SME YOUNG LEADERS MEMBER BIOS
CLASSES OF 2021-2018

Contents

Class of 2021

Alex Cantrall

grew up in Central New York and was not sure what he wanted to major in. However, once he found out about mining engineering, he decided that is what he wanted to do and that he wanted to go to school at the South Dakota school of Mines and Technology. While there he formed a core group of friends that helped push him to be more of a leader. After graduating in May of 2019 he went to work for Freeport McMoRan at the Bagdad mine in Arizona and joined the SME local section at the urging of the section members. Before the committee was delayed due to Covid 19 he was being trained to be the secretary. He is currently starting his second year at the site and is looking forward to improving his leadership skills.

Alexandra Murray

is a Production Engineer at the Stillwater Mine in Nye, MT, specializing in Ramp and Fill mining. She graduated with a BS in Mining Engineering from Colorado School of Mines in May of 2019. In college, she was involved with SME - Student Chapter and Mining Competition Team. At the Stillwater Mine, Alex manages production for the Upper West and Upper Off Shaft areas of the mine. Her other responsibilities include stope design and amendments, weekly to two year production planning, and compliance to plan reporting. Alex is very passionate about innovation within the planning process and finding new ways to encourage compliance to the plan. In her free time, she enjoys spending time with her dogs, exploring Montana, baking, and international travel

Braiam Zelso Córdova Salazar

earned a bachelor's degree in Mining Engineering from the School of Mines of the National University of Moquegua - Peru in 2017, with and specializations in Mine to Mill: Optimization of Production Costs in Surface Mining Operations - CAMIPER. He also took the course about Modern Management of Security and Loss Control by PACIFIC PIR. He has experience in open pit mining: Southern Peru Copper Corporation, such as Mine Operations and Long-Term Mine Planning in unit Cuajone. Also, in other companies He developed the mining consulting like assistant geological modeling and assistant planning. He was Student Chapter President in 2017 at UNAM, and worked on social activities, and professional growth. He had the opportunity to be in Internationals congresses, in 2018 he has selected for II International OMA Congress, in 2017 for he be part of VIII International CIEMIN Congress

Cristian Cardenas Triana

is a Mining and Metallurgical Engineer graduated from the Universidad Nacional de Colombia. He has worked in the mining industry for more than two years in Colombia and Australia where he has been involved in mining surface operations and mine planning. Currently, he is pursuing a Master of Science in Mining Engineering at the University of Kentucky. He works as a Teaching Assistant at the Mining Engineering Department where he teaches the undergraduate students the general concepts of the mechanical properties of solid materials and structural elements. When he finishes his graduate studies, he is looking forward to continue working in the mining industry where he can apply all the knowledge and technical expertise that he has acquired during his career.

and 2017 he won a scholarship to goes at CADE University - IPAE. Currently, he works at PEVOEX in Quellaveco copper mine, located in the Moquegua region of Peru.

Deniz Talon

received her bachelor's and master's degrees from Turkey in 2013 and 2016, respectively. Both of her degrees are in Mining Engineering. Her master thesis focused on the beneficiation of oxide lead and zinc minerals using selective flotation and ammonia leaching. In 2018, she joined West Virginia University Department of Mining Engineering to pursue her Ph.D. degree. Her current research focuses on pilot-scale testing of an integrated circuit for the extraction of rare earth elements from coal and coal byproducts which is a project funded by the US Department of Energy's National Energy Technology Laboratory. Deniz is the sole recipient of 2020 Benjamin M. Statler College of Engineering and Mineral Resources, Outstanding Merit Fellowship for Continuing Doctoral Students. She is also the recipient of 2019 WVU Mining Engineering Faculty Graduate Award.

Deniz Tuncay

received his bachelor's degree from Middle East Technical University in 2011 and his master's degree in 2014. His master thesis focused on the reliability analysis using fault tree analysis of draglines. He worked as a research and teaching assistant in Middle East Technical University Mining Engineering Department for six years and he is now a Ph.D. student and a graduate research assistant in the Department of Mining Engineering at West Virginia University working on his research in the subject of pillar design approach considering overburden geology and mechanics. During his time in West Virginia University, he produced 13 publications (5 journal articles, 8 conference papers) and made presentations in 7 different occasions, including the Society for Mining, Metallurgy & Exploration (SME) Annual Conference, SME Central Appalachian meeting and the International Conference on Ground Control in Mining. He also received various awards and scholarships including the West Virginia University Mining Engineering Faculty Graduate Award and the prestigious SME Syd S. and Felicia F. Peng Ground Control in Mining Scholarship.

Edison Herbas Berrospi

is a Mining Engineer graduated with honors from the Universidad Nacional Mayor de San Marcos (Peru) in 2015. He has 5 years of experience in mine planning and project evaluation for both Open Pit and Underground operations. He also developed studies for the main mines in Brazil, Ecuador, Peru and Bolivia. Furthermore, he was Assistant Professor for the courses Geostatistics (2014) and Mining

Elham Rahimi

Software (as of today) at Universidad Nacional Mayor de San Marcos. Since his early years in college, he has always been an active member in groups aimed at working towards academic and professional development. He joined the SME San Marcos Student Chapter first as Treasurer 2013-2014 and then as President in 2014-2015. Under his leadership, the SME San Marcos Student Chapter participated in the first Mine Planning Design Contest (2015) organized by SME Latin America and took the third place with his team. Currently, he is working as a Corporate Mine Planning Engineer at Volcan Mining Company (Glencore).

Erich Dohm is the Manager of Global Testing Services for Eriez Flotation. In this role, Erich's responsibilities include global technical oversight of Eriez' flotation test programs, which support R&D, commercialization, and sales efforts for Eriez' flotation technologies. Prior to this role, Erich worked for five years as a minerals process engineer for Jacobs Engineering with a primary focus on phosphate beneficiation. Erich has published several technical papers and made numerous professional presentations at domestic and international conferences. Erich is a registered professional engineer in the United States (Florida), and he received Bachelor and Doctorate degrees in Mining and Minerals Engineering from Virginia Polytechnic Institute and State University.

Juan Manuel Ayerve Pena studied Mining Engineering at the National University of San Antonio Abad del Cusco. The knowledge and skills acquired at the University and the experience of related work in open pit mining and underground mining, has allowed him to develop strengths, such as: Adaptability to face the different situations that arise, perseverance to persist in the projects undertaken, integrity to fulfill commitments, leadership to influence your team to achieve objectives, proactive in finding solutions, teamwork, with tolerance to pressure and being more productive in the work done.

Kayode Ajayi is an expert on numerical modeling of subsurface gas transport through fractured rocks. He earned his MS and PhD in mechanical engineering from South Dakota School of Mines and Technology. He has authored several articles in engineering journals highlighting his novel findings. In addition, he has also presented his research in several international conferences with peer-reviewed conference proceedings. Dr. Ajayi currently works for the National

Marie Hetherington is a Short Range Planner at Carlin Surface Complex with Nevada Gold Mines, a joint venture between Barrick Gold Corporation and Newmont Corporation. Along with YLC, she is involved with Women in Mining (WIM) Nevada Chapter as President, and SME Northeastern Nevada Section as Treasurer. In her free time Marie likes to swim at the beach, hike, and spend time with her husband, cat, and lizard. She graduated in

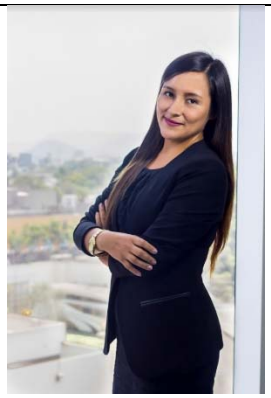
Institute for Occupational Safety and Health (NIOSH) and he is conducting research on mine ventilation specifically for longwall mines in proximity with shale gas wells. He is also working on explosion prevention using rock dust.

May 2019 with a B.S. in Mining Engineering from Colorado School of Mines.

Matthew Philip Ulizio

"Matt" is originally from Redondo Beach, California. Since graduating high school, Matt has lived in 10 states and Germany. In 2015 he received a B.S. in mining engineering from Penn State's College of Earth and Mineral Sciences. Matt has been residing in San Antonio, Texas, while working on the Kemano T2 Tunnel Project in British Columbia, Canada.

Most recently Matt worked as a Tunnel/Project Engineer for Atkinson Construction in their underground division on San Antonio Water System's Central Water Integration Pipeline 5-1 Project. Prior to this, Matt worked with Kiewit in their underground division on a variety of underground projects, including the West Branch Bypass Tunnel Contract BT- 2, Doan Valley Tunnel Project, Fort Calhoun Decline Tunnels, Deep Rock Tunnel Connector/White River Tunnel/Lower Pogues Tunnel, and Bingham Tunnel Rehabilitation. While with Kiewit, Matt estimated and also completed technical tunnel boring machine (TBM) operation training in Germany with Herrenknecht. Matt enjoys traveling in the U.S. and has visited 38 states, with the goal of seeing all 50 within the next 10 years. During the summer, he likes to spend time at his family cottage on Lake Michigan. He is also an avid outdoorsman and enjoys fishing, camping, hiking, and being on any body of water he can get to. He also enjoys cooking and surrounding himself with family and friends. Matt is an active member in the Society for Mining, Metallurgy & Exploration (SME); the SME Young Leaders Committee; the International Society of Explosives Engineers; and the Boy Scouts of America. Matt is also a registered Merit Badge Counselor for scouts interested in earning the Mining in Society merit badge.



Mirna Cachay Guerrero

is a 29 years old Mine Engineer, and a Hygiene and Safety Engineer, with over than 5 years of experience in the Safety Department of different companies and two years of experience in the Mine Planning Department of two companies. She finished college in June 2014 and was awarded with the "Manuel Pardo y Lavalle Recognition for her academic excellence" by her university. Then, she worked for supplier mining companies, such as Caterpillar (mining trucks provider), Zetramsa (transport of explosives), Mapfre (services of Safety Advisor for many Mining Companies) and the Canadian petroleum company, Gran Tierra Energy. During her work experience, she discovered her passion for Mining, and she decided to study a second university career on Mining Engineer, starting on 2016 and being graduated on 2019, on the top of her class. Mirna plans to continue her education by applying to a master's degree for 2023. In 2018 she worked at the underground Zinc Mine "San Ignacio de Morococha", where she was recognized in an article of the institutional magazine for her effort, outstanding work development and leadership. On 2020, she started to work at the Cooper Mine "Cerro Verde" (Freeport-McMoRan Inc) where she is working nowadays as a Short Term Mine Planning Trainee. In addition, she is a member of "Women in Mining Perú", co-founder and Public Relations Director of the "Network of Female Mine Engineers in Peru (RIM-Perú)", coordinator of volunteering of De-Mentes (NGO for Mental Health Promotion), coordinator of volunteering of the "World Organization in Support of Education" and Mentor in the Institute of Mining Engineers of Peru Mentoring Program.

