YLC Class of 2023

Rami Abousleiman has 5 years of geological engineering experience including 2 years of professional consulting experience and 3 years of academic research experience in support of underground and surface mining operations. His expertise is in advanced applications of two- and three-dimensional continuum and discontinuum numerical modeling methods in support of engineering analysis and design in both soil and rock. His experience prior to joining Knight Piésold includes 9 years of experience in the environmental, civil, and mining industries.

Joelson Alves is a graduate student of the Department of Energy and Mineral Engineering at Pennsylvania State University (PSU), conducting research related to electronic waste recycling. Joelson holds a bachelor's degree in mining engineering, minor in geoscience, and an undergraduate certificate in AutoCAD from PSU. During his education, he has accomplished several milestones including several SME scholarships. He has also obtained hands-on experience through interning with VibraTech, and Barrick Gold Co., where he gained a great amount of experience related to the mining industry and developed his mining software skills. Joelson is significantly involved in many student services, and community outreach activities, such as the Penn State SME student chapter (previous treasurer), and International Society of Explosive Engineers (previous president and treasurer), as well as Penn State mine rescue team (previous vice president and team captain).

Dr. Angelina Anani is currently an associate professor at the University of Arizona. She holds a BS (Summa cum laude) and PhD from the Missouri University of Science and Technology. She has over 10 years of research and teaching experience. Dr. Anani has extensive experience in modeling and optimization of mining systems.

She has a diverse teaching background in three universities in two countries. In her current role, she teaches graduate and undergraduate mining engineering courses. Dr. Anani is an active member of the Society of Mining, Metallurgy and Exploration (, the Society of Mining Professors, and the Women in Mining.

Festus Animah is a PhD student at the Mining and Minerals Engineering department at Virginia Tech. He obtained his master's degree in Sustainable Mining at T.U. Freiberg in Germany. He has research interests in mine health and safety, ventilation and sustainable development of critical minerals. His current work is focused on the monitoring and control of respirable coal mine dust to enhance miner safety. In the past, he worked at the AngloGold Ashanti Obuasi mine in Ghana and DMT Mining GmbH in Germany. He has held leadership roles during his time in academia and Industry.

Professional graduated from the Universidad Católica de Santa María - UCSM in Law. Member of the SME – Student Chapter UPC, Women in Mining Peru, volunteer in Mining Promoters and Mining Women of the Ministry of Energy and Mines of Perú. Specializing in the mining branch, fellow at the United Nations Development Program, looking at issues of women and mining, indigenous peoples and sustainable solutions. It has publications in magazines. Founder of the Circle of Mining Studies of the UCSM, founder of the mining magazine "Hefaistos". Teaching assistant, invited as a mining speaker in entities and universities.	Estefania Aramayo: Mining Engineer from the Universidad Catolica Santa Maria (Peru). Currently, she is pursuing her M.Sc. in mining engineering and working as a research assistant at the University of Kentucky, focusing on Computational fluid dynamics (CFD) modeling applied to blasting and explosions in mining. Estefania has experience in surface mining operations in metallic mines in South America (Peru).
 I started working in Metso Outotec (Outotec-side) in 2014, previous operations experience in Pyro and Hydrometallurgical plants in Mexico. I worked in roles in process engineering, shift supervisor and head of a department. I have developed different roles in Metso Outotec including Process Metallurgist, Technical Sales Support, Site Account Manager, Product Manager and currently working in Leading the global Product	 Mackenzie Best is a third year Ph.D. candidate at the New Mexico Institute of Mining and Technology (NMT). Her research centers on the astrobiological and biotechnological applications of extreme acid-adapted microorganisms, with a focus on their potential to leach metals from electronic waste. She is also on a project investigating critical minerals in historic mine tailings. Mackenzie has a BA in geology and an MSc in geochemistry. She has worked as an ore control geologist at a high-altitude copper mine in Espinar, Peru for Compania Minera de Antapaccay, and as an exploration geologist at the Mumi copper and cobalt mine in Kolwezi, DRC. She was the geology consultant on a project using open-access imagery to estimate uranium production at mines in East Asia which resulted in several publications.

