Acknowledgements

On behalf of the University of Arizona Society for Mining, Metallurgy, and Exploration (SME) Student Chapter, we would like to thank the industry professionals, the Tucson SME Section, the staff and faculty at the University of Arizona, friends, family, alumni, and all others who have helped us throughout the year to achieve our goals and be successful. We couldn’t have done it without your help.

Faculty Advisor
John Kemeny

Tucson Section Chair
Omar Smith

Special Thanks to our Generous Sponsors

- Epiroc
- RECON Engineering & Construction
- Arizona Rock Products Association
- Freeport-McMoRan
- Hexagon Mining
- Vulcan Materials
- Apache Nitrogen Products

- Imery’s Carbonates
- Southwest Energy
- Arizona Mining Association
- Florence Copper
- Mining Foundation of the SW
- Bradken

- Pam and Will Wilkinson
- Victaulic
- UA MGE
- MACCAFERRI
- El Continental
- Mobile Air
- Brooks and Nelson
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Mission Statement

To build a reputation upon respect, integrity, and professionalism while promoting in the fields of mining, metallurgy, and exploration through the education and direct exposure to mining, equipment, sustainability, and safety practices.
Officer’s Reports

President’s Report

Synopsis

This year it has been my incredible pleasure to have been the UA SME Student Chapter President. It was a great opportunity to gain management and leadership experience. Last year I was the Vice President of Fundraising which seemed like an excellent introductory leadership role; however, this position of President largely surpassed that as well as my expectations. The amount of time, organization, and effort required to run a large chapter became apparent rather quickly. It required me to become the liaison between the students, faculty, and industry and utilize my experience to help involve and encourage the students of the chapter. My main personal goal was to ensure every member had the best chance for success through access to scholastic and professional growth opportunities.

The last few year’s chapters accomplished being Outstanding Student Chapter of the Year in 2016-2017 and the runner up in 2017-2018. It was my duty to continue this excellence. With the knowledge of last year’s chapter’s structure and organization holding a role on the executive committee, I was able to build on that success while also learning from any prior mistakes. I worked very closely with this year’s Executive Committee to implement any goals we had for the students and the chapter as a team. I am confident that the chapter’s success this year was not solely because of myself, it was a great team of students working together, striving to improve at every opportunity.

The year was extremely busy, and the UA SME Student Chapter is very proud to consist of students and teams that participated internationally in competitions with great success. Not only did the chapter achieve enough in fundraising to send 40 students to the 2019 SME Annual Conference & Expo in Denver, 12 members to the 41st Annual Intercollegiate Mining Competition in Virginia City, but also still be able to leave the next year’s chapter with well over $10,000.

Sincerely,

James Verbois
UA SME Student Chapter President
**Goals**

The following are the 4 main goals that the Chapter planned to accomplish during the academic year:

1. **FUNDRAISE FOR 2019 SME ANNUAL EXPO & CONFERENCE AND COMPETITION TEAMS**
   - a. This year’s conference was held in Denver, CO. The goal was to give the opportunity to every active student member to be able to attend at lowest cost possible.
   - b. The Chapter had successfully fundraised almost $45K which allowed for us to send 40 active student members to the Annual Conference.
   - c. The SME/NSSGA Mine Design Teams will need all the help it can get to get two teams of 6 to the finals in Denver. Also, the Intercollegiate Mining Games Team will need help in funding its travel to Virginia City, NV for this year’s competition.
   - d. The two Mine Design Teams had successfully secured sponsorships from ARPA, Hexagon Mining, Imery’s Carbonates, and Southwest Energy allowing them to travel to Denver with almost no out-of-pocket expenses. This team successfully placed 3rd.
   - e. The Chapter fundraising also allotted funds to allow a team to go to Virginia City, NV almost at no cost to the students. This team successfully represented the Chapter, MGE Department and the University of Arizona. One of the teams took 3rd place in its competition bracket.

2. **OUTREACH**
   - a. The SME Student Chapter and the MGE Department are looking for aspiring young engineers, geologists and metallurgists to join and make a positive impact in their future careers.
   - b. We successfully recruited students that were in different departments, majors and from local community colleges. This approach gained members to cover the amount that graduated last year and more. The member count is around 90 students.