Ney Lisset Silva Hernandez is a Mine Engineering with 8 years of experience in the mining industry working for several multinational mining companies in both technical and leadership roles in the areas of mine planning and project management in large open-pit mining copper deposits. Her career started at Glencore's Antapaccay Mine doing Professional Internships in the Long Term Planning area in 2012, and continued with the Graduate Program in the Strategic Planning area where she rose to Assistant Strategic Planning Engineer in 2014 collaborating with the mining plan of the Coroccohuayco mining project and the Antapaccay Mine Expansion project as well. Then Mrs. Silva joined as Junior Mine Planning Engineer in Constancia Mine of Hudbay Minerals in the Medium-Term Planning area collaborating in the elaboration of annual mining plans (Budget and Forecast). Finally, Mrs. Silva got a position of Junior Planning Engineer in Freeport-McMoRan at Cerro Verde mine in 2015 in the area of Earthworks, where she was responsible for planning the projects to be executed in the area. In her next position as Junior Planning Engineer II, she was responsible for the development of mine projects, energy, pit dewatering and discharge sequence in the PAD 1X, stocks and dumps. Current position at the Cerro Verde mine is Mine Planning Engineer, in the of Short-Term Planning area since April 2018, her responsibility is to supervise compliance with the daily mining plan, identifying risks and opportunities in a timely manner, preparing the plan in order to supply the mineral to the two concentrators, the leaching system and ROM, she also carry out viable mining plans considering safety and the environment, fulfilling the supply of mineral in the processes based on the defined mining strategies in the forecast. Ney Silva is a Mining Engineer from the Universidad Nacional de Ingeniería of Peru. She graduated with the highest honors.

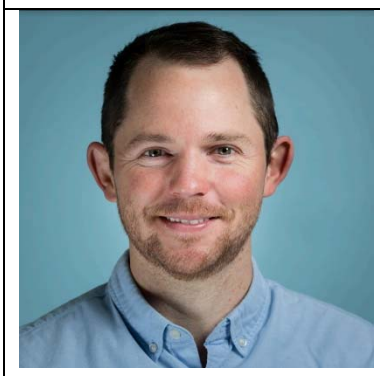
Maria Paula Pineda is a Mining Engineer from the National University of Engineering of Peru. She did a student exchange at the National Autonomous University of Mexico. Likewise, she was elected by the Canada-Peru Chamber of Commerce and OMA Peru as Roca Woman in 2017, elected as one of the ten most empowered women in the Peruvian mining industry. She was a member of the Board of Directors of Amautas Mineros and SME Student Chapter UNI and was awarded a scholarship by the National Society of Mining, Oil and Energy to attend the XII International Gold and Silver Symposium. After graduation, she has taken courses in Drilling and Blasting, Mine Planning and Safety and she has worked in mining companies such as Aruntani S.A.C. (open pit mine) and Minsur S.A. (underground mine) in the Mine Planning Area.

Pablo Cesar Altamirano Soto

is a professional graduate of the Mining Management Engineering career from the Peruvian University of Applied Sciences - UPC. In addition, a member of the Advisory Council of the UPC Engineering Faculty. He is the current President of the Association of Professionals of Mining Engineering Group of Peru, President of the Society of Mining, Metallurgy, and Exploration (SME) Student Chapter UPC, Finalist of the Move Mining 2020 Contest, Associate of the Institute of Mining Engineers of Peru, and Member of The Australasian Institute of Mining and Metallurgy. Pablo has a great passion for the mining sector and a strong sense in matters of safety, social responsibility, and mining operations. In addition, he presents great management of interpersonal relationships, ease of taking the initiative in any activity he performs, and he has extensive experience in leadership, systemic thinking, design thinking, innovation, and organization.

Rushikesh Battulwar

is currently a first-year Ph.D. student at the Department of Mining and Metallurgical Engineering, University of Nevada, Reno. He completed his B.Sc in Mining Engineering from Indian Institute of Technology – Indian School of Mines, India in 2016 and M.S in Mining engineering from UNR in December 2018. At UNR, His research interests include the application of drones, computer vision and artificial intelligence in the mining industry focusing on health and safety. In his free time, Rushikesh loves to do hiking, traveling, cooking and social service. He is also a licensed UAV pilot in the USA.



Tom Boundy

is a Process Engineer for Paterson & Cooke based in Golden, Colorado. He started with Paterson & Cooke in January 2020 and has enjoyed supporting mining clients design solutions to complex tailings, water, and processing challenges. Prior to working at Paterson & Cooke, Tom has supported various mining clients through metallurgical audits, laboratory management, test work program management, and operator training at Westbound Metallurgy and Colorado School of Mines.

Tom received a Bachelor of Science degree in Chemistry from Pepperdine University in 2013, and his Masters and Ph.D. in Metallurgical and Materials Engineering from Colorado School of Mines in 2019. He has also help

Tyler Faulkner Faulkner

received his B.S. in Mining and Minerals Engineering from Virginia Tech in 2014 where he graduated at the top of his class. He obtained his Professional Engineer license in 2020. He works in Mining Sales and Support for Carlson Software, and has trained hundreds of mining engineers, geologists, surveyors, and students in the use of Carlson's mine planning, geologic modeling, and surveying software packages. He has travelled to sites in India, Greece, Australia, Canada, and all across the US, spanning a variety of mine types including coal, aggregates, phosphate, salt, clay, and metals. One of Tyler's favorite parts of his job is his work with mining engineering

positions outside of the mining industry including in polymer formulation for HRL Laboratories and recycling technologies for Apple.

universities. Through webinars, lectures, survey labs, and technical support calls, Tyler has provided practical knowledge and assistance to the next generation of mining professionals. “My alma mater’s motto ‘Ut Prosim’ means ‘That I May Serve’, and this is something that I consider to be a big part of my life’s purpose. The support I provide to industry professionals and aspiring students is my way of serving the industry that has given me so many great opportunities.”

Veronica Cordova

received a B.S. in Mining Engineering degree from Pontificia Universidad Católica del Perú (PUCP) and is currently a M.S. student in Mining Engineering at the University of Arizona. She got certified as Engineer-in-Training by the Minnesota Board of AELSLAGID. Her research focuses on heat stress and the development of PPE. She has worked on projects in Peru, Chile and USA and is currently a Graduate Research Assistant at the University of Arizona, where she is a teaching assistant of Geopositioning and Monitoring for Mining Applications. She has also done research in Deep Sea Mining and Ventilation. She was the captain of the 2020 UofA Women’s team for the 41st International Mining Competition. She is the student liaison of the Women in Mining Arizona Chapter. She presented in two sessions at the 2020 SME annual conference and she was the recipient of the 2020 SME Henry Dewitt Scholarship. She wants to be a role model for first generation miners. “Everything is possible, even in tough times”.

William Pierce

Xuan Wang

is an Electrical Engineer at Rio Tinto, its Resolution Copper Company located in Arizona. She has a B.Eng from Liverpool John Moores University and a M.S in Electrical Engineering from Case Western Reserve University. Xuan spent her first few years after graduate school in Salt Lake City Utah, where she worked as a Graduate Electrical Engineer supporting copper production process at Kennecott Utah Copper (a Rio Tinto Operation). She was relocated to Arizona in 2019, where she gains experience of Underground mining as well as underground construction. Her recent project was to manage the Engineering Design and Review, and to support the construction and commission of an underground electrical substation about 7000ft below surface.

Younes Shekarian

has a bachelor and master of mining engineering from Amirkabir University of Technology (Tehran Polytechnic), Iran. He has 4 years-experience as a mining engineer. He joined the mineral engineering program at New Mexico Institute of Mining and Technology (NMT) in 2019. He is part of NIOSH capacity building project entitled "Characterization, deposition, monitoring, and mitigation of Respirable Coal Mine Dust (RCMD) and capacity building for mine health and safety". In particular, he focused on Investigation of the Effects of Mining Parameters on the Prevalence of Coal Worker's Pneumoconiosis (CWP) Risks among the US Coal Miners. During his education, he has accomplished some milestones including several journal and conference publications and scholarships from the society of mining engineering (SME). He will join the Ph.D. program of mining engineering at the Pennsylvania State University (PSU) in Spring 2021.

Class of 2020

Alireza Valian Alireza

holds a master's degree in mineral processing and is now pursuing a PhD degree at University of Kentucky. Before entering the PhD program, Alireza experienced five years of industrial R&D work. During those years, he conducted feasibility studies, designed and optimized mineral processing circuits, and developed control strategies and reagent schemes. He has published several papers and received several awards and grants during his academic career. In Spring semester 2019, Alireza taught "Mineral Processing Plant Design" at University of Kentucky. The course is offered for graduate and undergraduate students in the Department of Mining Engineering.

Amir Eskanlou

obtained his bachelor's degree in mining engineering in 2013 from Shahid Bahonar University, Kerman, Iran. He continued his studies in mineral processing engineering at Tarbiat Modares University, Tehran, Iran, with research focus on column flotation and obtained his master's degree in 2016. After graduation, Amir joined NIPEC Company, a subsidiary of National Iranian Copper Industry Co., as a process engineer where he earned a two-year experience in the flowsheet design and optimization of mineral processing plants. He currently is a PhD student and research assistant at West Virginia University and his main research focus is the optimization of column flotation process.

Andrew Cavendor

from a young age enjoyed breaking and making electronics and knew he was going to be an engineer. He mashed his father's love of geology with engineering into geological engineering, or metallurgy. Unafraid of a challenge, Andrew earned a BS in Metallurgy and Materials Engineering followed by a MS in Materials Science from the CSM. Andrew applied his knowledge to improve the efficiency and reliability of equipment that separate minerals working at Derrick Corporation and now Weir Minerals Andrew is a father of two budding toddlers. He enjoys hiking, biking, ultimate frisbee, brewing beer, and boardgames.