Management team for Flotation Product Group. I have led Mineral Processing test work , process Assessments, Flotation Plant commissioning and ramp up. I have developed and launched several products and technologies to help improving flotation operations around the world with clear technical, economical and sustainability targets. I have had the opportunity to work based in different offices in Metso Outotec including Mexico, Finland and now Canada. From Sonora, Mexico. B.ScChemical Engineering and MBA.	Mackenzie is fluent in French and highly proficient in Spanish, with technical work experience in both languages. She also speaks conversational Italian
 Joe is a geotechnical engineer and PhD student at Colorado State University studying tailings, geotechnical engineering, and engineering education. Joe received his Bachelor's Degree in Geological Engineering from the University of Missouri Science and Technology, and his Master's Degree in Geotechnical Engineering from Colorado State University. He has worked as a geotechnical consultant and is passionate about bringing practical engineering problems into the classroom. Joe is involved with tailings outreach initiatives and volunteers to bring tailings education to middle and high schools.	 Michahel Arturo Calixto Rivera Calixto Michahel received his bachelor's degree in Mining Engineering from National University of Engineering in 2021. As a student SME member, he participated in the third Mine Planning Design Contest (2019) organized by SME Latin America and took the first place with his team, thus he went SME Annual Conference (2020) in Arizona. Also, member of the winning team in the innovation competition of Cerro Verde Company with the topic of the shovel's Accurate bucket position (2021). He has 3 years of experience in mine planning, process modeling and automation. He worked in mining companies such as Chinalco, BISA Engineering Projects, Freeport-McMoRan. Currently, he is a Junior mine planning engineer at Cerro Verde Company.

Emily Carroll is currently a Junior Mining Engineer at Piedmont Lithium, Inc. originally from Salisbury, Maryland. She graduated cum laude from West Virginia University (WVU) with a B.S. in Mining Engineering in May 2022. Prior to graduation, she pursued three internships in various sectors of mining: underground coal mining, surface gold mining, and granite quarrying. She also held leadership positions in WVU Society for Mining, Metallurgy, & Exploration (SME), WVU Women in Mining (WIM), WVU Marching Band, and the Kappa Lambda (WVU) Chapter of Sigma Alpha Iota – a music and service professional women's fraternity. She continued to foster her passion for music throughout school, playing the alto saxophone in marching, concert, and basketball pep band settings. Due to her exceptional involvement and diverse experiences throughout her education, Emily earned the West Virginia Coal Mining Institute Award, WVU Mining Engineering Faculty Award, Sigma Alpha Iota Sword of Honor, and approximately 20 different scholarships. Emily looks forward to enhancing her technical and soft skills while promoting positive change and growth within the mining industry.

Cesar Juber is a mining engineer graduated with honors from the National University of San Marcos in Lima, Peru in Dec 2013. As a student, Cesar was an active SME member, supporting the SME San Marcos Student Chapter in 2012-2013 with the first mining workshop for high-school students, raising awareness of the benefits of responsible mining. Mr. Juber has 7 years of experience in both operations and short-range mine planning in polymetallic underground mining. He has worked in companies such as Nexa Resources and Glencore International, where he currently works as a short-range mine planning engineer. His interest includes mine forecasting, scheduling, and design.

Zeynep Cicek is a master's student in the Department of Mining Engineering at West Virginia University (WVU). She received a bachelor's degree in Mining Engineering and a minor degree in Geographic Information Systems & Remote Sensing from Middle East Technical University (METU) in 2020, in Turkiye. Cicek's research area is mineral processing and extraction of critical minerals. She is currently working on developing a separation approach to selective recovery of rare earth elements from acid mine drainage treatment byproducts. She is the current president of the Women in Mining WVU Student Chapter

I have a bachelor's degree in Mining Engineering from the Catholic University of Santa María in the city of Arequipa - Peru, during my stay at the university I have always been interested in getting involved with different groups and organizations that allow me to grow as a professional, which is why I have been able to get many opportunities throughout my life, I have simply followed a philosophy of life: "alone we can go faster but never further than working as a team"