3. **CONTINUING PROFESSIONAL DEVELOPMENT**
   - a. Securing an internship is a very important task for all aspiring engineers to complete. The Chapter provided professional assistance for members including: resume resources, mock interviews and networking. Internships/jobs are searched, and
links are provided in all of the newsletters and meeting minutes to ease the process for students to find an internship/job
b. The Vice President of Professional Development was assigned the task to help students with resume checks, mock interviews and to communicate to the chapter of all available internship and full-time job postings. At the end of the academic year, we can say for certain that the large majority of our student members have either secured an internship for the summer or acquired a full-time position.

4. INTRODUCE POINTS SYSTEM
   a. The implementation of accountability points for officers to be able to track the involvement of students within the chapter for future use deciding who the chapter could afford to send to events depending on the budget at that time.
   b. Students gained weighted points for chapter held activities, events, and tasks. Tasks such as golf tournament phone calls and fundraising were worth the most points, but every activity earned points including General Body Meetings, SME Tucson Dinners, and social events which were free since they all contained signup sheets for attendance.
   c. After the golf tournament and profits were established, we researched and estimated travel and lodging expenses for the conference and competitions we planned on attending. Once completed we totaled students’ accountability points to determine the number of top points earning students to be able to attend each event within our budget constraints.

Achievements
This academic year, the student chapter was extremely successful in almost all aspects of a student organization. Listed below are many achievements, events and fieldtrips that the Chapter succeeded or participated in:

- 2016-2017 1st Place Outstanding Student Chapter of the Year
- 2017-2018 2nd Place Outstanding Student Chapter of the Year
- 2018-2019 Outstanding Student Chapter of the Year
- Mining Out Your Closet Clothing Drive
- SME Tucson Section Dinner Meetings
- Komatsu Proving Grounds Field Trip
- 2018 SME Tucson Section Scholarship Dinner
• 23rd Annual Diggers & Duffers Golf Tournament
• Mining Foundation of the Southwest Hall of Fame Banquet
• 2018 SME/NSSGA Student Mine Design Competition
• 2018 SME Arizona Conference
• 2019 SME Annual Conference & Expo
• 41st International Intercollegiate Mining Competition
• 23rd SME Operator’s BBQ
• Membership 89 members
Treasurer’s Report

Synopsis
As a fairly new member of this SME chapter I knew I had the goal of one day becoming President. I decided the steps to accomplishing this goal were to first become an active general member and the serving in an officer position other than President to learn the ins and outs of the chapter before running. I felt becoming treasurer put me in the best position to do that as nothing can be accomplished without funding. At the beginning of the academic year the officers outlined our goals for the year. These included being able to send students to the annual conference, competing SME/NSSGA design teams, and two teams to the Intercollegiate Mining Games.

The golf tournament was a big success this year with the chapter raising our goal of $40,000, $25,000 of which was profit. We also utilized other fundraising opportunities that previous leadership didn’t such as submitting funding proposals to student organizations sponsored by the University of Arizona. By doing so we were able to raise an additional $5,500. Our design teams also secured sponsorship from companies and the Mining and Geological Engineering department totaling $10,000. Along with merchandise sales throughout the year and a fall bake sale the chapter was able to raise about $41,500. We were successful in covering aforementioned events as well as covering our annual Operators BBQ and monthly costs.

We started the academic year with a bank account balance of $10,200. The year was closed out with a bank account balance of $15,400. As a rule of thumb $10,000 is left for the next chapter. This provides a solid starting point for the next officers to get the chapter up and running for the year’s events, most importantly the golf tournament. Due to this year’s success it was decided that the excess funds would be set aside in an emergency account to be used in case of industry downturn or significant travel costs for students such as international travel. I am confident that the next set of executive officers will have all the tools to build on this year’s success.

Sincerely,
Gabriella Archunde
UA SME Student Chapter Treasurer
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Secretary’s Report

Synopsis
This was my first year as Secretary of UA SME, and it has been a phenomenal year! I came into this position with three goals in mind that I wanted to achieve: help raise $50k, start a clothing drive for fellow members, and professional networking for our chapter and students.