Carolina Navia

is a Mining and Metallurgical Engineer from the Universidad Nacional de Colombia. I am a master's student in the Mining department at the Colorado School of Mines. My research topic is to develop a classification system to prevent rockfall in artisanal mines in Peru. I have gained a wide array of knowledge about best practice mining concepts and techniques, in order to maximize environmental, economic, and social harmony. I am honored to contribute to the development of my country through education and take pride in the role I can play changing the perception of mining, and in particular, the role of women in mining. I am enrolled in the Society for Mining, Metallurgy, and Exploration (SME), where I have had the opportunity to be the part of several different projects related to changing the perception of the mining industry.

Catalina Venegas

is a Mining and Metallurgical Engineer from the Universidad Nacional de Colombia. She graduated with the highest honors. Catalina worked as an intern and junior engineer in a geotechnical consultant company in Colombia, IRYS S.A.S. for one year and seven months. She is currently pursuing her Master's degree in Mineral Engineering at New Mexico Tech. The focus of her research lies within underground geomechanics. During summer 2019 she worked as a Geomechanical Engineering Intern at Freeport McMoRan. Her objective is to become an excellent Geomechanical Engineer. She wants to apply all her knowledge to solve problems, to innovate, and support the mining sector guided by her university motto, “Hard work and Honesty”.

Elsy Zapana Cruz

Is a Mining Engineer from the Pontifical Catholic University of Peru with diplomas and specializations in Strategic Cost Management and Optimization of underground and surface mining operations by the Mining Society of South Africa - Camiper. She also took the course about Estimation of Costs in Mining Operations at the Institute of Engineers of Mines of Peru. She has experience in underground mines: Pan American Silver Argentum, Productive Unit Contonga - Glencore, Quenuales, Pan American Silver Huarón and Colquisiri Mine. Also, in mining consulting companies and equipment marketers with a focus on productivity, planning, operations and safety. She obtained recognition in third place at II International prize of students in mining, Ciemin-Perumin-2017 for her participation in a research project that allows cost reduction through loss control and was also exhibited as Research, Technology and Innovation Work in the XII National Congress of mining in 2018, achieving 2nd place in the framework of Management Mining. She was also the founder - coordinator of Yachaywasi Minero PUCP, a university association that promotes responsible and sustainable mining at schools in Lima and provinces. Currently, she works at Minera Colquisiri S.A in the Mine Planning area and is also a brigadist.

Eric Watkins

is an associate service fellow with NIOSH currently researching gas flow in the coal mine environment through field work and CFD modelling. He completed his B.S. and M.S. in Mining and Minerals Engineering at Virginia Tech. During his time at Virginia Tech he researched mine fires and application of firefighting foams with the use of the CFD modelling programs FDS and Open FOAM. He was also the president and team captain for the

Fangyu Liu

is currently a process engineer in the hydrometallurgy team at Hatch, Ltd. He graduated in the fall of 2019 from the Colorado School of Mines with a Ph.D. degree in metallurgical and materials engineering. His thesis focuses on rare earths electro-reduction in molten salt systems in support of the rare earth metals (REMs) production technology. Fangyu also has a master’s degree and a bachelor’s degree in metallurgical engineering both

Virginia Tech Collegiate Mine Rescue team across varying amounts of time during his 5 years with the team.

from Central South University, China. He was the winner of Best Student Paper Award at the 68th Annual SME Colorado Mineral Processing Division (MPD) Conference and the First Prize winner in the National English Competition for College Students China. In addition to his passion for extractive metallurgy, he enjoys hiking and long-distance trail running.

Jacob A. Hunter

is a General Manager working in the Mining, Tunneling, Underground Construction and Geotechnical Industries with 9 years of experience. Following an internship with Foresight Management, a subsidiary of Cline Resources in 2010 and in 2011 began an internship with Jennmar's Virginia Specialty Division in Pounding Mills, VA. Upon graduation, Mr. Hunter worked 18 months with Jennmar's Jennchem Division as a Project Engineer and Product Manager before relocation to Abingdon, VA to work again with Jennmar's Virginia Specialty Division/Civil Division. In December of 2016, Mr. Hunter received his Professional Engineer's License in the state of OH by successfully passing the Practice and Principles of Engineering Exam in October 2016 and completing 5 years of engineering experience. Mr. Hunter relocated to Matthews, NC in 2017 to pursue outside technical sales with Jennmar's Civil Division. In March 2019, Mr. Hunter was promoted to General Manager of Jennmar's Civil Division and tasked with continued growth in the areas of Tunneling, Underground Construction and Geotechnical Support. Mr. Hunter is skilled in project management, engineering, estimations, detailing and technical sales. He is a 2012 graduate of Ohio University's Russ College of Engineering completing a Bachelor of Science in Civil Engineering.

James Edward Tabinski

was born on August 15th, 1984 and raised for 18 years in the town of Olney, Maryland. I first pursued a BS in Technical Writing at New Mexico Tech, 2006. I then went back to school and achieved a BS in Earth Science from University of New Mexico, 2010. I went back to my alma mater, New Mexico Tech, and further pursued an MS in Mineral Engineering/Exploration Geology, 2016. I am currently working for Freeport-McMoRan Inc. in Morenci, Arizona as an ore control geologist in a copper and molybdenum mine.

Jared Olson

received a B.S. degree in chemical engineering from the University of Nevada, Reno in 2012. Since receiving his degree, he has worked as a metallurgist for McClelland Laboratories managing contract research programs for precious and base metal projects and currently serves as McClelland's V.P. of operations. Jared recently (2019) earned his master's degree for his work developing a novel alkaline heap leaching process for the recovery of vanadium, and he is a chapter co-author of the book "An Introduction to Vanadium: Chemistry, Occurrence and Applications."

Jessica Garcia

graduated from the Colorado School of Mines with her B.Sc. in Engineering – Civil Specialty in 2011 and is currently working on her Professional Masters in Mining Engineering and Management, also from Colorado School of Mines. Upon graduation, Jessica has worked for industry leaders in underground construction and mining contractors, starting was a Field Engineering working up to a Project Manager. She is currently a Project Manager for American Mine Services, LLC overseeing the installation of a new screen plant and erection of a new headframe at the Weeks Island Mine in New Iberia, LA.

Jesus Castillo

earned a bachelor's degree in Mining and Metallurgical Engineering from the School of Mines of the National University of Colombia in 2018. Nowadays, he is pursuing a master's degree in mining engineering at the University of Kentucky. Also, Jesus is the teaching assistant of the deformable solids lab.

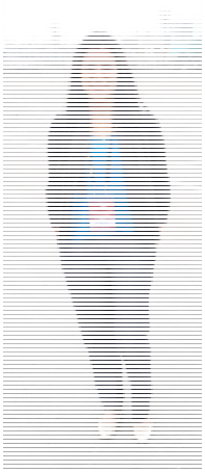
Prior to being in Kentucky, Jesus was working for STRACON at an underground gold mine in his home country, Colombia. In February of 2018 Jesus and his team won the Move Mining competition in Minneapolis, MN; at the annual conference of the SME with the proposal "Teaching Kids". Currently, he is working with Dr. Zach Agioutantis on ground control.

Kinsley Costner

graduated from Colorado School of Mines in May of 2019 with a bachelor's degree in Mining Engineering. While in school, I was actively involved in the mining engineering department. I was the Recording Secretary for our student SME chapter from 2017-2018 as well as the inaugural president for the Women in Mining organization. After college, I started with Orica USA in their Graduate Rotation Program where I have been able to gain hands-on experience about the blasting industry as well as interact with many aggregate quarries.

Malyree Raymond

graduated from the University of Arizona with a Bachelor of Science Degree in Chemistry in the fall of 2013. She began working for Freeport-McMoRan Inc. after graduation as a Lab Technician in the Analytical Department of the Technology Center in Tucson, Arizona. As promotions became available, she was able to work her way up to being Chemist I and now Chemist II. She has plans to continue her Chemist progression into the next level and onward. She serves as one of the Chemical Hygiene Officers for her site as well as a member of the Acid Safety Team, where she helps implement safety improvements regarding the acids and other chemicals used at all three sites of the Technology Center. Malyree is also the site coordinator for the United Way Committee as well as the contact for other volunteer and employee engagement opportunities.



Maria Paula Pineda

Is a Masters student at New Mexico Tech in Mineral Engineering with specialization in Geotechnical Engineering. I did my bachelor's degree at Universidad Nacional de Colombia in Mining and Metallurgical Engineering. I have previously worked as an intern at Argos S. A (Cement plant) in Colombia. The internship gave me the opportunity to acquire skills in mining process optimization and ground control as well as underground excavation design. During Summer 2019 I had the opportunity to do an internship with Rio Tinto performing a 2D geotechnical assessment for a dump design and gaining experience in open pit mines.

Nina Astillero

has worked in the Environmental Department at Freeport-McMoRan Inc. for over 6 years with previous experience in environmental consulting at Bureau Veritas North America and Uhl & Associates, Inc. She has experience in managing compliance programs for waste and recycling management, groundwater, surface water, drinking water, and air quality. She has extensive experience in auditing against ISO14001 as well as compliance programs. Nina hails from Philadelphia, Pennsylvania and holds a Bachelor of Science in Geology with a minor in Environmental Studies from Temple University as well as a Master of Science in Environmental Engineering from the New Jersey Institute of Technology. These days, you can find Nina experimenting with configurable apps, mixed reality, and artificial intelligence to improve the workflows of the Environmental Department at her site. When Nina is not working, she spends time volunteering as a mentor, school trip leader, and at the community garden.

Sanket Bacchuwar

is a Metallurgist, working with Freeport McMoRan Inc. as Frontline Shift Engineer in a completely agile 'America's Concentrator' team at their copper/molybdenum concentrator in Bagdad, Arizona. Previously, he has worked as Graduate Research Assistant in Dr. Jan Miller's x-ray computed tomography research group at the dept. of metallurgical engineering at University of Utah. Over there, he worked on multiple research projects and was able to author/co-author three research papers. In his short career, he also had an opportunity to work at Freeport McMoRan's Metcalf concentrator at Morenci, Arizona as a metallurgical engineering intern for three months, also got to spend a summer at Universite de Sherbrooke in Quebec, Canada in their concrete research group as a research intern. Sanket holds a Master of Science degree in Metallurgical Engineering from University of Utah, and a Bachelor of Technology degree in Mineral Engineering from Indian Institute of Technology (ISM) Dhanbad.

Scott Hutchins

is a member of the Global Mining Solutions team within Komatsu Mining, focusing on continuous improvement and technology with surface mining customers around the world. Scott joined Komatsu in 2015 in a program with Joy Global and Rio Tinto Coal Australia to focus on joint productivity initiatives and improvements across Australia. He has also held various technical and operational roles throughout mine sites in iron ore, copper, and coal. Scott completed Bachelor of Science degrees from Virginia Tech in Geochemistry (2008) and Mining and Minerals Engineering (2010). He is a native of Virginia and now resides in Milwaukee, WI.