Nina Dawson is an environmental engineer at Hecla Mining Company at the Coeur d'Alene office. She has an environmental

engineering degree with a minor in water resources from the College of Environmental Science and Forestry in Syracuse, NY. Her professional career starting in engineering consulting but has joined Hecla with an interest in the mining industry. Her role is focused on helping three operating mine sites in Alaska, Idaho, and Quebec, Canada achieve environmental compliance and assist with technical reviews, permitting, and mine operation. She is interested in innovative green technologies in the mining industry.	Rahel Dean-Pelikan is from Santa Clara, CA and attended the South Dakota School of Mines & Technology. She graduated with her B.S. in Mining Engineering and Management. Rahel continued her education at the Colorado School of Mines, where she graduated with her M.S. in Underground Construction and Tunnel Engineering. Her research focused on ground control and successfully defended her thesis *Numerical Modeling of Pillar Stress Redistribution During the Retreat Mining Process*. During her studies, Rahel was an active participant in the Mining Competition Team. Rahel captained the SD Mines Co-Ed 2018 and CSM Women's 2021 teams. Both teams competed and won the competition, in their respective divisions. Rahel currently works for Northern Star Resources at their Pogo Mine, located in Alaska, as a Graduate Mining Engineer. As a Graduate Mining Engineer, she gains both operational and technical experience. In her role, she spends one year working underground among the miners to learn the various jobs in operations and one year working as the Ventilation Engineer in the Tech Services Department. Outside her role, Rahel is a member of the site's Social Club Committee and helps plan fun activities for everyone at camp.
 Jim DesRochers is a graduate mining engineer with Northern Star Resources' Pogo Mine near Fairbanks, Alaska. Originally from Cincinnati, Ohio, he graduated the Colorado School of Mines in 2022 with a B.S. of Mining Engineering. Jim has experience in underground mining operations, project management and geotechnical lab work. During his time at CSM, Jim	 My name is Cassandra Galvez, and I am an Enterprise Product Owner for Freeport-McMoRan Inc. I am a Tucson native and graduated from the University of Arizona with a bachelor's in Chemical Engineering and with a bachelors in Environmental Engineering. As a product owner I lead a team that rollouts out and shapes one of Freeport's Digital Solutions. Two things I enjoy most about what I do is getting to work with so many people from different backgrounds of the industry and that I'm continuously learning. Outside of

worked at the Earth Mechanics Institute performing commercial rock testing and mechanical excavation research. He also participated in CSM's SME and ARMA student chapters, as well as the mining competition team. Jim is particularly interested in rock engineering, production optimization and precious metals mining.	work I spend my free time with my wonderful family and in competing in weightlifting.
 Shihua Han is a Ph.D. student in the Department of Energy and Mineral Engineering at Pennsylvania State University. His research interest lies in the fields of hydrometallurgy and mineral processing. In 2019-2020, he worked in research institutes as an assistant engineer to undertake research projects and take part in industrial projects in mineral processing and hydrometallurgy. Shihua received his Master's and Bachelor's degrees in Mineral Processing Engineering from Wuhan University of Technology in China.	 Emily Hendrickson has five years of experience in hardrock gold and silver mine exploration, development, and operation. She has held increasingly senior positions in mining in Nevada and Idaho in her young career, becoming the Community Affairs Manager for Integra Resources Corp. at the DeLamar Gold and Silver Project at 25 years old. Ms. Hendrickson received an Associate of Science with a concentration in Public Health from Truckee Meadows Community College in 2016, a Bachelor of Science in Communication from Colorado State University, Global Campus in 2020, and a Master of Business Administration from Southern New Hampshire University in 2022. Ms. Hendrickson is a passionate activist for the United States' responsible modern mining industry. Her work focuses on dismantling antiquated perceptions of mining in the U.S., and connecting diverse students and young professionals with the opportunities available in the industry. She presently serves as the Vice President of the Women's Mining Coalition and is an active member of the Boise section of SME as well as the newly formed Idaho chapter of Women in Mining.

Originally born in Canada, Mark is in his sixth year at Penn State, and is enrolled in a program called the Integrated Undergraduate/Graduate (IUG) program where he will receive both a bachelor's and master's degree upon graduation in Spring 2023. Mark is studying Mining Engineering for his undergraduate degree and Energy and Mineral Engineering for his graduate degree. His graduate research is focused on health and safety in the mining industry, specifically the characterization of respirable dust in underground coal mines. When not busy with exams or labwork, Mark is probably spending time outdoors hiking, biking or kayaking.

Victor Jauja is a professional graduate of the Mining Engineering career from the National University of Saint Agustin – UNSA. Winner of the "Mining & Exploration Division Scholarship" in SME (Society for Mining Metallurgy and Exploration), and the "Alex Senules Scholarship" in ISEE (International Society of Explosives Engineers). Organizer of the researching contest "Minería y Agricultura en convivencia estratégica para generar desarrollo en los pueblos del Perú", the purpose of which was to reduce social conflicts in Peru. In addition, associate of the Institute of Mining Engineers of Peru (IIMP), and Member of the International Society of Explosives Engineers (ISEE).

