



2019 - 2020 ANNUAL REPORT

SOCIETY FOR MINING, METALLURGY & EXPLORATION - UCE STUDENT CHAPTER -

Address: Ciudadela Universitaria – Gerónimo Leiton y Av. La Gasca - Museo Ciencias de la Tierra FIGEMPA



SME - Universidad Central
del Ecuador



SME Student Chapter UCE



smeuce@gmail.com

TABLE OF CONTENTS

COVER LETTER	2
OFFICERS	3
EXECUTIVE SUMMARY	4
PRESIDENT'S REPORT	5
VICEPRESIDENT'S REPORT	7
TREASURER'S REPORT	8
ACTIVITIES REPORT	9
Student Meetings	9
Membership and informational meetings.	9
SME digital platform training	9
SME image broadcast.....	10
Banners, flags and t-shirts.	10
Social activities.....	10
Anniversary protocol - AIME (Ecuador).	10
Seedling in defense of responsible mining in Ecuador.....	11
Godparents of new students (mining integration).	12
Courses, workshops and conferences.....	12
Academic mining conferences.....	12
Course "Micromine training".	13
Specialized workshop: Exploration of copper porphyry with computer tools.	13
Technical English course.	14
II "Tecmin 2019" Technical sessions.	15
International master conferences.	16
Datamine software training workshops.	17
Ecuamining Webinars.....	18
Virtual geology and mining conferences and workshops.	20
Travels.....	21
MineXChange 2020 SME Annual Conference & Expo.....	21

COVER LETTER

June 01, 2020.

Mona Vandervoort

Education Coordinator Society for Mining, Metallurgy and Exploration 12999 E. Adam Aircraft Circle.

Englewood, CO 80112.

Dear Mona,

In fulfillment of my responsibilities, it is an honor for me to present you the 2020 annual report of the Central University of Ecuador, Student Chapter of Society for Mining, Metallurgy & Exploration.

During this second year of administration, the leadership and consolidation of our organization has prevailed, which has been successfully led by President Ronald Herrera and its steering committee, becoming a recognized student representation by different universities and companies in the national mining sector.

With the development of different activities, not only has the participation of associate members of SME been achieved, but also different students from the geoscience and technical branches of the mining industry; who have benefited from keynote talks with high-level professionals and international recognition, as well as training courses that contribute to their academic training and job performance.

All the activities carried out have generated a greater interest in participation, which has been reflected in the recruitment of new members and the presence of dozens of people in the events that our student chapter has promoted for the benefit of a growing industry in Ecuador.

Please accept this report that details the efforts of our associates in activities that have allowed them to raise the name of the organization at the national level and in their international participation in the annual SME convention.

Sincerely,



Eng. Danny Burbano

FACULTY SPONSOR

SME – UCE Student Chapter 2019 – 2020

OFFICERS



STUDENT CHAPTER PRESIDENT

Ronald Eduardo Herrera Tamayo
ronald.herrera.t@hotmail.com

STUDENT CHAPTER VICEPRESIDENT

Dangela Maribel Toquetón Tacoamán
dangela.toqueton@gmail.com



STUDENT CHAPTER SECRETARY

Moshe Beneli Peralta Zurita
mbe_98@hotmail.com

STUDENT CHAPTER TREASURER

Andrea Karina Carrión Cabrera
akcc.carrion@gmail.com



SME STUDENT CHAPTER UCE 2019 - 2020

EXECUTIVE SUMMARY

Universidad Central del Ecuador SME Student Chapter was created in January 2018, under the support and advice of Peru Local Section, becoming the first student chapter in Quito, the capital of Ecuador.

Since its foundation, the student chapter has increased and strengthened the presence of SME in the country, along with the academic collaboration of other national universities with SME chapters and mining companies committed and responsible with the training of future professionals in the industry.

The period 2019-2020 is the second year of existence of the organization in the university, during this period it was assumed the great challenge of consolidating and committing its members to common objectives that allow them to take full advantage of the opportunities that SME offers, as well as, achieve the growth and recognition of the student chapter by government entities and companies related to the mining sector.

During the last years, Ecuador has entered a process of diversification of its economy, being mining an industry of great attraction for international investment due to the geological wealth it possesses, thus generating royalties and job opportunities for the benefit of all Ecuadorians. This developing sector has created new challenges for students, teachers and professionals, who have been forced to develop new skills that allow the rational and sustainable use of natural resources in a technological and responsible way with society and nature.