Sena Cicek

received her Bachelor of Science degree in mining engineering from Middle East Technical University (METU) with the area of emphasis in geotechnical engineering, in 2018. During her undergraduate study, she was a student assistant in Rock Mechanics in Mining Engineering Department and a laboratory assistant in Soil Mechanics in Civil Engineering Department in METU. She pursued three internship experiences in different areas of mining engineering. Her motivated and ambitious character drives her towards other aspects of life as well, in addition to seeking academic excellence. She served a founding member of Women in Engineering that is a new supporting branch of IEEE in METU. She was involved in the organization group of the biggest IEEE event in campus for three years.

She joined the West Virginia University mining engineering department as a graduate research assistant in 2018. Her research is focusing on geotechnical engineering and ground control. She is currently working on developing a methodology for rating floor quality of US coal and limestone mines that have encountered floor failure.

Sidharth Agrawal

is a Ph.D. candidate in Energy and Mineral Engineering and a master's student in Applied Statistics at Penn State University. His research lies at the interface of occupational health and safety, economics and regulatory policies and he applies analytical skills and theoretical knowledge to inform policies in the mining industry

Suman Saurabh

is a doctoral candidate at Southern Illinois University Carbondale in the department of Mining and Mineral Resources Engineering. His research is investigating implications of methane extraction from coal and bioconversion of coal to methane. Additionally, he has two years of industry experience in coal and metal mining operations (Vedanta Resources) and services (Orica Ltd.). He also serves voluntarily as reviewer for several journals.

Weiping Liu

is a Metallurgist at Technical Service, Freeport-McMoRan Mining Company, Phoenix, Arizona. His main job responsibility includes flotation, comminution process optimization, and design, metallurgical balance, data mining, commissioning and survey campaign. He got his Metallurgical Engineering Ph.D. degree at the University of Utah. His recent research focuses on the surface chemistry of gold, sulfide minerals, and rare earth flotation, lithium, magnesium, molybdenum, and nickel extraction. He is a volunteer Judge for Miner's Day Mucking and Jackleg Drilling Event in UT and Grand Award Judge in Energy: Chemical session for Intel International Science and Engineering Fair 2019. He has contributed 26 peer-reviewed papers, one patent and 5 presentations at SME and IPMI conferences. He received a graduate student award at 67th MPD Conference and Colonial Metals George Benvegno Memorial Award at IPMI 42nd Conference.

Yuanyuan Xia

is a geologist at Morenci Mine, Arizona. She got her bachelor's degree in geology at Sun Yat-sen University, Guangzhou, China and master's degree in geology and geophysics at Missouri University of Science and Technology. She got abundant field experience as well as academic projects. She interned at Safford Mine, Arizona in 2018. Currently, she works for Freeport McMoRan as an ore control geologist.

Diegue Tchienga

is a Cameroonian of origin who moved to the United States at the age of 16. After two years at Montgomery Blair High School in Maryland, I enrolled at The Pennsylvania State University for their mining engineering program. As a first generation, my first year was very challenging, full of mistakes, and adjusting to the culture. I learned very early during my freshman year the importance of time management because I was the captain of the soccer team at York campus who worked on the weekend to support my basic needs, so managing my time effectively was critical for me to succeed that year. Overcoming the struggles that I went through my freshman year gave me the momentum and self-confidence of being able to graduate, which I did on May 5, 2019. While at Penn State, I was involved in a variety of clubs such as Black Student Union, SME student chapter, International Society of Explosive Engineers, Penn State Mine Rescue, and participated in student design, entrepreneurship, and soccer intramural competitions. I am currently working at Cemex as a Mining Engineer. When I am not working, I read Spanish books to learn, play soccer, or catch up on the latest sports news. I am also very passionate about mentoring international students (studying mining engineering), especially the first generation, with purpose to share my experience and help them avoid the mistakes that I did as an undergraduate student.

Class of 2019

Aaron Young graduated from the University of Utah in May 2015. During his undergraduate career Aaron received many scholarships and awards, including the Department of Mining Engineering Distinguished Service Award. He was also involved in many leadership roles, including SME and ARMA student chapter president, leader of a robotics team, and student senator for the college of mines. He received his Master's Degree from the Universidade Federal do Rio Grande do Sul in 2017, began his PhD studies at the University of Utah in January 2018, and is a recipient of the 2018 SME PhD Fellowship Grant.

Adam Rodriguez is a mining engineer currently commissioning a new frac sand mine in West Texas. He is extremely passionate about the mining industry and loves teaching others about it. He spends his free reading and writing about mining history, visiting mines and collecting mine maps. Adam graduated from Penn State with a degree in Mining Engineering in May 2016. He began his professional career as a production engineer working for The Mosaic Company at the Four Corners phosphate mine. He progressed to a supervisor role at the Four Corners beneficiation plant, and then as a supervisor over the mining operations at the South Fort Meade mine. At the South Fort Meade mine, he was responsible for a crew of 13 operators and the day-to-day mining activities of 3 draglines and their supporting equipment. One of his greatest highlights as a supervisor was being responsible for the closing and restarting of the mine before and after a category 3 hurricane—Hurricane Irma. After his supervisor role, Adam was promoted to the Area Coordinator role at South Fort Meade. As Area Coordinator, Adam was responsible for the operation of the dragline fleet, material transport systems and the water management on 30,000 acres of land. He also provided coaching and leadership to the hourly employees. Adam recently joined U.S. Silica in May 2018, where he is the on-site process engineer responsible for the start-up and commissioning of the Crane County frac sand mine.

Alexandra Wheatley is a Las Vegas native, Alex moved to Reno, where she received her Bachelor of Science in Geography from the University of Nevada, Reno in 2016. In, and since, that time, she has garnered three years of industry experience. Alex used those three years to solidify her skills as a competent and solution focused geospatial scientist. She developed a proven record of implementing data driven maps and applications, handling various data formats, managing multiple projects, and communicating results clearly. A passion for creating connections, and a desire to provide more extensive data solutions to a broader clientele base is what drove Alex to open her own consulting business in 2018. Grafting Innovative Solutions LLC believes that data needs are specific and personal to clients, and as such, their data solutions should be as well.

Amol Paithankar is a graduate research assistant at Michigan Technological University. He finished his master's in 2017 and is currently pursuing his PhD. He has published several articles in high ranked journals. His research is focused on the resource and reserve estimation in an uncertain environment. He currently represents the department on the Graduate Student Government and has served as a Treasurer for the SME student chapter. Prior to graduate school, he works as a shift in charge at NMDC limited for four years.

Amar R Patel is an air quality scientist at Barr Engineering in Salt Lake City, Utah. He received a B.S in Chemistry from Tulane University with a minor in Finance. Amar started his career with Freeport- McMoRan at the Morenci mine in Arizona, before joining Barr in 2016. During his career, Amar has involved in numerous projects focused on air quality, water quality, permitting, compliance, and wildlife. At the upcoming SME National conference, Amar will be chairing a session in the Environmental Division entitled "Effective permitting strategies for capital projects."

Ashok Kumar is working as Scientist in Strata Mechanics Section at CSIR- Central Institute of Mining and Fuel Research, Dhanbad, Jharkhand, India. He completed his graduation in 2013 and post-graduation in 2015. He has more than five years of R&D experience in the field of rock mechanics, mining methods, field instrumentation and numerical simulation for Indian underground coal mining. He has published quality papers in reputed rock mechanics journal and presented several technical papers in international conferences. He has successfully completed several R&D, consultancy and sponsored projects. Currently, he is also pursuing part-time PhD from IIT(ISM), Dhanbad.

Atta Ur Rehman is a PhD Student at Missouri University of Science and Technology, Rolla. He is currently working on development of DEM models for understanding excavation operation of rubber tire loaders. He was finalist for move mining competition in 2018. He did his bachelor's and Masters from University of Engineering and Technology, Lahore, Pakistan. Mr. Atta has worked for both public and private sectors in Pakistan and interned with Komatsu Mining Corps, Longview, Texas. Since, June 2017 he has worked on different projects on community engagement, cognitive studies, and underground mine evacuation system under the supervision of Dr. Kwame Awuah-Offei.

Bobbi Strange graduated from South Dakota School of Mines and Technology with two Bachelor of Science Degrees: Geological Engineering and Mining Engineering & Management, with a Geology minor in May of 2018. Bobbi was the President and Founder of the University's Sigma Gamma Epsilon – Theta Nu Chapter, in addition to being the Captain of the Hardrocker Dance Team, a four-year Resident Assistant, in addition to many other organizational involvements. She conducted and published Glacial Geology research with the University of Minnesota Morris as a sophomore, interned with Barrick Gold – Goldstrike's underground resource modeling and reconciliation team as a junior, and interned with Freeport McMoRan –Henderson's Geomechanical Engineering team as a senior. Upon graduation in May of 2018, Bobbi accepted a full-time position as a Management Associate with Martin Marietta's Rocky Mountain Division. As a Management Associate, she is gaining the essential knowledge, skills, and background to become a Plant Foreman.

Brandon MacDougall graduated from the University of Nevada, Reno in 2010 with a B.S. in Mining Engineering. While studying at UNR he served as president of the student chapter of SME and as captain of the 2010 National SME/NSSGA Student Design Competition 2nd place team. Upon graduation he was the recipient of the 2010 University of Nevada Outstanding B.S. Student of the Year Award in Mining Engineering. Previously, Brandon worked as a mining engineer for Comstock Mining Inc. and Rawhide Mining LLC. Since 2015 he has been with the Coeur

Brandon Michalski is a 2011 and 2016 graduate of West Virginia University in Biology and Mining Engineering respectively. During this time Brandon was involved in SME (President, Vice President, and Treasurer), ISEE, and new student outreach. He was previously employed by Kiewit in the Tunneling Division in Omaha, Nebraska doing estimating and fabrication engineering. He is currently employed at Cargill Salt in Lansing, New York providing technical oversight and management to over

Rochester Mine in Nevada, where he has worked as a Mine Shift Supervisor, Senior Mine Engineer and Mine General Foreman. Brandon is a licensed Professional Engineer in the state of Nevada.

$150m in proposed and ongoing projects. In his free time, he enjoys volunteering, travel, and spending time with his wife Kara and boxer puppy Berkeley.