My first goal of assisting in raising $50k was intended to fund a multitude of events. The revenue raised would ensure that members could attend SME conferences and competing teams travel. I wanted to exceed the previous year’s success, and with the help of my fellow members, we did!

The second goal was to start a clothing drive for the UA SME Chapter members called “Mining Out Your Closet.” The clothing drive involved asking companies and their employees to donate gently used professional attire for the students. The idea soon blossomed, and companies, friends, and industry professionals started donating a lot. “Mining Out Your Closet” gained over 200 clothing items to help our students compile business professional outfits for use in interviews, conferences, and career fairs. In addition to outfitting the students, any clothing items unused by year’s end were then donated to a local drug and alcohol rehabilitation center.

My third goal was to network with industry professionals while promoting the hard work of other members of our chapter. I achieved this by attending Tucson SME monthly meetings, connecting at internships, and attending conferences. I would ensure that I introduced other members of my chapter to other business professionals at each event. This has led to several students being hired on with companies within the mining industry.

With exceeding all three of the goals set to achieve, I feel that we have enhanced the UA SME Student Chapter experience. Thank you everybody who helped making these goals a reality for the chapter. Go Wildcats!!

Sincerely,

Juanita Parkerson
UA SME Student Chapter Secretary
Monthly meetings

General Body Meetings were held twice a month, with food and refreshments provided from the budget to encourage the students to attend and participate. Guest speakers from the industry were invited to present about their experiences, company projects, company in general, or any job placement or career advice that they may have for future mining professionals. Outreach for our guest speakers began before the fall semester and with the exception of only special events or elections, all meetings had a guest speaker. Our meetings would also relay important information about openings for internships, scholarships, job fairs, etc. These meetings also updated the members on upcoming events, this allowed the officers to display their excitement about events and to encourage other students to participate.

The officers committee met once a week to ensure the material covered would be reflective of each other for General Body Meetings and to ensure that the officers were keeping up on any tasks at hand.

Overall our bi-weekly General Body Meetings were a huge success with an average of 1/3-1/2 of our members attending. The students were also always given time to ask questions from the guest speakers before the chapter announcements would follow, and several of the students made very good connections with the speakers because of this.

Meeting Minutes

All meeting minutes are available online on our website as they are quite extensive.

Fall Semester
- General Body Meeting 1
- General Body Meeting 2
- General Body Meeting 3
- General Body Meeting 4
- General Body Meeting 5
- General Body Meeting 6
- General Body Meeting 7
- General Body Meeting 8
Spring Semester

- General Body Meeting 1
- General Body Meeting 2
- General Body Meeting 3
- General Body Meeting 4
- General Body Meeting 5
- General Body Meeting 6
- General Body Meeting 7
2018-2019 Executive Committee

President
James Verbois

Senior Vice President
Cayley Brooks

Treasurer
Gabriella Archunde

Secretary
Juanita Parkerson
VP of Fundraising
Caitlin Dowd

VP of Professional Development
Edson Guebe

VP of Competitions
Chris Liddle

VP of Outreach
Alejandro Durazo
Vp of Marketing
Priyanshu Raj
UA SME Student Chapter Members

Anthony Adun
Junmo Ahn
Ryan Amos
Gabriella Archunde
Sarah Arredondo
Jake Bedlington
Mridul Bharadwaj
Justen Bingham
Xavier Bravo
Ryan Brock
Cayley Brooks
Jaun Burrola
Cole Cashin
Akash Chaurasia
Steven Cole
Alexandra Contreras
Veronica Cordova
Paulo Coutinho
Jake Cramer
Katy Dorfschmidt
Caitlin Dowd
Talita Duarte
Alejandro Durazo
Tryston Erb
Aaron Escamilla
Clarissa Escamilla
Mitchell Fullenwinder
Anthony Garcia
Fernando Gomez
Edson Guebe

Luis Guillen
Hunter Hartley
Arash Hassani
Jinping He
Lauren Heath
Gail Heath
Conor Heathershaw
Wilson Hengombe
Daniel Higgins
Brianna Hoegler
Carl Holiday
Tony Holmes
Sarah Hubbard
Chad Julius
Hyeong Kang
Edwin Kaykay
Corbin King
Kerst Kingsbury
Blaze Lasala
Chris Liddle
Ivan Llancas
Maggie Lyons
Blake McConnell
Kenny McLaren
Fatemah Molaei
Luis Morales
Phillantony Narciso
Alex Nathe
Peter Ortega
Klaus Pacheco
Hague