Thanks to the tools and opportunities that SME offers, and the training activities promoted by the student chapter; Associate members have been able to access information about new trends and technical advances in the industry, which have strengthened their knowledge and contributed to their preparation for the country's new major mining projects.

The commitment of SME UCE is to encourage new members to work together for the objectives of the organization and the development of new opportunities that allow them to stand out at the national level and soon at the international level.

PRESIDENT'S REPORT

Two years ago, a group of students from the mine engineering career at the Central University of Ecuador approached me with the idea of creating a SME student chapter in order for this new organization to provide opportunities and training to its members; At that time, I was one of the youngest members of this group and, of course, I supported this initiative led by the previous president, Mr. Luis Noboa, and in this way, together with a group of 15 people, we founded the SME Student Chapter UCE , which for months faced the challenge of establishing itself representatively in our university faculty through the annexation of new members and the development of binding activities.



All the work done during the first year of administration of the chapter motivated me to participate in the subsequent electoral process as a candidate for the presidency, dignity that with the majority support of the members of the organization I could occupy during the period 2019-2020, working day by day for the growth and benefit of this group that I had the honor of serving in commitment to our common goals.

Thanks to the continuous work and support of the steering committee we have fulfilled several of the initially proposed objectives, one of the most important being the annexation of new members; reaching the end of this administration period with more than 40 associate members, people with whom I have had the pleasure of working and sharing ideas that have prompted our student chapter to be recognized by students and professionals in the Ecuadorian mining industry.

It is pleasing to me to have received the support of students and professors of my faculty for the development of activities of the student chapter, especially the support of our Faculty Sponsor the engineer Danny Burbano, who with his constant work and commitment to students has been a fundamental pillar for the organization. Likewise, I extend my gratitude to the small private companies related to the industry and other academic and professional unions that have given us their contingent and trust.

Currently, the SME Student Chapter UCE is a well-known organization in the university's geology, mining, petroleum and environmental engineering faculty; and even recognized by companies that develop important mining projects in Ecuador, due to the contact that has been established with them and the support that they have given us in the different training and events that the student chapter has carried out.

During this administrative period, we had the privilege of organizing master conferences with the collaboration of exponents from countries such as Chile, Colombia, Peru, Spain and Portugal; conferences that contributed to the knowledge of the students and expanded their vision of an industry that develops every day based on technology and research. In addition, with the completion of the second technical sessions "Tecmin 2019", the student chapter achieved the presence of 145 attendees in these technical talks that took place over two days and that had the participation of professionals representing different mining companies and consultants in the country.

The magisterial conferences served as academic support to the members of the chapter and students in general, being complemented with training courses organized by SME Student Chapter UCE and which were focused on the main needs of the technological mining sector, being these, the knowledge of mining software and English language.

All the activities that we carry out with a lot of work, broaden our vision as a student chapter to have a group participation at an international level; for this reason, we set ourselves the common goal of attending the 2020 annual convention, which took place in Phoenix Arizona (USA), and that thanks to the enthusiasm of this great group, 8 people from the student chapter were able to travel and enjoy this great event carried out by SME, an organization of which we are proud to belong.

Once again, I reiterate my thanks to my colleagues and to my work directive for having allowed me to lead this group that has left me many teachings, good memories and good friends; there are many things to do, many pending projects, new dreams and objectives that will lead us to raise the name of SME in Ecuador, for which I wish all the successes to the new members and new leadership of the student chapter.

Without further ado, I say goodbye with great appreciation and consideration.

Sincerely,



Ronald Herrera Tamayo

PRESIDENT

SME – UCE Student Chapter 2019 – 2020

VICEPRESIDENT'S REPORT

Being part of the SME UCE STUDENT CHAPTER has been a rewarding experience as a student participating in a team that praised and promoted student participation in the mining industry. Resulting in addition to professional growth, growth in the social field forming new friendships since the foundation of the SME-UCE, likewise the decision-making for the student chapter that over time has been taking more strength and prestige. Glad for the completion of this stage and sure of having contributed a grain of sand to strengthen the chapter, I hope that future members bring fresh ideas that will further improve the image of responsible mining.