Victor has been passionate about mining since he was a child. Since then, he has developed a great sense of commitment to this field. Furthermore, he has great leadership skills. He is proactive and innovative, for always having implemented new ideas in every place where he worked. Empathic and fair, since he has continuously been in search of group progress and equality in the leadership positions he held so far. And finally, he has experience in group thinking, leadership, and innovation.

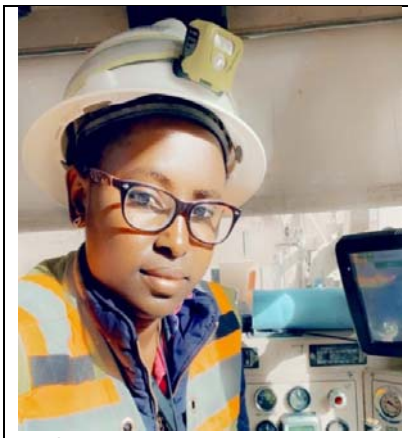
Michael Karl graduated in 2018 from the Colorado School of Mines with a B.S. in Mining Engineering. He worked for the James W. Fowler Company for 18 months on the Cle Elum Fish Passage Project in Ronald, Washington, where a 9.5-ft.-diameter, 1,200-ft. tunnel was dug to increase the fish capacity of Cle Elum Lake. The machine used was an Akkerman EBS 960 Digger Shield TBM.

Currently, Michael works for Barnard Construction in the Underground Division. While at Barnard, he has worked on the Kemano T2 Upstream Project a 6.5-m-diameter, 4-km-long tunnel located in the remote Coast Mountains of British Columbia. The machine used at Kemano was a 6.5-m OD Herrenknecht single-shield hard rock TBM. This project built a replacement tunnel for Rio Tinto Alcan to provide water to their Kemano hydropower plant.

Michael Keener graduated from the University of Pittsburgh with a master's degree in Civil Engineering and from Missouri University of Science and Technology with a master's degree in Mining Engineering with a certificate in Explosives Engineering. Michael has more than 10 years of experience in the mining industry in the fields of mapping, reclamation, process improvement, subsidence, abandoned mine pools, and abandoned mine support. He currently works for CONSOL Energy as an Assistant Mine Engineer and has worked on projects involving surveying, construction blasting, and ventilation. Michael is a registered Professional Engineer in the states of Pennsylvania, West Virginia, and Kentucky. He enjoys hiking, photography, and model railroading in his free time

Brock Langford is a licensed professional geologist who grew up in the small town of Atkins, Arkansas and could not wait to “get out.” He attended Arkansas Tech University where we played football and achieved his bachelor’s degree in professional geology. He then went to the University of Arkansas where he received his master’s degree in petroleum geology. He spent the next 6 years in the oil and gas industry, working in the San Juan Basin in New Mexico and the Permian Basin in West Texas. After years away from his friends and family, “getting out” was not as exciting and enjoyable as he believed as a teenager, so he returned to Arkansas in 2020 and took a position as Staff Geologist with Blackstone Construction where he oversees the development and characterization of several aggregate mining operations. Brock is married to his wife of 3 years, Cecelia, and they have two small dogs that are spoiled entirely too much. His two major hobbies include outdoor activities and weight training.

Howdy! I graduated from Colorado School of Mines with my bachelor’s degree in mining engineering during March 2022. During my time in college, I stayed involved on campus with undergraduate student government, SME and many other organizations. I got involved with the mining industry because of my passion for corporate social responsibility and public education and I hope to one day work in this sector. I spent a year in underground gold gaining experience as a drill and blast engineer, short range planning, mid range planning and ventilation. I now am learning the other side working as an open pit short range planning engineer. I have enjoyed the opportunity the mining industry gives to connect with people all over the world and I look forward to growing these connections in the future.

