com/briefs/AIPG/AIPG2023-Sponsor\\_Invitation.pdf](https://www.multibriefs.com/briefs/AIPG/AIPG2023-Sponsor_Invitation.pdf)



# National EVENTS

## **AIPG 60th Anniversary Conference**

**Sept. 16-19, 2023**

<https://aipg.org/general/custom.asp?page=202360thAnniversaryConference>

## **AEG Annual Meeting**

**Sept. 19-24, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1712373&group=>

## **Earth Science Week**

**Oct. 8-14, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1699533&group=>

## **GSA Annual Meeting**

**Oct. 15, 2023**

<https://aipg.org/events/EventDetails.aspx?id=1712367&group=>



## **Western Interior Paleontological Society "Founders Symposium**

**Mar. 25-26, 2023**

<https://www.westernpaleo.org>

## **Fort Collins Gem & Mineral Show**

**Mar. 24-26, 2023**

<http://www.fortcollinsrockhounds.org/index.shtml>

## **Colorado Mineral and Fossil Spring Show**

**Apr. 7-9, 2023**

<https://www.coloradomineralandfossilshows.com>



# Colorado EVENTS

## **Dinosaur Ridge March-April Talks (in-person or Zoom @ 10 a.m.)**

**March 23 & 30, 2023**

**April 6 & 20, 2023**

Questions or to get Zoom link? Email:  
[Erin.LaCount@dinoridge.org](mailto:Erin.LaCount@dinoridge.org)

## **University of Colorado Benson Earth Sciences Colloquium**

**Wednesday, March 22**

For Zoom links, go to  
<https://www.colorado.edu/geologicalsciences/colloquium/zoom-linkpasscode-geocolloquium>

## **Focused Remediation Seminars (FRS) Webinar**

**March 23, 2023**

To register, go to  
[https://focusedremediationseminars.com/?event=focused-remediation-seminars-frs-webinar-march-23-2023&event\\_date=2023-03-23](https://focusedremediationseminars.com/?event=focused-remediation-seminars-frs-webinar-march-23-2023&event_date=2023-03-23)

# EMPLOYMENT

## **Director of the Wisconsin Geological and Natural History Survey and Wisconsin State Geologist**

*Wisconsin Geological and Natural History Survey*

Madison, WI

<https://aipg-jobs.careerwebsite.com/job/director-of-the-wisconsin-geological-and-natural-history-survey-and-wisconsin-state-geologist/68477224/>

## **Geologist**

*KPRG and Associates, Inc.*

Brookfield, WI

<https://aipg-jobs.careerwebsite.com/job/geologist/67753774/>

## **Environmental Technician - Poughkeepsie**

*C.T. Male Associates*

Poughkeepsie, NY

<https://aipg-jobs.careerwebsite.com/job/environmental-technician-poughkeepsie/68477577/>

## **Interdisciplinary (Risk Manager)**

*USA Jobs*

Louisville, KY

<https://aipg-jobs.careerwebsite.com/job/interdisciplinary-risk-manager/68479967/>

## **Chemical Engineer, GS 11-13**

*US Environmental Protection*

*Agency*

Washington, D.C.

<https://aipg-jobs.careerwebsite.com/job/chemical-engineer-gs-11-13/68418556/>

## **Natural Resource Scientist 3, State and Federal Lands Geologist**

*WA State Department of Natural Resources*

Washington

<https://aipg-jobs.careerwebsite.com/job/natural-resource-scientist-3-state-and-federal-lands-geologist/68432378/>

## **Production Geologist**

*Ur-Energy*

Lost Creek, WY

<https://aipg-jobs.careerwebsite.com/job/production-geologist/63212970/>



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# AIPG Purposes

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The purposes of the Institute shall include:

- advance the geological sciences and the profession of geology;
- establish qualifications for professional geologists;
- certify the qualifications of specific individual Member geologists to the public;
- promote high standards of ethical conduct among its Members and Adjuncts, and within the profession of geology; and
- represent, and advocate for, the geological profession before government and the general public.

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What AIPG does . . .

- Professional Certification - Certifies geologists based on their Competence, Integrity, and Ethics.
- Categories of Membership - Certified Professional Geologist, Professional, Early Career Professional, Associate, and Student.
- Ombudsman - Intervenes with regulatory boards and agencies on behalf of individual geologists, at the geologist's request. Information also is disseminated in cooperation with the Association of State Boards of Geologists.
- Lobbying - Presents testimony and position papers to Federal and State legislators and agencies on matters affecting geologists and geologists' employment opportunities. Exhibits at the National Conference of State Legislators.
- Liability Insurance - Provides access to insurance for errors and omissions, designed specifically for geologists.
- Continuing Education - Through online learning, publications, seminars, short courses, and field trips, provides educational opportunities for geologists, other scientists, engineers, and the general public.
- Supplemental, Life, and Accident Insurance - Provides access to a full line of supplemental, life, and accident insurance.
- International Comity - Through agreements with professional societies in other countries, provides access for its Members to professional registration, certification, or chartered status in those countries.
- State and Section Activities - State and regional sections work on local political issues and the professional status of geologists in their geographic areas. The Institute's sections around the country hold regular meetings, featuring educational programs covering important subjects of interest to professional geologists. One of the most worthwhile benefits of AIPG Membership is the opportunity to make personal contact at the local and State level; to meet fellow geologists; and to learn from them.

## Copper Sponsors

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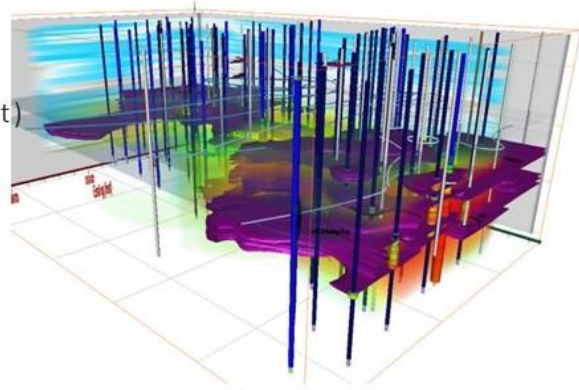
**Would you like all AIPG Colorado  
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# Diamond Sponsors

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Ground Water Profiler (HPT-GWP)



## REMEDIATION

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## GEOTECHNICAL & ENVIRONMENTAL DRILLING

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Geoprobe Dual Technology Rigs  
Dual-Tube Coring Systems  
Discrete Ground Water Sampling  
Monitor Wells, Piezometers



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303-277-1694  
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RFP@vistageoscience.com

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**COUNCIL ITRC TECHNOLOGY REGULATORY**  
**IPEC** AUTHORIZED PROVIDER  
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