Among the activities carried out, I highlight the growth of the student chapter with the insertion of new members, in the same way I helped to promote training courses focused on the management of design software.

The holding of the II Academic Conference on Technical Mining called TECMIN was successful within the academy and the industry, we have the presence of high-level exhibitors, professors and geological-mining companies in the sector. In the social field, we collaborate with AIME (Ecuador) as staff personnel on the Anniversary of creation as well in different activities and courses carried out, in the same way we collaborated in the Mining Integration (Welcome of new students) being godparents the members of the Chapter and strengthening their presence in the School of Mines.

I want to express my thanks to the School of Mines of the Central University of Ecuador, to public and private companies in the geological-mining sector, to our Faculty Sponsor Ing. Danny Burbano, to our Section Advisor Ing. Jonh Bolaños, to my colleague President Ronald Herrera who was a fundamental pillar in the growth and development of each of the courses and activities; and especially to the members of the student chapter for their contribution, dedication and commitment. Finally, I appreciate the trust of all who have supported this directive and I predict success for the next directive and for the SME-UCE Student Chapter.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Dangelá Toquetón', written over a light blue circular stamp.

Dangelá Toquetón

VICEPRESIDENT

SME – UCE Student Chapter 2019 – 2020

TREASURER'S REPORT

Throughout the period of 2019, during which I was treasurer of the SME Student Chapter UCE, I was able to realize the great impact of instilling interest in mining to those related people and those who believe they are not, as well as the constant increase in knowledge for students.

Throughout this period, SME UCE has promoted different trainings aimed at professionals and students, who participated considering that they were not an expense, but an investment.



We have strived to correctly direct the money we have managed, always focused on the academic growth of the members that make up this great group.

Several of the courses taken over this time could be highlighted, but it is difficult, due to the great variety that they have had, and all with the importance and relevance, necessary in our field of study.

Without a doubt, it has been a great year for SME-UCE, since the number of members has grown considerably; We take this growth as a new opportunity to do everything planned on a larger scale.

We know that the challenges that come are even greater than those that we have already faced, but we are sure that we will do it much better than we have already done, since the experience is something that is priceless.

Regards,

A blue ink handwritten signature, appearing to be 'A. Carrión', with a stylized flourish.

Andrea Carrión

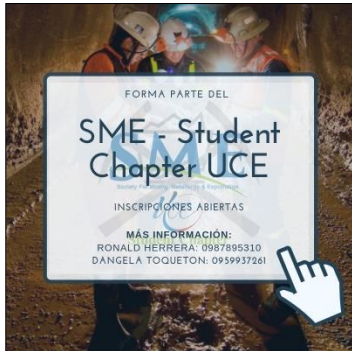
TREASURER

SME – UCE Student Chapter 2019 – 2020

ACTIVITIES REPORT

Student Meetings

Membership and informational meetings.



From the beginning of our activities, the priority was the change of mentality of the members of the student chapter, it is for this reason that meetings were held with students to motivate them to join SME, socializing the benefits to which they could access and which would contribute to your academic training.

About 7 meetings were held during the administrative year, during which SME Student chapter members were made aware of the activities being carried out and future planning as part of promoting joint participation.



SME digital platform training

As part of taking advantage of the benefits that SME offers on its digital platforms, SME Student Chapter UCE provided training to associate members on how to use these tools. Presentations were delivered and a video on the step-by-step handling of the platforms was made, which can be found at the following link:

https://drive.google.com/open?id=18xv_PlqOx0HrfrnRW6Fh3HuWSxoapnzGG



SME image broadcast

Banners, flags and t-shirts.

A great mission in this second year of existence of the SME Student Chapter UCE was the broadcast of the image of the organization with the aim of making the group known to the mining community of Ecuador, which is why the following activities were carried out:

- Acquisition of two advertising banners with the image of the student chapter.
- Acquisition of two medium-sized flags: the flag of Ecuador and a flag of the student chapter.
- Partial acquisition of T-shirts for the members, with the image of the student chapter and the university institution.

In addition, the dissemination of informative, academic and social content related to mining activity in Ecuador and the activities that the student chapter has carried out during this administrative year were promoted through the management of social networks such as Facebook and Instagram, networks that currently have 810 and 325 followers respectively.