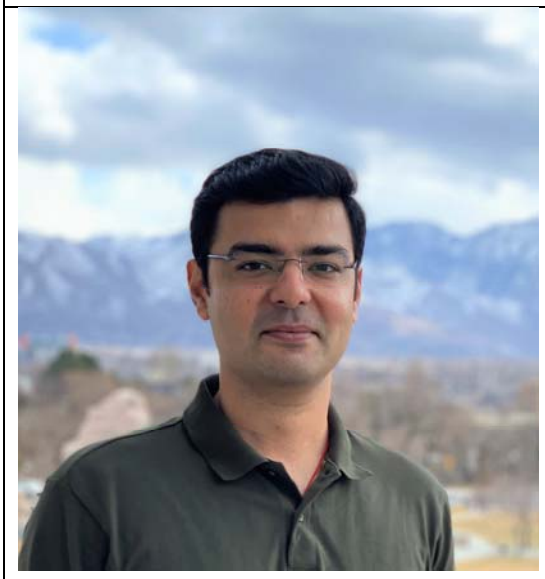


Safiatu Barrie Narteh is a mining engineer working as a mine operations supervisor at Nevada Gold Mines' Cortez mine. She obtained a graduate degree in Mining Engineering from the South Dakota School of Mines and Technology (SDSMT). Safiatu is also the founder and CEO of Give The Girl A Hand International (GIGAH, Int'l.). GIGAH is a humanitarian organization that helps empower young people by providing mentorship and career development programs. Currently, she runs a GIGAH mentorship program on Facebook live to help students from developing countries further their studies abroad. Her hobbies are reading, dancing, meeting new people, and traveling.

I am a first year master's student in Mineral Engineering with a background in Civil engineering. Throughout my academic career, I have gained a wide array of knowledge about best practice engineering concepts and techniques in order to best deal with the environmental, economic, and social aspects of the field. I had the opportunity to engage in research opportunities and conferences. I have developed skills like leadership, logistics, teamwork, oral and written communication, creativity, and innovation. In my personal life, I like to do social work, and travel is one of my passion, I am so critical thinking and curious

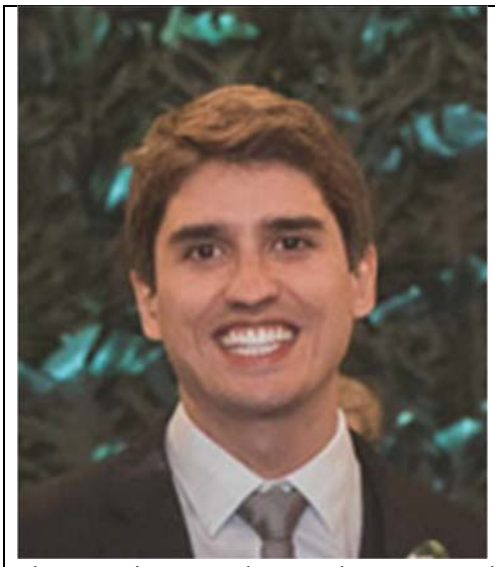
Marco Portal is a professional graduate of the Mining Engineering
program at the National University of Cajamarca. In addition, he

was the best student of his class. He is the current president and founder of the Student Chapter of the National University of Cajamarca, finalist of the MoveMining 2022 competition, associate of the Institute of Mining Engineers of Peru (IIMP), chosen as one of the 50 scholarship recipients of the Peruvian mining talent program. Marco has a great passion for the mining industry, always transmitting responsible and sustainable mining. He is focused in the areas of Mining Operations and Mine Planning, always having a great sense of safety and care for the environment. In addition, he has great leadership, ease to take the initiative in each project, excellent interpersonal relationship management, systemic and design thinking, innovation and organization.	Mohsen Rabbani is the first Afghan Ph.D. student at the Department of Mining and Metallurgical Engineering, Mackay School of Earth Sciences and Engineering, University of Nevada, Reno. He works on the sustainability assessment of rare earth production in Mountain Pass Rare Earth Mine, sponsored by the Department of Energy. He received his B.Sc. and M.Sc. degree in Mining Engineering and Mineral processing from the University of Kashan and Isfahan University of Technology, respectively. Furthermore, he worked on various mining and mineral processing projects in Afghanistan, such the Shaida Copper Mine project as research laboratory manager.
 Daniel Riggs is a sales executive for Eclipse Mining Technologies supporting new clients by helping them address pressing issues and enabling value-generating solutions.	 Salami holds a bachelor's degree in Mining Engineering with first class honors and a Master graduate certificate in Oil and