Orlando Palomino
Junhyeok Park
Jaunita Parkerson
Jaymin Patel
Will Peterson
Miguel Pugmire
Molly Radwany
Priyanshu Raj
Brody Rastall
Betty Rathbone
Nathalie Risso
Alex Sanov
Rachel Saufley
Brayden Shields
Ryan Stewart
Nathan Syers
Garrett Szura
Melissa Talavera
Kelly Umlauf
Edgar Uriarte
Frank Valentí
Antonio Varela
James Verbois
Will Ward
Tennyson Wilson
William Yurtinus
Yu Zhao
Nawik Zoraina
Bryan Zormeier
May 29, 2019

Mona Vandervoort  
12999 E. Adam Aircraft Circle  
Englewood, CO 80112

Dear Mona,

I have received the Annual Report of the University of Arizona (UA) Student Chapter of the Society for Mining, Metallurgy, and Exploration for the 2018-2019 school year and attest that the information presented is accurate.

I would like to thank the outstanding efforts of the Executive Committee of the SME Student Chapter at UA, led by its President, James Verbois. They have created a very professional organization in 2018-2019 that has made significant contributions in fundraising, recruiting, professional development, and outreach. With a membership of almost 90 students, the SME Student Chapter has become a centerpiece for the department and a demonstration of the power of student-run organizations in accomplishing goals and effecting positive change. Some examples this year include raising $40,000 in the student-run golf tournament, sending two teams to the SME/NSSGA design competition in Denver, and ending out the year with a positive balance of over $15,000.

It has been a pleasure to work with the chapter Executive Committee throughout the year, and to interact with chapter members in the bi-weekly chapter meetings and special events such as the SME annual meeting. This year the UA SME Student Chapter has continued to be highly successful in all aspects of its mission. I am particularly impressed by the diverse and inclusive character of the membership, which includes male and female members, students from around the world, undergraduate and graduate students, and many members from outside the mining department.

I want to thank all the chapter members for contributing to the success of this department and for providing a unique educational experience for students at the University of Arizona.

Regards,

John Kemeny  
Faculty Sponsor
Chapter Activities

Social Events
The UA SME Student Chapter tends to have a close community. Most of the students become close friends and regularly spend time together outside of chapter events. The chapter also hosts a monthly social event for all students to encourage that community and comradery and to be able to have a little break from studies.

August Social Event
For the first social event of the academic year, the Chapter decided to host a party to kick off the school year. Titled “Refreshments after the Refresher” since it was held the evening after the annual MSHA refresher. This event was highly anticipated and was well received by the Chapter. As our first event, we deemed it highly successful with great participation from our current members and new members that joined the Chapter.

September Social Event
The social event this month was a hockey game. The chapter paid students’ tickets to a U of A hockey game vs the main rival ASU. The event was well received since the students always enjoy supporting U of A athletics whenever there is a chance.

October Social Event
When mentioning October, one cannot escape associating it with Halloween. The social this month was tickets to a local scare park called Nightfall at old Tucson Studios. It was a positive change to see members participate that do not typically attend these events.

November Social Event
This month had two social events, one at the first weekend and one at the last, since December is a short school month with only a week of finals. The first social was a local Tucson tradition, the Dia de los Muertos all souls procession parade. Residents celebrate the lives of lost loved ones and parade through downtown streets dressed and painted as skeletons. The chapter provided the paint and students met a few hours before the parade to paint each other’s faces, then walked in the procession.
The second social is always a student favorite called Friendsgiving. The students all bring a Thanksgiving dish to share. This is especially important since many of the students are from different countries and parts of the U.S.
and are unable to return for the very short Thanksgiving break. Students that are from other countries get to experience an American tradition and share some of their traditional food as well.

January Social Event
The social this month was a simple and relaxing event. The chapter rented a few lanes at the local bowling alley and ordered pizzas. The members that definitely enjoyed bowling and eating pizza together.