Facebook fan page: <https://www.facebook.com/SMEStudentChapterUCE>

Instagram fan page: <https://www.instagram.com/smeuce/?hl=es-la>



Social activities.

Anniversary protocol - AIME (Ecuador).

On July 25, 2019, several members of the SME Student Chapter UCE collaborated with the Association of Mining Engineers of Ecuador (AIME) as a protocol on its

anniversary of foundation as part of the good relationship that it has with this union that fosters technical, formal and responsible mining in the country.

During this participation, the members of the student chapter also had the opportunity to talk with professionals from the industry and the Vice Minister of Mining of Ecuador.



Seedling in defense of responsible mining in Ecuador.

On September 3, 2019, different mining unions in the country marched through the streets of Quito (capital of Ecuador) in defense of legal, technical and responsible mining activity; that during those days was threatened by the intention of political groups that wanted to prohibit the development of the strategic mining projects in the country by means of illegitimate and unconstitutional action.

SME Student Chapter UCE was present at this seedling in support of the mining sector and its development with an academic and scientific contribution that Ecuadorian universities can provide. The president of the student chapter, Mr. Ronald Herrera, participated as a representative of the university sector in the commission that spoke in the constitutional court of Ecuador and that delivered supporting documents to defend mining activity based on the provisions of the Ecuadorian constitution.



Godparents of new students (mining integration).

The mining engineering career at the Central University of Ecuador has the tradition of celebrating the arrival of new students and the farewell of those who graduate each academic year. This celebration is known as the “mining integration”, a party with sports activities, music and dance. During the last mining integration held in January, several members of the SME Student Chapter UCE collaborated as godparents of the new students of the career, offering them a warm welcome and giving them their first mining helmet.



Courses, workshops and conferences.

Academic mining conferences.

On July 25, 2019, the SME Student Chapter UCE gave the university community two highly enhanced conferences by international exhibitors. The students and teachers had the opportunity to listen to the knowledge of the engineer Juan Pablo Gonzalez (President of the Institute of Mining Engineers of Chile) and the engineer Angel Meza (General Manager of Mines of Gran Colombia Gold Segovia), with the topics “Geology and project mining ”and“ underground exploitation and social responsibility in the Gran Colombia Gold project ” respectively.

CONFERENCIAS TÉCNICO ACADÉMICAS MINERAS

JUAN PABLO GONZÁLEZ
 PRESIDENTE
 INSTITUTO DE INGENIEROS DE MINAS DE CHILE
 CHILE
 MAESTRO EN ADMINISTRACIÓN DE EMPRESAS Y MÁS DE 21 AÑOS DE EXPERIENCIA PROFESIONAL COMO INGENIERO CIVIL DE MINAS.
 CUENTA CON EXPERIENCIA INTERNACIONAL EN PROYECTOS DE MINERÍA: CIELO ABIERTO Y SUBTERRÁNEA, EN DIFERENTES PAÍSES TALES COMO: CHILE, PERÚ, ARGENTINA, BRASIL, COLOMBIA, ESPAÑA, BOLIVIA Y A TRAVÉS DE TODA AMÉRICA LATINA.
 EN MINERÍA DE MINAS COMO DIRECTOR Y CONSULTOR SENIOR EN MINERÍA, ES PERSONA COMPETENTE IUPY Y EXPERTO EN EVALUACIÓN DE RECURSOS Y RESERVAS.
 TIENE UNA LARGA EXPERIENCIA INTERNACIONAL COMO PROFESOR DE RECURSOS Y RESERVAS TENIENDO PARTICIPACIÓN EN LAS AUDITORÍAS Y CERTIFICACIÓN DE RESERVAS BASO ESTÁNDARES INTERNACIONALES: JORC, SEC, NI 43-101 PARA EMPRESAS TALES COMO: SMM BOLSONIN, ANGLO AMERICAN, NISC METALS, COLLAHUAS, CODELCO, CYRQ, YAMANA GOLD Y DIVERSAS EMPRESAS MINERAS JUNIO.