Brittany Garcia received a Bachelor's of Science in Microbiology from the University of Arizona in May 2008. Having originally started her career at University Medical Center in the microbiology lab, she transitioned to Freeport-McMoRan over 10 years ago. She is currently a Research Scientist with FMI's Tucson Technology Center where she became the head of the bioleaching lab with FMI. Over the years,she has developed this lab into a fully functioning microbial speciation lab. She has designed many new testing procedures for the analysis of DNA in mining solutions for microbial identification.

Cass O'Connell was born and raised in Wheeling, West Virginia. My father, John O'Connell was a coal miner for 35 years, employed at various mines throughout the Ohio Valley during his career which gave me an early fascination with the mining industry which would lead to me pursuing a mining career. I attended West Virginia University for Mining Engineering and have been employed with J.H. Fletcher & Co. since my

graduation in May 2017.

Cosmas Nana Opoku-Ware

received his B.S. in Mining Engineering from the University of Mines and Technology - Tarkwa, Ghana in 2013 and an MS. in Mining Engineering from Montana Tech in 2018. After completing his Bachelor's degree, Cosmas accepted a Graduate Mining Engineer position with Newmont Mining Corporation at the Ahafo Mine in Ghana. After about a year, he relocated to the United States where he worked in pharmaceutical manufacturing until he enrolled in Graduate school in the fall of 2016. During

his graduate school days at Montana Tech he interned with Newmont Mining Corporation at their Cripple Creek & Victor Mine in Colorado. Cosmas has worked with Barrick Gold Corporation at the Goldstrike Underground operations in Nevada as a Short Range Planning Engineer

Daniel Torres is a Civil Engineer that graduated with a B.S. in Civil Engineering from The University of Texas at El Paso in 2011. After graduation, he became a Soils Lab Technician at Licon Engineering Inc. in El Paso where he grew keen interest in the geotechnical engineering field. After working in El Paso he moved companies and landed a job with Golder Associates. Daniel quickly became a promising engineer for the company and held various roles in mining projects. After six years with Golder Associates, Daniel accepted a position with AECOM and keeps getting involved in the mining industry.

and is currently a Mine Engineer at the Haile Gold Mine (OceanaGold Corp) in Kershaw, South Carolina. He is working towards acquiring the Project Management Professional (PMP) Certification and hopes to develop his career in the mining industry and rise through the ranks.

Eliana Torres is am from Lorica - Colombia. She is a Mining & Metallurgy Engineering graduated from National University of Colombia. She had the opportunity to be student representative in my bachelor, and did her internship at the Operadora Minera Company, being first women working as engineer trainee in “Los Mangos” Mine, breaking genders, barrers and prejuices and open doors to other women in this field. She demonstrated that we can have skills required to lead even in hard environment and remote locations. During her career she been part of the SME Student Chapter, was a leader in the Field trip commitee, and coordinator of academics event. She was also a volunteer teaching assistant in "Introduction to Mining and Metallurgical Engineering", a subject to first semester students. In her experience she believes that knowledge is best way to encourage people to work for the countries development.

Emily Rose graduated from The University of Mississippi in 2015 with a degree in Geological Engineering and pursued a master’s degree in Mining Engineering from Montana Tech, graduating in 2017. Her area of expertise focused on characterization of weak rock, shallow subsurface geotechnical stabilization, and ground control management for underground excavations. Currently, she works as a Geotechnical Engineer at Barr Engineering

Emily Muteb is a Community Development Manager with Freeport-McMoRan’s Morenci Mine where she facilitates and implements social responsibility and community development strategies. Emily believes that creating meaningful partnerships is a key component in achieving social license to operate. Emily holds an MS in International Development from Tulane University and has over 10 years of experience in nonprofit management and Corporate Social Responsibility.

Harshit Agrawal is working as a Research Assistant in the Department of Earth Science and Engineering at Imperial College London and pursuing Doctor of Philosophy. He has excellent scholastic records and was the first rank holder in all his studies. He has over six years of experience in research and consulting. He is currently working on prediction of rock bursts and gas outbursts occurrences in deep underground coal mines. Over the years, he has successfully executed several research projects in India

focusing on slope stability, instrumentation, and geomechanics based projects. Outside of work, Emily is actively involved in training Brazilian Jiu Jitsu with Combat Arts in Salt Lake City, UT.

and Europe. He is a member of five professional mining bodies. He has published his research in reputed journals and serve as a peer reviewer for journals.

Himeshkumar Ashokbhai Patel is an engineer fueled by compassion, curiosity, empathy, and leadership quality. He is pursuing Master of Science in Metallurgical Engineering in Mackay School of Earth Science and Engineering, University Of Nevada, Reno. He holds a first class degree in B.Tech with M.Tech (under 5-year dual degree program) in Mineral Engineering from IIT (ISM), Dhanbad, India. Mr. Patel has worked on multidisciplinary projects in the field of Mining & Mineral engineering in India and Spain like settling study of fine coal (for dewatering application), beneficiation & optimization of iron ore

slimes (Agglomeration & Pelletization), characterization of lead-zinc & copper mine tailings. Based on his research he has published several articles in conferences and journals.

Isabel Casasbuenas is a Mining and Metallurgy Engineer from Colombia. She is a master's student in the Mining Department at the Colorado School of Mines. Isabel maintains the highest moral and ethical standards, and has strong interpersonal and leadership skills. She is also creative, disciplined, and committed to work. Her professional goals are to contribute to solving problems related to the mining industry in Colombia. She has had the opportunity to work into the mining industry on projects related to environmental issues, artisanal and small-scale mining, ventilation, and underground problems. She has been an active member of two student chapters in the mining profession, including SME (Society for Mining, Metallurgy, and Exploration) and SEG (Society of Economic Geologists) over the past three years. Student chapters have allowed her to develop and improve her leadership skills.

Jamie Young graduated from Montana Tech of the University of Montana with a Bachelor's in Metallurgical and Materials Engineering and a Mathematical Sciences minor. During her college career, she had three internships. She worked for ASARCO's Amarillo Copper Refinery, Stillwater's Smelter, and Freeport McMoRan's Tucson Technology Center. After graduating in 2017, she went on to work for

Freeport McMoRan in Tucson, Arizona. As of August 2018, she is now pursuing a PhD from Missouri University of

Javier Vizcarra is a Regional Manager for WesTech Engineering in Peru. responsible for establishing a WesTech Process Equipment Peru office in Lima to direct the sales and project management efforts in the region. Lead and manage the interaction with agents/representatives supporting them in the sales of process equipment. Represent the company in events, meetings and other items as well as general company summoning. Direct all Peru office resources, including personnel and financial resources

Science and Technology and working as a graduate research assistant. Her research will focus on the electrorefining of copper.

Jeff F. Wallace received his B.S. in Civil Engineering from the University of California, Los Angeles in 2011, M.S. in Civil and Environmental Engineering from California Polytechnic State University, San Luis Obispo in 2012, and Ph.D. in Civil Engineering from University of Illinois at Urbana-Champaign in 2018. After graduating with his Ph.D., Dr. Wallace, accepted his position as a Tunnel Engineer at Mott MacDonald in Chicago, IL. While his professional background is in tunneling, he has published over 10 journal and conference papers and given numerous presentations related to his Ph.D. dissertation entitled "Response of Cyclically Loaded Suction Caissons in Soft Clay for Tidal Current Turbine Applications."

in order to run a profitable business. Mr. Vizcarra has previously developed the role of Applications Engineer for WesTech Engineering Inc.; as an Applications Engineer for the International Sales division, he supervised WesTech Sales activities to industrial and mining clients in Mexico, Perú and Chile. Mr. Vizcarra coordinated with sales representatives throughout the mentioned regions and supported the WesTech Brazil office; office responsible to cover the remaining countries of South America. Mr. Vizcarra has been with WesTech since 2013; working with the disciplines of Industrial Sedimentation; Turnkey Systems and Applications. Mr. Vizcarra has experience in Thickeners, Clarifiers, Solids Contact Clarifiers and pilot units, functioning as a technical liaison and sales supervision.

Jennifer Jorgensen Jennifer Jorgensen graduated from the university of Nevada, Reno in 2017 with a B.S. in Mining Engineering. While in school, she was a part of multiple organizations including SME. She co-founded the volunteer organization known as the Mackay Representatives. During school, she completed 4 separate internships with 4 separate companies experiencing different aspects of the engineering degree. Just before graduation, Jennifer started working with Ledcor CMI Inc as an intern and accepted a full-time position with them, where she worked as an estimator and now is currently the project coordinator / mine engineer.

Josef Bilant received a BS in Metallurgical and Materials Engineering from Montana Tech. His career over the past 10 years has taken his from engineering to senior management roles across northern Nevada in operations such as milling, roasting,and leaching from both underground and open pit facilities. In 2018 he also received both a MBA from Temple University with an emphasis in Strategic Management and Registered Member status with SME. He values family and leadership development within my teams while striving for continuous improvement of the organization he works for and industry he works in.

Josef Bourgeois is a PhD student in Mining and Earth Systems Engineering at the Colorado School of Mines in Golden, CO with industry, consulting, and research experience. In addition to his studies, he works part time as a Junior Mining Engineer for Cementation at the Henderson Mine in Empire, CO. He enjoys working in a team setting, is always looking to gain new skills to be helpful in industry, and is dedicated to changing the perception of mining to one more focused on the positive aspects industry can have on local communitites around the globe.

Josue Lopez graduated from the National University of Trujillo, Peru, in 2017 with a Bachelor's of Science Degree in Mining Engineering and he won a scholarship at the Pontifical Catholic University of Peru, where he completed his mining engineering career. He was founder of the UNT of SME Student Chapter and later became president. He has completed internship in a mine planning consulting and entered to Barrick Academy 2017 at Lagunas Norte mine from Barrick Gold Corporation as engineer in training in the area of mine planning. He has worked as Long Term Planning Assistant at Fractals Geo Consulting and developed the Centauro Mine. Currently he works at La Zanja Mine from Buenaventura as a mine-planning engineer. His current interests surround long and strategic range mine planning and research into new technologies and method-s in mining estimation and planning.

Juan J. Monsalve is a Colombian Mining and Metallurgical Engineer from the National University of Colombia with a M.S. in Mining Engineering from Virginia Tech. He is currently pursuing a PhD. degree at the Mining and Minerals Engineering Department Virginia Tech. He has worked as an engineer assistant in geotechnical design companies in Colombia gaining experience in rock mass characterization and numerical modeling for underground excavations. His current research is sed on the integration of laser scanning with discrete element numerical modeling to evaluate rock fall risk in underground limestone mines with structurally controlled failure mechanism in order to improve safety performance on the operations.