February Social Event
February’s social event was paid entry to a local putt-putt course and arcade called Funtastics. The students were able to let loose and play putt-putt, ride go-karts, play laser tag, and arcade games. This was a very welcomed event since friendly competition runs rampant in the chapter.

March Social Event
The weather in Tucson in March is absolutely fantastic. The officers decided that this would be the best time to host a social at a U of A baseball game. The chapter purchased the tickets and the students enjoyed watching the Cats beat their opponents. Bear Down Arizona!

April Social Event
To celebrate the end of the year and James Verbois winning the drill contest arranged by the chapter, the UA SME Student Section had an open tab at a local and popular restaurant close to the University of Arizona. Meals and refreshments were provided to the student members who attended. It was also a celebratory event as we congratulated James Verbois for winning the SME Annual Drilling Competition earlier in the day.

Outreach
This year we set out to further build upon the foundation we were given by the previous chapter leadership, to regain numbers that had graduated, and help reach students and the general public about the industry in general and SME. Thanks to the Lowell Institute of Mineral Resources and Tucson SME, two of our officers Garrett Szura and Alejandro Durazo were hired as outreach interns. Through the mixed efforts of the two students and the LIMR, outreach events were held throughout the year that taught the public about the importance of the mining and minerals industry. Some of them included U of A mall outreach, going to high schools and the local community college, and
Bear Down Friday Football events with a mining tent. The events were successful in recruitment as well as informing students and general public on the benefits of the industry. A quote typically used by our students given to us by Ms. Pam Wilkinson, “Can you name one thing that you have used today that hasn’t been touched by mining?” The answers were always incorrect. The only thing used daily that hasn’t been touched by mining is the air you breathe.

Technical/Professional Involvement

Mining Out Your Closet
The UA SME Student Chapter has high professional standards and holds its members accountable for their attire at professional events. We take great pride in looking very professional at events where some schools do not. We are striving to become professional leaders in the future, so it is also up to the students to look the part. Because of this high standard, one of our officers, Juanita Parkerson, had a great clothing drive idea. It was titled Mining Out Your Closet, and we implemented it during the summer before
the school year. It was a clothing donation drive that we presented to our internship companies, SME Morenci, and SME Tucson. The goal was to collect business professional attire to be able to give to our chapter’s students if they could not afford the suits, slacks, and blazers themselves. The clothing drive went very well, we in fact collected so much clothing, we were not only able to donate to our members, but at the end of the year, the leftover clothing was given to the local homeless communities.

UA SME Student Chapter

MINING OUT YOUR CLOSET

Time to dig deep into your stockpiles and find those hidden gems! Help the student chapter to look their best by turning your coal into diamonds of success. Donate your gently used business and dress attire and help invest in the future of our industry. Students need to look sharp during their interviews, presentations, and conferences and can use your help achieving that goal.

Items we are looking for include:

- Belts
- Shoes
- Slacks
- Dresses
- Skirts
- Blazers

Donations will be greatly appreciated,
Thank You!

SME Tucson Section Monthly Meetings

As with years past, our dinner meetings with the SME Tucson Section were a huge success. For each monthly meeting, we typically had 20-35% of students attend. Many new students started participating creating contacts within the mining industry, returning members grew their connection pool even larger. The Tucson Section deserves a special thanks for making this possible and encouraging students to participate in their meetings. Both the professional and student chapters have recognized that these events create opportunities for the students to familiarize themselves with industry professionals.
**Komatsu Proving Grounds Fieldtrip**

Again this year, the local Komatsu Proving Grounds provided a personal and in-depth fieldtrip to their facility near Tucson. 40 students and faculty participated on this field trip. Komatsu gave us a tour of their autonomous haulage fleet, the truck shop and their autonomous haulage control center. Each person who attended got the opportunity to ride in an autonomous haul truck while it was driving a route without a driver. It was a marvelous experience which was improved upon from last year and the students learned an incredible amount about their products and systems.

