

Meet the Young Leaders 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

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, Andrew 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

I am Carolina Navia. I am 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

Catalina 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

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

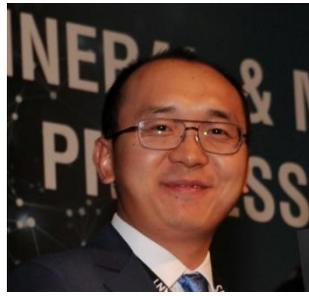
the Institute of Engineers of Mines of Peru. She has experience in underground mines: Pan American Silver Argentum, Productive Unit Contonga - Glencore, Quenuales, Pan American Silver Huarón and Colquisiri Mine. Also, in mining consulting companies and equipment marketers with a focus on productivity, 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

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

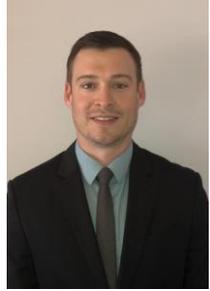
researched mine fires and application of firefighting foams with the use of the CFD modelling programs FDS and OpenFOAM. He was also the president and team captain for the Virginia Tech Collegiate Mine Rescue team across varying amounts of time during his 5 years with the team.



Fangyu Liu

Fangyu Liu is currently a PhD candidate in the metallurgical and materials engineering at the Colorado School of Mines. His thesis is focused on rare earth electro-reduction in the molten salt system and currently he is engaging in the investigation on

the fundamental properties of rare earth molten fluoride electrolytes. His research work is funded by the Critical Materials Institute (CMI) under the Department of Energy. Fangyu has a Master's degree and a Bachelor's degree in metallurgical engineering from the Central South University, China. In addition to his passion on the extractive metallurgy, he enjoys hiking and long-distance trail running.



Jacob A. Hunter

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

I, James Edward Tabinski Jr., 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

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

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

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

I 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

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

Masters student at New Mexico Tech in Mineral Engineering with specialization in Geotechnical Engineering. I did my bachelors 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

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

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

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

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

Sidharth 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

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

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

Yuanyuan 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

I am 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.