Kenneth Griffin is a registered Professional Engineer with five years of mining production supervision, engineering, and technical sales experience. Kenny is currently employed with Mineware Inc. as a Technical Account Manager in North America. He received his B.S., M.S., and Ph.D. in Mining Engineering at Virginia Tech in 2007, 2009, and 2013, respectively. Kenny formerly worked for the The Mosaic Company as a shift supervisor, process engineer, pipeline engineer, and production engineer at several mines in Central Florida.

Line-Audrey Nkule, originally from Cameroon in Central Africa, came In the United States as an international student in 2013. After completing her Associate's Degree in General Studies at Howard Community College, she transferred at West Virginia University where she obtained a Bachelor's Degree in Mining Engineering, a Bachelor's Degree in Civil and Environmental Engineering with a minor in Geology with honors. After gaining some sales management experience and completing a mining internship with Freeport-McMoRan, she decided to pursue her full-time career with Caterpillar, Inc in their Mining Technical Development Program as a Mining and Marketing Pre-Field Representative. When she was not busy assuming her roles and responsibilities as a Media and GEM Coordinator for the Society of Mining, Metallurgy and Exploration – West Virginia University Chapter, Line-Audrey was active as a student ambassador for global diversity and cultural awareness for the WVU Extension Service and as a volunteer.

Laura O'Connor has worked as a Rock Mechanics Engineer since mid-2018 at the Stillwater Mine for Sibanye-Stillwater in Nye, Montana--the only PGM operation in the United States. She completed her MS in Mining Engineering at the University of Nevada, Reno in 2018, working with NIOSH focusing on mine ventilation & heat management. Laura got her start in Michigan's Upper Peninsula, completing her BS in Geological Engineering at Michigan Tech in 2016. She has also had experience in Nevada, in underground gold, and back in Michigan, in open-pit limestone.

Mario Alejandro Bendezu was born 28 year ago in the multicultural city of Lima, Perú. Since he was very young he always thought that putting all the effort is the key to achieve success, therefore, he considers himself as a working hard and perseverant person before any other feature. He has learned the hard way that life is not a bed of roses, however, the way you face the challenges and hardships are an integral element of life. And to solve a problem is not only need knowledge but the attitude and after surpassing any problem you feel thankful and triumphant.

Marlotte Kox currently is part of Caterpillar's mining leadership development program (MTDP) in Tucson, Arizona. After her U.S. based assignments, she will relocate to Geneva, Switzerland, to complete her remaining training prior to working as a Caterpillar field rep in Europe, Africa or the Middle-East. Marlotte is a 2017 graduate of Delft University of Technology (The Netherlands), earning a Master's degree in Resource Engineering. Her thesis was on the impact of trolley assisted haul trucks on strategic mine planning. Prior to her Master's, she earned a Bachelor's degree in Applied Earth Sciences and spent a year at Queen's University in Ontario, Canada, joining their Mining Engineering program. Marlotte completed internships with Caterpillar Global Mining (Geneva/The Netherlands) and RWE Power AG (Germany). In addition, she served as Secretary in the board of the Delft Mining Association and as President & Secretary in the Delft SME Student Chapter.

Michael Donkor is a Mining Engineer with Rio Tinto at their Borates mine in Boron, CA. Prior to that he worked with Kinross Gold (Round Mountain Mine) as a Strategic Projects Engineer where he played a key role in the Phase W pit expansion studies. He holds a Masters in Mining Engineering from the Colorado School of Mines. Originally from Ghana, Michael had his undergraduate degree from the University of Mines and Technology in Tarkwa, Ghana. Subsequently he worked with Golden Star Resources (Wassa Mine) where he was a Senior Mining Engineer before he left in 2012 to go work for Randgold Resources at their Loulo Mine in Mali as a Production Engineer where he was tasked with managing both the mining and haulage contractors as well as training and developing locals in engineering and supervisory skills. In his current role, he assists in developing the company's Strategic Business Plans, budgets and LOM plans and training graduate engineers.

Muthu Vinayak is a Ph.D Student in Mining Engineering at Colorado School of Mines (CSM) specializing in Mechanical Excavation. He graduated with MS (Thesis) at CSM in January 2018, studying disc cutters for mining applications. He is a former employee of Coal India Limited in India, where he worked for 3 years as Assistant Manager in Underground Coal Mining Operations. He holds a Bachelor's degree (B. Tech.) in Mining Engineering from NITK, Surathkal, India. He aspires to be an academician to advance the technology in Mining and develop students of high caliber to the mining industry.

Nestor Santa is a mining and metallurgy engineer from The School of Mines of The National University of Colombia. During his undergraduate program, he always looked forward to opportunities in foreign countries, because he considered this the best way to step out of my comfort zone and acquire fresh perspectives. That is the reason why he got involved in the SME Student chapter as president and leaded different projects in a successful way to take advantage of opportunities. Now, he is pursuing a master program at Virginia Tech in mining engineering to be the future industry leader he always wanted to be.

Paloma Lazaro is a PhD student in the Mining and Geological Engineering Department at the University of Arizona. Engineer with over 9 years of experience in the industry: Alcoa Aluminum (Peru, Brazil), Constellium (France), ASSA ABLOY (France) as an Industrial Hygienist, Environmental & Health Engineer with specialization in Mining Engineering. Her working experiences are in Metal, Metallurgical, Aluminum and Mining.

Her passion for HSE first started at Alcoa Aluminum Peru (Ex Rio Tinto owner), experience that laid the foundations in my learning on the best HSE practices in mining. She began as an intern and was offered a full-time position after college graduation. Afterwards she pursued a master in

France of Industrial Risk and Environmental Management from the University of Poitiers, the 2nd oldest university in France. During studies in France, she experienced a decisive vocational moment when she took part in a team project to develop a simple and quick tool to evaluate the company's performance in terms of sustainable development for which my group won the National Student Project Award on 'Sustainable Development. At the moment, she is doing a PhD, working on the development of the Heat Stress Model and Validation of the PHS Moded in Hot Underground Mines.Validation of the PHS Model in Hot

Underground Mines. She has been working this last 2.5 years doing the field work in Rio Tinto Mine, Superior and San Xavier Mine, AZ. She is a professional skilled in Mining Occupational Health, Safety,MineSight, Matlab, and Public Health. Team leadership, motivated, creative

problem solving, active Learning, passionate about work, proactive with ethic professionalism. Her main goals are to contribute in the mining industry as a mining engineer, keep doing what she enjoys, keep an open mind, and to always make the most of every opportunity. She feels very motivated to empower women and young leaders in

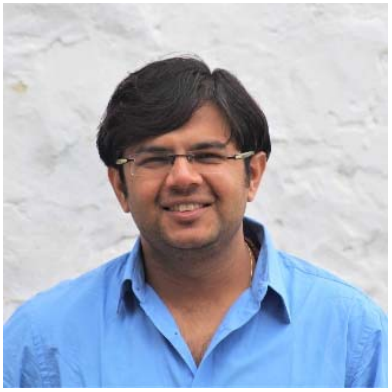
Riddhika Jain is working with Outotec USA Inc. as Product Development manager for flotation division. Her areas of interest are research related to ultrafine particles recovery in flotation and tailing-reprocessing. Riddhika earned her bachelor's degree in in Fuel and Mineral Engineering from Indian Institute of Technology, Dhanbad and master's degree in Mineral Engineering at the Virginia Tech. While at VT, she worked on developing the novel HHS process for concentrating ultrafine minerals.

Mining. She belongs to the SME Community which has helped to develop my career and to support active involvement of other SME students in their professional grown.

Sebastian Arenas Bermúdez is Mining and Metallurgy Engineer of the National University of Colombia. He started his professional life as an intern in STRACON, a Peruvian company that operates an underground gold mine in Colombia. He currently works as a Junior Engineer in STRACON and keeps working with the academy in one research program about jumbos availability. With SME and the "teaching kids" team he won the Move Mining competition in February of 2018 and now continues development of the project to change the bad perception of mining around the world. As an engineer and person, he enjoys working side by side with people who dream about make the difference in mining industry and the world.

Taylor Ball grew up in a small, farming area of Kentucky (Trimble County) where he spent a great deal of time working on the family tobacco farm. Taylor graduated from The University of Kentucky with degrees in Mining Engineering and Mathematical Economics. While at UK, he had internships with Newmont and Vulcan Materials Company. Since graduation, he has been employed by Vulcan. My first role was as a foreman in the Nashville area, primarily at an Underground Quarry, but also served as Foreman at several other sites in the area. Recently, he moved to the Chicago area as

Simon Timbillah graduated in 2009 with a BSc. in Mineral Engineering from the University of Mines and Technology, Ghana. He worked on a greenfield iron ore project in Sierra Leone with African Minerals (Now SISG) where he helped deliver the first shipment of iron ore concentrates as a Metallurgist. He studied in four universities across four European countries (UK, Poland, Germany and Finland) and awarded a MSc. Mineral Engineering in 2013 by two of the universities: The University of Exeter, CSM, UK and Aalto University, Finland. He worked for a year as a Process Engineer (EIT) with FLSmidth in Salt Lake City, UT. Subsequently, he returned to the iron ore mine for another year before commencing my PhD studies in Materials Science at Montana Tech and will graduate in Spring 2019.

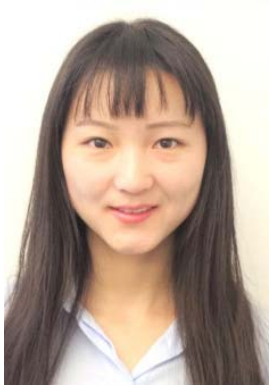


Tushar Gupta is a graduate student pursuing Ph.D. in Mining Engineering at the University of Kentucky. His research area focuses on investigating the effect of oxidation, integrated with hydrometallurgical processes in the recovery of rare earth elements (REEs), from coal and coal byproducts. Tushar earned a Bachelor of Technology (B.Tech.) in Mining Engineering from Indian School of Mines, Dhanbad, India (currently known as IIT(ISM), Dhanbad) in 2012 and worked as Assistant Manager-Safety for Coal India Limited, the world's

the Plant Manager of four Recycled Concrete and Rail Distribution facilities.

largest coal producing company, for two years. Before joining University of Kentucky, Tushar earned his Masters of Science (M.S.) in Mining Engineering from the University of Alaska, Fairbanks in 2016. He has been awarded Grand Canyon Section of SME Scholarship (2015/2016) and ASUAF Student Travel Scholarship (2015/2016). He has also been awarded the prestigious WAAIME Scholarship for the current academic year (2018/2019).