**SME Tucson Scholarship Dinner**

The local Tucson SME section hosts an annual fundraiser dinner to raise money for student scholarships. This year the event was hosted in downtown Tucson.
The SME Tucson Section spends months fundraising with local mining companies to award outstanding students with scholarships. The event is typical to the monthly Tucson meetings however in addition to catered food, there is a DJ, a dance floor, and an open bar. The event is themed with a country western type attire, students and members are encouraged to put their best hats and boots forward. This year, the 14 recipients were less than that of last year, however each scholarship was worth more, to reward students with the best participation in the department and the chapter to continue their hard work. Applicants were judged not only upon academics, but also on their involvement with student chapter leadership, UA SME Chapter events, the Mining and Geological Engineering Department, and volunteer work at the University of Arizona’s San Xavier Student Mine. It is basically a scholarship opportunity catered specifically to our students. The support we get from the SME Tucson Section continues to be invaluable to the chapter students.
23rd Annual Diggers & Duffers Golf Tournament

The largest fundraising event of the year for the chapter is the Diggers and Duffers Golf Tournament. The University of Arizona SME Student Chapter reaches out to industry to host a golfing competition. This event is congruent with the Arizona Conference weekend and is held the morning of the Mining Foundation of the Southwest’s Hall of Fame Banquet. This single fundraiser enabled the chapter to send students to attend the February SME Conference, and compete in the various mining competitions. The Golf Tournament Fundraiser is always hosted at the Starr Pass JW Marriot’s Resort, since it is a beautiful 24-hole golf course set in the Tucson mountains at the same resort as the Arizona Conference and the chapter has an excellent cooperation with the course coordinator. Planning for the golf tournament begins before the semester and takes almost the entire fall to prepare. The tasks begin with speaking with the course coordinator to reserve dates and courses, organizing a call list to include companies and individual industry professionals, targeting companies to become large event sponsors, printing sponsor tee-shirts, working with the resort to finalize number of players and tee times, making a sponsor banner, getting sponsor plaques made and individual trophies, and creating golfer goodie bags in preparation for the 130 golfers who were to attend.

Planning and meeting task deadlines for this event take a large coordination effort between the President and the VP of Fundraising, however they also could not have been met without the hard work of the other officer committee members and chapter volunteers. With the implementation of the points system, students who helped with calls, organizing gift bags, and the day of the tournament volunteering, gained the most points since they were crucial to the success of the fundraiser and without its success the chapter would not be able to afford to send anyone to conference. The points system was a very successful in encouraging the students to be involved with events that were most beneficial to them as the chapter. The day of the tournament was a very early start and slightly stressful day, however the feedback from the golfers was that the event was great and they would be excited to be back next year. Booths and tables are set up for golfer check in where they are handed nametags and gift bags, then they go to their assigned carts and shotgun start beginning holes. Students also sold mulligan tickets and raffle tickets to aid in any additional fundraising opportunities. Students were assigned to each booth with a few photographer students walking around taking pictures of all which went off without a hitch. 132 golfers played that day, with 5 large
company sponsors which was an excellent turnout and success. After the tee-off, students drove around ensuring that the golfers were happy and taken care of, while a few had the opportunity to golf with industry professionals. It was a very successful event topping last year’s fundraising goals and the UA SME Student Chapter was able to raise approximately $40,000 from this year’s tournament fundraiser.

36th Annual Hall of Fame Dinner
The Annual Hall of Fame Dinner is a formal banquet hosted by the Mining Foundation of the Southwest and held the day before the Arizona Conference. The event contains over 200 individuals, where distinguished mining professionals are recognized for their achievements and one individual is inducted into the Hall of Fame for the industry. Students are invited on a first come first serve basis to attend under the sponsorship by seat by companies and individual donations, our students were thankful for the opportunity to attend through these sponsorships. It was a perfect opportunity to network with mining professionals from across the South Western United States and witness the recognition of important industry members. The event is recognized as a southwestern industry banquet however many professionals travel from outside of that region to see their
friend or inspirational figures, such as Red Conger be inducted to the Hall of Fame.