Daniel has a strong data orientation and with a focus on problem solving. With over 11 years of experience with mining technology and software, he possesses a good understanding of both surface and underground mining. Daniel's professional background includes a successful track record of growth and strategic initiatives within the Americas region during his tenure at P&H Mining, Komatsu Mining and Mine Site Technologies. Daniel currently acts as Enterprise Software Sales Executive for Eclipse Mining Technologies.	Gas Field Development Engineering. He is currently a doctoral researcher in the Department of Mining and Nuclear Engineering at the Missouri University of Science and technology USA. His doctoral research focuses on quantification of fire risk and developing novel evacuation techniques using agent-based models in Underground Mines. Salami is also a serving member of the *Missouri Show Me the Ice Team*- a Space Mining research team developing novel techniques to Mine resources in Space. To date, Salami has received several academic and leadership awards including the award for being the overall best Mining Engineering student in Nigeria in 2016. His research interest stretches across critical minerals and green mining, mine ventilation, mine safety, ESG, and mining sustainability.
 Aman Soni is a Geomechanical Engineer at Freeport-McMoRan Bagdad Operations. He earned his Ph.D. in Mining Engineering from Virginia Tech specializing in geomechanics, numerical modeling, and ground control. In the past, Aman has worked on projects related to risk assessment, monitoring, and safety management in metal mines and hydropower projects. He is currently managing pit depressurization projects for dewatering wells and improving slope stability.	 Vaibhav Srivastava 'VK' is a metallurgist at Freeport McMoRan working with hydrometallurgical group. He has experience working in research and industrial operations ranging across different commodities such as lead, zinc, rare earths, copper, etc. Vaibhav received his doctorate in Mining Engineering from University of Kentucky where his work was focused on modeling rare earth separation process for flowsheet design. Prior to his doctorate he went to University of Alaska for his masters and Indian School of Mines for bachelors. He has also worked as Process Engineer for Hindustan Zinc in India upon completion of his bachelors. He is an active member of SME and was a recipient of Mineral and Metallurgical Processing Scholarship for two consecutive years in 2016 and 2017. He enjoys modeling, applied statistics and is passionate about, ESG mining and application analytics and AI in mining industry.

Caitlin obtained her bachelor's and master's In Mining Engineering from the University of Kentucky in 2020 and 2021, respectively. She now works for the Mine Safety and Health Administration (MSHA) Technical Support as a General Engineer in the Ventilation Division. In this role, she supports MSHA Enforcement by performing investigations, reviewing ventilation plans, providing training, and responding to requests for assistance during mine emergencies. Caitlin also serves on MSHA Technical Support's Diversity, Equity, and Inclusion committee's Sustainability Subcommittee, which focuses on initiatives which are designed to maintain employee engagement and represents MSHA in the Department of Labor's Strategic Employee Engagement Drive (SEED) Initiative, a task force dedicated to empowering employees by making improvements in the workplace and government processes.

Chandima Subasinghe is a Graduate Research and Teaching Assistant at the Department of Energy and Mineral Engineering of Pennsylvania State University. He graduated with a BS in Mineral Resources and Technology in Uva Wellassa University of Sri Lanka in March 2020. In college he excelled in both academics and in various extracurricular activities and he was awarded as the most outstanding graduate of the Faculty of Applied Sciences. Following graduation, he served the Geological Survey and Mines Bureau of Sri Lanka as a Geoscientist and the Uva Wellassa University as a Research Assistant before joining PennState. Chandima is currently working for his MS and PhD in Mineral Processing Engineering at PennState. He is passionate about innovative methods for mineral processing, metal extraction and R&D and he has several publications and conference presentations. He will join academia after pursuing his PhD.



Thiago Tolentino Silva was born in Brazil, on July 3rd, 1990. He received his bachelor's degree in Metallurgical Engineering from the Federal University of Minas Gerais (UFMG), in Brazil, in 2013. He has operations and projects experience, as a Metallurgist, in various countries and continents, including Brazil, Canada, USA, Mexico, Mauritania, Ghana and Chile, and various metals. At the moment, he holds a Senior Metallurgist position with Hecla Mining Corporation and provides support to operations and projects in North America. He always brings a positive attitude and passion on his work and he believes this is the best way to achieve great results as a team and as a company.

Joseph is a postdoctoral researching working on the responsible supply of domestic critical minerals in the Mining Engineering Department at the Colorado School of Mines. He completed in PhD in Metallurgical and Materials Engineering in July, 2022. His research was on the recovery of critical minerals from copper smelter wastes. Joseph grew up in Pennsylvania and attended Purdue University for his undergraduate degree in Materials Engineering