Will Jacobs is a graduate mining engineer at Glencore's Alumbrera Mine in Catamarca, Argentina. When not blowing stuff up and running big machines, he enjoys skiing, fishing, mountain biking, and whitewater canoeing. He wound up in the mining business in a rather roundabout way, after throwing baggage on a hot runway, building bridges, paving roads, and spending four seasons running a snowcat at ski resorts around the world. He graduated from Middlebury College and lives in Traverse City, Michigan.



Yan Wang obtained her PhD at the University of Utah in metallurgical engineering, and is now a postdoctoral associate in Virginia Tech. She has a wide range of professional experience consisting of both academia and industry. Her academic research interests include mineral processing flowsheet design, interfacial chemistry, cutting edge geometallurgical characterization, image processing technical development for mineral processing applications, rare earth chemical speciation, rare earth extraction technologies. By working for two large international mining companies, Rio Tinto and Freeport-

McMoRan and participation in several pilot-scale and industrial-scale projects, she enriched her industrial experience such as process control and project management.

Zacharie Forest-Dupont graduated from the Colorado School of Mines with his B.Sc. in Mining Engineering and Area of Special Interest in Explosives Engineering. Upon graduation, Zach started his professional career with Cementation USA Inc. at Barrick's Cortez Underground Mine where he worked as the Project's Engineer lining the South Vent Raise. Upon completion of the raise, Zach spent time in the corporate office estimating differing projects across the United States and working within the engineering group to complete the feasibility study and early engineering of the Turquoise Ridge #3 Shaft. Zach went on to work at Hecla's Lucky Friday #4 Shaft after his time in the office. Here, he experienced the installation and furnishing of the winze headworks. Currently he is a Project Engineer at the Eagle Mine in Michigan's Upper Peninsula where his responsibilities vary between coordinating, and designing stope blasts, and coordinating construction projects.

Zoheir Khademian is a research faculty in the mining engineering department at Colorado School of

Mines. His main research interest is in the field of computational rock mechanics for addressing ground

control hazards in the mining industry. Zoheir received his Ph. D. and M.S. in Mining Engineering and

Earth Systems from Colorado School of Mines. He has worked as a mining engineer at Shahab-Sang Mining and Industrial Company in Iran and also at ARUP LLC in New York. Dr. Khademian has published several peer-reviewed journal papers on ground control and presented his research works in national and international conferences.

Class of 2018

Ali Naeimipour

is currently a senior staff engineer at McMillen Jacobs Associates in Nashville, TN and an active member of UCA of SME, ASCE and ARMA. His professional background is tunneling and rock mechanics. He has more than three years of experience in the industry and has published over 20 journal and conference papers. He received his PhD from Penn State University in Mining Engineering in 2016 under the supervision of Dr. Jamal Rostami. In addition to working on his research at PSU, he coordinated Mining Dept. Geomechanics laboratory, instructed Rock Mechanics Laboratory course and assisted with teaching Ground Support and Rock Mechanics Laboratory courses. He earned his Bachelor degree from Tehran Polytechnic University in Mining Engineering and his Master degree in Rock Mechanics from Tarbiat Modares University in Tehran, Iran.

Alyssa Kendir

received a B.S. in Mining Engineering from the Colorado School of Mines in 2015. As an undergraduate, she completed an internship with AngloGold Ashanti at its Cripple Creek and Victor gold mine in Cripple Creek, Colorado (now owned by Newmont Mining) and two internships with Kiewit Mining Group in its Buckskin coal mine and Walnut Creek coal mine in Wyoming and Texas, respectively. After graduation, Alyssa accepted a position as a Mine Planning Engineer with Lehigh Hanson.

Alyssa currently leads the North American initiative to produce strategic Quarry Development Plans and has worked on several projects in Canada. Her current interests surround mid- and long-range mine planning, ensuring each quarry is developing in the most efficient way possible while optimizing the reserve. She has worked with many different team members and professionals to produce meaningful and successful results. Alyssa is actively pursuing her Professional Engineering license and plans to continue growing and developing as an engineer in the mining industry.

Ankit Jha

is a graduate research assistant at South Dakota School of Mines& Technology. He finished his master's in mining engineering at the University of Utah, where he completed a research project on "control of spontaneous combustion in underground coal mines using pressure balancing techniques". He had an opportunity to conduct ventilation surveys in few mines as part of the project. Prior to graduate school, he worked as shift in charge at Coal India Limited for three years.

Behzad Vaziri Hassas

Is SME (Stantec/McIntosh) PhD fellow and PhD candidate at the Pennsylvania State University, Department of Energy and Mineral Engineering. Behzad has received his M.Sc. in Metallurgical Engineering from University of Utah and holds B.Sc. in Mineral Processing Engineering from Istanbul Technical University. Behzad has been awarded SME Robert E. Murray 2019 innovation scholarship award, Cooper-Hansen Fellowship (2015/2016), WAAIME-SME scholarship for 2017/2018. He was also

awarded the 2017 Student Research Award by International Precious Metals Institute.

Benjamin Teschner

is the Solid Minerals Manager for the Colorado State Land Board where he is responsible for mining leases on nearly 4 million acres of mineral estate. He is also a PhD Candidate at Colorado School of Mines in the Mining Engineering Department. Prior to his current work, Benjamin worked with Gold Fields in Mali and Ghana, and as an independent consultant on company-stakeholder relationship management. Ben holds a B.S. in Geological Engineering and a Masters of International Political Economy of Resources, both from Colorado School of Mines. He has authored numerous peer-reviewed publications on 1) managing company-stakeholder relationships at mining projects, 2) modeling and predicting company-stakeholder conflict 3) artisanal and small-scale mining, and 4) engineering education. He is a frequent presenter at the SME Annual Conferences.

Bijan Peik

was born on August 4th, 1995 in Sirjan, Iran. I graduated from Amirkabir University oi Technology (Tehran Polytechnic) in august 2017.I joined University of Nevada, Reno for Master program in mining engineering. I worked as a historian in Tehran Polytechnic Student chapter between the years 2015 to 2017. I am the president of this chapter currently. I also was one of the founders of The Iranian Union of Mining Engineering Student-Scientific Associations. I had worked for a consulting company as the supervisor of rock and soil mechanics laboratory before I came to US.

Bradley Meyer

is pursuing his Master's degree in Underground Construction and Tunneling at the CSM, with a research focus on the use of acoustic emission to detect damage thresholds in rock. He has a Bachelor's in Civil Engineering from Bucknell University and became interested in mining after spending a semester at the University of Queensland in Brisbane, Australia, where he took two advanced level mining courses. He is the current president of the UCA of SME Student Chapter at Mines, and previously served as the Treasurer. He also represents his degree program on the Graduate Student Government at Mines.

Carlos Alfaro

was born in Juliaca, Peru is a country in Latin America. I graduated from the Universidad Nacional del Altiplano in 2016 with a degree in mining engineering, I was president of the student chapter SME UNAP and I developed several activities among them, the Mentoring program that was awarded by the university and implemented by another school on campus. I am currently working at Pevoex, which is a mining and rock drilling company. I am a member of the "Institute of Engineers of Peru", which is a leading mining organization in Peru.

Cesar Alexander Guerra Vasco

graduated from the Universidad Nacional Mayor de San Marcos, in Lima, Peru. I am a Mining Engineer graduated from the National University of San Marcos. I was member of the board of directors of the SME San Marcos Student Chapter in two terms (2013-2015), I participated in several projects of leadership in my university, the experience and qualifications make me do my job better and have contributed to my personal, professional development and also in the improvement of soft and hard skills.

Chad Neilson

graduated with a B.S. in Mining Engineering from the University of Utah's College of Mines and Earth Sciences in 2013. He had summer internships with Freeport McMoran and DMC Mining Services. Upon graduation, Chad joined Agrium's Conda Phosphate Operation in Southeastern Idaho where he gained experience in both the Engineering and Mine Development groups. In 2015, Chad accepted a mine and mill engineering position with Materion Natural Resources (MNR) in Delta, Utah where he has experience in beryllium reserves estimations, long-range planning, and project management. He is concurrently working on a Lean Sigma Black Belt Certification focusing on how to improve the current hydrometallurgical process.

Giuseppe M. Gaspari

is a more than 10 years experienced tunnel engineer, holding a Master in Geotechnics and one in Tunneling & TBMs; he is currently Deputy Project Manager for the West Vaughan Sewage System Project in the Greater Toronto Area, ON.

He started his career in the Geodata Engineering *center of excellence* (Italy) applying his numerical modelling skills to design massive structures underground for multi-billion projects such as the SEM sections of Istanbul Metro Line and TBM tunneled Turin Metro.

He was then assigned as Deputy Technical Director for Geodata India, he covered the role of Acting Project Manager for the Bangalore Metro Line UG-01 and he finally moved to Singapore as Tunnel Design specialist to work on the Thomson-East-Coast LRT.

He currently plays an apical role in Geodata Canada supporting the technical and business development of North American operations as General Manager and Tunnel Lead.

Hamdaoui Hamza

, 27 years old, I was born in rabat in 1990. I received the Engineering degree in Process, Energy and Environment Engineering from the National School of Applied Sciences Khouribga in 2014, and a Project Management Certificate at JESA in 2017. During my engineering studies, I have passed several trainings in many Moroccans offices & companies such as ONEP (Potable water & electricity office), MASEN (Moroccan agency for solar energy) & GPC Carton. I held the role of process engineer in Jacobs Engineering SA, since Mai 2015, in which I oversaw different Mining projects:

• Basic engineering studies for benguerir beneficiation plant project - OCP GROUP.