2018 SME Annual Conference & Expo
The Annual SME Conference and Expo is the most anticipated event for students every year. The students are excited to expand their networking foundations with people from around the world as well as their education of the newest technologies and innovations from technical sessions. Along with these, there are competitions held at the conference that the chapter’s students annually participate in including; the SME/NSSGA Student Design Competition, Move Mining, Poster Sessions, MPD Poster sessions, and Outstanding Student Chapter. This year the chapter is proud to have sent two teams for the Student Mine Design Competition, 6 students for poster sessions, two MPD poster sessions, and a move mining team. These students were comprised from the 40 total that the chapter was able to send to conference. Students spend all day at the conference networking and attending lectures and then connect in the evening with peers from other
schools that will be alongside them as their careers progress. Overall the students gain much more than knowledge and networking, some also left with internship and job offers, making this year just as always, a huge success for all the students.
Additional Fundraising

Since the Chapter had two teams get accepted to the Phase II of the Student Mine Design Competition and was planning on sending two teams to the 41st Intercollegiate Mining Competition, the executive committee worked on additional fundraising to cover these activities. One of the mistakes learned from the prior year, was to make sure that competing teams were lodged in the proper hotel to reduce travel time to and from competitions thus reducing additional stress during these competitions. The goal of attaining better and closer lodging usually means to have to sacrifice a little more spending.

The President and Treasurer worked on several different proposals addressing the college and club associations as well as mining companies that did not participate in the Golf Tournament Fundraiser. Four different proposals were submitted to the Associated Students of the University of Arizona (ASUA), Engineering Student Council (ESC), the College of Engineering (CoE), and the Mining and Geological Engineering (MGE) Department in attempt to raise these additional funds. This was the first year that the chapter attempted these proposals, however, due to our accomplishments to date, we received funds from each of these entities. These funds from the college and including the mining companies such as Hexagon, Imerys, Southwest Energy, The Arizona Rock Products Association, reached a total of around 10k. The donations well utilized since both the design team and a mine competition team took 3rd place which benefits not only the chapter but the University as well for the recognition on an international level.

SME/NSSGA Student Mine Design Competition

The UA SME Student Chapter has competed in the Student Design Competition many times in the past however, this is only the second year that the team has progressed to Phase II to be one of 6 teams to present to judges the day before the annual conference. This year, the chapter was very proud to have not one, but two teams advance to Phase II. The teams were comprised of one junior and one senior set of students with six members each. Phase I is a technical report based on a problem given to schools by the competition’s committee. Our teams spent all the fall semester preparing for this technical report. We went on field trips to aggregate operations, did technical Mine Plan and excel trainings, and read research in our designated problem strength areas. Dr. Brad Ross was our faculty advisor that guided the teams’
preparation process since no outside help is allowed once we receive the problem statement. This preparation was also a huge triumph due to the preparation path the team paved for the chapter the past year. After preparation and research was done in each members’ strength areas, a Gantt chart was constructed to structure problem portions and deadlines for every individual’s part of the project. The senior team took 3rd place at the competition, which is only the second year that the University of Arizona’s SME Student Chapter has placed in the contest. Since the junior team also was a part of the 6 teams competing in Phase II, they will be much better prepared for next year when they have more extensive classroom and software knowledge to apply to the problem. The accomplishments of this and last year’s teams have set the pace for the student chapter’s future teams’ structures and preparation. We are extremely proud of the achievements from this year and can expect that the UA SME Student Chapter will be a strong competitor in the years to come.

23rd Annual SME Operators’ BBQ
Every April the UA SME Student Chapter hosts a BBQ at our underground research mine located south of Tucson. The San
Xavier Underground Mining Laboratory is a perfect location to invite industry professionals, students, family members, and friends for an afternoon. The day includes underground tours of our workspace, adit tours, horseshoes, a cotton candy machine, and food which also makes a great networking experience and still friendly for children. The BBQ is the main task of the Senior Vice President, Cayley Brooks, to organize and implement. After the tours and during lunch, there was a presentation by a student Ryan Brock, about his magnetic survey research for opening new drifts in the mine, which was followed by the induction of the new Senior Officers. Similar to the golf tournament, student volunteers man the registration, tours, food, raffle and parking. The SME Tucson Section does not host a meeting this month to encourage its members to attend this event and only hear the chapter’s accomplishment and see who the new officers will be. We had 120 attendees and spent well under budget for entire the BBQ. We would like to thank SME Tucson Section again for their help making this an excellent event and all the industry professionals for attending the BBQ.
University of Arizona Involvement
There are campus events that we attend as a form of community service, partial outreach, and because they are in general very enjoyable. This helps us stay updated with campus activities and spreads the word about UA SME.

Associated Students of the University of Arizona
ASUA is the association that is requires registration to become a university recognized club. They assure that you can be sanctioned by the University of Arizona through its rules and regulations. In addition, they host club events every few months that are optional, however UA SME always makes an effort to be involved. Some of them even benefit both parties since we can instill outreach about the industry for those who are unaware. One of their major events allows all clubs to showcase what they do over the year and help recruit engineering freshmen. The student chapter did in fact have several active freshmen that were engaged at this showcase.

Engineering Student Council
ESC is the governing body of all College of Engineering recognized clubs at the University of Arizona. They regulate and organize engineering college events where they showcase different clubs, do outreach for the local community, and get engineering students to collaborate. Either the president, VP of Outreach, or VP of Competitions attended all meetings to stay informed on ESC updates, events, and elections. ESC organizes a Meet Your Major Fair where undecided engineering freshmen and sophomores can learn more about the majors available at the university. The chapter gets involved and volunteers with the faculty since it is just as important for upcoming students to hear from their peers. One of the biggest events that ESC hosts is eWeek where clubs can choose to participate and host events for other engineering clubs to compete in activities such as, softball, relays, pressure rocket builds, rube Goldberg machines, etc. The week ends with a small ceremony with winners announced where the UA SME Student chapter took 4th overall place from participating in all events.

Annual SME Drilling Competition
Another annual tradition for the UA SME chapter is to showcase a jackleg drilling competition with the help of the mine managers and assistant director of the San Xavier Underground Mining Laboratory. This competition is hosted near the end of the spring semester where the students can exhibit their
experience and grit in a friendly competition. The rules are similar to the Intercollegiate Mining Competition Drilling Event (main difference being a granite slab rather than a concrete block): each driller has two minutes from the moment they touch the steel to set up the drill and drill a hole (or multiple holes) as deep as they can. The depth is measured afterward, and the winner is the competitor with the deepest hole(s). This event’s location is also traditional for the University of Arizona since the university was founded in 1885 on mining and agriculture and Old Main building was the original Mines Building erected at that time. The granite blocks that are drilled for the competition are located right next to this building.

This year, competitors included: Chris Lidde, Alejandro Durazo, Anthony Adun, Luis Morales, and James Verbois. The winner of the competition was James Verbois who drilled the entire 30” steel and began another hole. Lastly in UA Drill Comp tradition, the students congratulatorily threw him into the fountain in front of Old Main after carrying him from the block of granite all the way there!
41st International Collegiate Mining Competition

The UA SME mining competition team’s competitive edge has dwindled over the years. Since several of the chapter members participated last year, a major goal was to rebuild the competitive nature of the team by recruiting younger chapter members to instill a team building foundation. The chapter held practices on campus and at the mine all year long and encouraged all members to participate. The event is almost as good as a networking opportunity as the national conference since it builds comradery between international schools with students’ peers. These built connections and friendships will blossom throughout each members’ future careers. The competition itself consists of seven old school mining events such as: hand steel, swede saw, surveying, hand mucking, trackstand, gold panning, and jackleg drilling. The competition this year was hosted by UNR in Virginia City, NV. The competition consists of several days of competing since there are different categories of contestants such as Men’s, Women’s, Coed, and Alumni. This year the chapter budgeted to send two teams, one Men’s and one Coed team. The Men’s team’s members were Chris Liddle (Captain), James Verbois, Edson Guebe, Xavier Bravo, Luis Morales, and Jorge Loya Lopez. The Coed team’s members were Talita Duarte (Captain), Ivan Llancas, Gabriella Archunde, Akash Chaurasia, Cayley Brooks, and Tennyson Wilson. The teams successfully represented the Chapter as a whole and the University of Arizona especially since the Coed team won several events and took overall 3rd place in their division.
Closing Remarks
This year was full of success for the UA SME Student Chapter. Not only did we complete all goals and tasks that we were set out to accomplish, we also took home several plaques and trophies from our International competitions. We are extremely proud of the achievements of the students and hope that the chapters in the years to come are as successful and more, putting the UA SME Student Chapter in the minds of future students, industry, and mining companies across the globe.