• Performance tests for adaptation in Daoui wash plant – OCP GROUP

• Support for Lakeland process team in the startup of ODI's P1 & P3 – OCP GROUP

• Basic engineering studies for MEA expansion wash plant project - OCP GROUP

	• Conceptual studies for renovation unit of fusion U63, Rack 21 – OCP GROUP
 **Ibrahim Amin** recently completed his bachelor's degree in Mining Engineering from University of Engineering and Technology Peshawar having distinctions in his academics. He has done his Internship for six weeks at Sindh Engro Coal Mining Company (Open Pit Coal Mining), and three weeks at Cement Industry. He is having intentions to go abroad for higher educations and research. Then he plans to beneficiate his institute with modern skills and new technologies he has learned by joining his institute as teacher and researcher.	 **John Hansen Carlson** is currently completing his senior year in Metallurgical Engineering at Montana Tech. After working for years in private security, he was employed at Met-Solve Labs in Burnaby, BC as a technician. He was encouraged by his superiors to pursue his education and enrolled at the age 30 moving himself and his wife to Butte from Canada. He has completed two internships with Newmont Mining and worked as a research assistant on campus. As an officer with the Metallurgy student group and the local Material Advantage Chapter, he has built on his established leadership ability and has gained a reputation for his persistent smile and ability to motivate.
 **Jordan Oxborrow** graduated from the Colorado School of Mines in 2016 with a Bachelor's of Science Degree in Mining Engineering and a minor in Explosives Engineering. In college, he was president of the mining competition team for 3 years and co-chaired the 2013 games hosted at CSM. He has interned at KGHM's Robinson Mine, Barrick Goldstrike, and Hecla's Lucky Friday Mine. Currently he works at Barrick Goldstrike as an ore control engineer and is the site lead for a surface autonomous haulage trial. He also serves on the executive committee of the Northeastern Nevada Local Section.	 **Jordan Rutledge** has a background in metallurgical engineering, graduating from the Colorado School of Mines with her bachelor's and master's degrees. In addition, she studied at mining universities in Poland, Finland, and Hungary as part of the European Minerals Engineering Course. Jordan currently works as the area sales manager in North America for the sensor-based sorting company Tomra Sorting.

Jose R. Velasquez

is a graduate student in Civil Engineering at the University of Texas at Arlington. His background is in International Business and Management at Institucion Universitaria Salazar y Herrera and in Mining and Metallurgical Engineering at Universidad Nacional de Colombia, Facultad de Minas. His previous research focused on Artisanal and Small-Scale Gold Mining (ASGM) in Andes, Antioquia, developing an institutional framework to understand sustainable development in formalization processes. During this time, Jose also co-developed an educational outreach program to work with local elementary students regarding mining perception. His current research focuses on finding engineering-based alternatives that help mining communities to develop substitute economies from the reuse of mine tailings and their impacts on health and the environment.

Kathleen Tew

graduated with double bachelor's degrees in mining engineering & Management and Geological Engineering from the South Dakota School of Mines & Technology (SDSM&T) in 2016. She started her career as a Mine Planner at the Doe Run Company, for two of the company's operations. In 2018, she joined Cementation USA as a Project Engineer. Since then she has worked on Shaft Projects in Nevada and on Business Proposals, and Project Controls with the Business Development Group. She is current working as a Jr. Mining Engineer in charge of Drill and Blast Operations for our project in the Upper Peninsula.

Kyle French

is a Senior Mineralogist at Freeport McMoRan's Technology Center in Tucson, AZ. I currently oversee the scanning electron microscope laboratory and work on research and development of quantitative SEM applications. I started my career at Freeport in 2011 and have since worked in Safford, Bagdad, and Tucson in various roles and responsibilities. Areas of specialization include: SEM, EDS, quantitative X-ray powder diffraction, NIR/FT-NIR chemometric modeling, laboratory QA/QC reporting, and programing. My hobbies include painting, photography, motorcycles, and aquarium keeping. In 2019 I was vice-chair of the membership sub-committee and look forward to assisting the YLC in the future.

Kylie Boyce

is a Site Performance Manager in training for Caterpillar Global. The first rotation she completed in the Mining Technical Development Program was in the Marketing Training Class which allowed her to expand her knowledge of the manufacturing industry & develop leadership skills. Kylie is currently in her second rotation with the commercial team in the Electric Rope Shovel & Dragline Product Group. Prior to Caterpillar Kylie received her bachelor's degree in Mining Engineering from the University of Utah. She has experience with various gold mining operations across the Carlin Trend in and completed undergraduate research in underground ventilation.

Lizeth Diaz

is a Marketing Representative for Caterpillar. She recently completed a four-month marketing training program and has started mining specific rotations within the Surface Mining & Technology division. She graduated from the Colorado School of Mines in May 2017 with a BS in Mining Engineering. Lizeth has worked with various gold mining operations in northeast Nevada and Colorado. Her experience has allowed her to get a better understanding of the mine design and production process, as well as some of the key factors influencing mining operations. She is eager to make an impact in the mineral industry.

Nicole Henderson

graduated from the Colorado School of Mines with her B.S. in Mining Engineering in May of 2014. From there she began her career with a six-month Health and Safety Engineering internship at the Henderson Mine before transitioning into a full-time position as the Operation's Engineer. When the price of molybdenum fell in February of 2016 Freeport McMoRan transferred her to the Chino Mine in Silver City, New Mexico. There she spent a little over a year learning about the open pit operation before returning underground to the Kensington Mine starting in June of 2017, where she currently works as a Short-Range Planning Engineer.

Rachel Boz Boothby

is a Mining Engineering graduate from West Virginia University.

After interning with GMS Mine Repair and Maintenance through college, she accepted a full-time position as an engineer with the company. She decided going into her career that she wanted to set a foundation of solid and realistic understanding of the underground work milieu by doing just that – working underground. Jumping into a work project and fully engaging in the opportunities at hand and really being able to help are a part of her character and a joy.

Throughout her time working in mining – diligence, sharpness, and honesty are what matters to her. Boz has transitioned throughout the company working as a project engineer, division manager, and mine coordinator. Currently she uses her engineering and project experience to support her in technical sales.

Rahul Bhargava

is a graduate research assistant in Mining Engineering and Management Department at South Dakota School of Mines and Technology. He graduated with first-class honors from Indian School of Mines in 2010. He had summer internships with Coal India, UCIL, and Tata Steel. After graduation, he joined Tata Steel as a full-time Mining Engineer and worked in mining operations, project management, and safety initiatives. In 2012, he moved to Indonesia as a Mining Advisor at Pt. Karya Putra Borneo. He handled overall mining, haul road and stockpile operations. He led the mine site for reducing the contaminants in the coal quality during mining, transportation, and handling at stockpile. He joined the research group at South Dakota School of Mines and Technology in the fall of 2016. Bhargava is a recipient of WAIMME, ISEE and Paul Muehl Scholarship.

Ravi Rajshekar Hiremath is an experienced process control and applications engineering specialist with ~8 years of professional experience in alumina refinery operations and specialty chemicals. Mr. Hiremath holds a Master's degree in Chemical Engineering from Univ. of Southern California. Mr. Hiremath has in-depth knowledge of working environments in chemical/manufacturing industry. Apart from acquaintance of financial impacts and influences of the product mix and process efficiencies on the EBIDTA, Mr. Hiremath is also well versed with Statistical process Control and lean Six Sigma Tools. Mr. Hiremath is a Certified Six Sigma Green Belt from American Society for Quality (ASQ). Recent works of Mr. Hiremath include Design and Development of organic binder for iron ore palletization, developing procedures and products for Plant and lab scale qualifying tests in order to evaluate the performance of Floatation Collectors, Scale Inhibitors, Crystal Growth Modifiers, Defoamers and Filtration Rate Enhancers.

Sam Baker is a 2017 graduate of The Pennsylvania State University holding a Bachelor's of Science degree in Mining and Minerals Engineering. While at Penn State he was a member of the mine rescue team and captain of the team his junior and senior years. He was also an active SME member and president of the student SME society. Sam interned through school for Peabody Energy's Twentymile Mine in their engineering department working on projects supporting underground development and production. After graduation, he worked as an Operations Management Trainee for Vulcan Materials in the Nashville Region where he served on their mine rescue team and worked in operations management.

Sam is currently a mining engineer for Rosebud Mining Company supporting their underground coal mines in western Pennsylvania. He primarily works on multiple seam mining issues, methane control, mining under impounded water and project management.
Outside of work Sam enjoys hiking, kayaking, historic preservation and serving as a Boy Scout Merit Badge Counselor.

Soukaina Ettouimi

, throughout my engineering curriculum in Process, Energy and Environment Engineering at ENSA Khouribga, I was able to acquire theoretical knowledge and solid practices in the field of industrial processes. Also, my experience within Jacobs Engineering SA. as Process Engineer allowed me to put these achievements into application. I joined JESA in February 2014 as an intern and in February 2015 as an employee. I started working on the Axe Centre Feasibility phase with several other young engineers. I quickly became a key contributing member of the team and helped produce a quality product for the client. I continued to the Conceptual phase of the project and

Tyler Artz is from Rapid City, SD and attended the South Dakota School of Mines & Technology. He graduated with his B.S. in Mining Engineering & Management in 2015 and his M.S. in Mining Engineering with a Geotechnical focus in 2016. Mr. Artz is currently employed at RESPEC in Rapid City as a Staff Engineer where he assists with field instrumentation and data programming, laboratory testing, and numerical modeling projects. He also researched the effectiveness of melting natural rock in deep boreholes to seal off nuclear waste depositories. Mr. Artz has also conducted ventilation research with the Sanford

worked hands on with more experience mentors daily to further develop my skill set. Since the completion of the Conceptual Phase of the Benguerir Wash Plant Project, I have been requested to support with various projects including: flexibilities, another feasibility study, the lead for performance test work and DAP Commissioning and Startup. I worked also with a small team of engineers on a research paper related to Wash Plant Thickener design. This paper was submitted to and accepted by Symphos for the May 2015 conference where I presented the findings with one of my team members. I have an excellent work ethic and will put in whatever hours are required to get the job done. I have volunteered to work on field assignments and as part of the commissioning team at Jorf because I realize the large learning opportunity this assignment presents. I'm well received by my fellow Process engineers, by the project level people that I work for and by the client. I have received several requests to be given lead level responsibility on larger projects already at this stage of my career.

Underground Research Facility who he has continued to partner with in various other experiments.

WanWang Geissler

My two favorite TV shows are Breaking badand Suits, because I like chemistry and I like business. After receiving my MS and PhD from Mining Engineering, I started working as a research chemist within the mining application group at AkzoNobel Surface Chemistry LLC.

Xu Tang

Xu Tang is a postdoctoral associate in Virginia Center for Coal and Energy Research at Virginia Tech. He received a bachelor's degree in mining engineering from Henan Polytechnic University (China) in 2011, a master degree in mining engineering from West Virginia University in 2014, and a PhD degree in mining engineering from Virginia Tech in 2016. He authored 20+ papers in international journals and was also a technical reviewer for 10+ international journals. He has been an invited speaker on several occasions in his research area. He is interested in research on health and safety in mining and unconventional gas.