TEMA: GEOLOGÍA Y MINERÍA DE PROYECTOS

ÁNGEL IGNACIO MEZA
 GENERAL MANAGER OF MINES
 GRAN COLOMBIA GOLD SEGOVIA
 COLOMBIA
 MAESTRO EN ADMINISTRACIÓN DE EMPRESAS Y MÁS DE 21 AÑOS DE EXPERIENCIA PROFESIONAL COMO INGENIERO CIVIL DE MINAS.
 INGENIERO DE MINAS CON MÁS DE 14 AÑOS DE EXPERIENCIA DE LA UNIVERSIDAD DEL CENTRO DEL PERÚ DON UNA MAESTRÍA EN ADMINISTRACIÓN ESTRATÉGICA DONA CERTIFICADO CATALUÑA, PASEO ANCHA EXPERIENCIA EN EL SECTOR MINERO, HABIENDO REALIZADO TRABAJO TANTO EN EL ÁREA DE PLANEAMIENTO, PROYECTOS Y OPERACIONES MINERAS REALIZADAS TANTO EN EMPRESAS DE COLOMBIA COMO EN EL EXTRANJERO TALES COMO GRAN COLOMBIA GOLD, CIENCOSA, PLAN AMERICANO SILVER, SUBTERRÁNEA, JORCA AUDITOR, SEFAMA, UNIMIN EN PAÍSES COMO PERÚ, REPÚBLICA DOMINICANA Y CHILE COLOMBIA.

TEMA: EXPLOTACIÓN SUBTERRÁNEA Y RESPONSABILIDAD SOCIAL EN PROYECTO DE ORO GRAN COLOMBIA GOLD

Fecha: 25/07/2019
Lugar: Auditorio Schlumberger
Hora: 10:00 AM - 12:00 PM
EVENTO GRATUITO

SME
 Student Chapter
 UCE
 Universidad Central del Ecuador



Course "Micromine training".



One of the main objectives of the SME Student Chapter UCE is to train its members in the use of computer tools applied to the mining field; In this context, on September 30, 2019, the “Micromine” mining software course began, which offered 23 people registered a certification of 40 academic hours in the use of this tool for the manipulation of geological and mining databases.

The course was held with the support of the consulting companies GEOIL, Geomining Ltd. (Distributor in Ecuador of Micromine software licenses - Ing. Franklin Viera) and the Mining Engineering Career from the Central University of Ecuador.

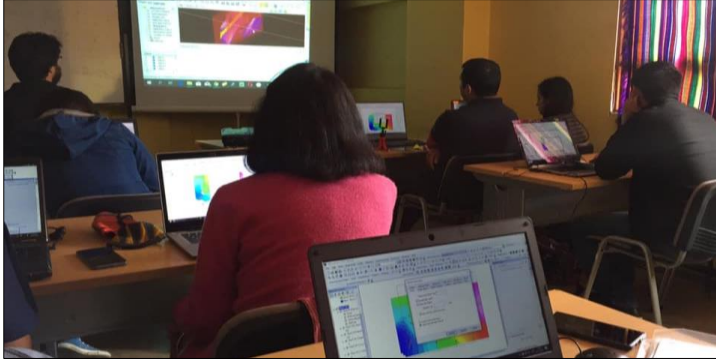


Specialized workshop: Exploration of copper porphyry with computer tools.

On November 8, 9 and 10, 2019, the SME Student Chapter UCE offered a theoretical-practical workshop aimed at students and professionals in the geological and mining field on the exploration of copper porphyry-type deposits. The 15 attendees received a 20-hour certification for the workshop that had topics such as theoretical class of mineral deposits, visualization of standard samples, management of two specialized software in database processing, explicit and implicit geological modeling and estimation of mineral resources using block model and profile method.



The workshop was supported by a career in mining engineering at the Central University of Ecuador and the College of Geological and Mining Engineers (CIGMIPA); It also provided coffee breaks for attendees and fostered the socialization of experiences of geology professionals for student learning.



Technical English course.

SME Student Chapter UCE through management with the Association of Mining Engineers of Ecuador (AIME) obtained the free participation of 10 of its members in a technical English course that awarded a certificate of participation of 10 academic hours. In the course, basic foundations of everyday English grammar and pronunciation were reviewed, to later delve into technical terms in English used in the mining and geological field; In addition, attendees were trained on how to handle a job interview in English and how to present a properly organized resume.



II "Tecmin 2019" Technical sessions.



Without a doubt, one of the most important activities carried out during the 2019-2020 administration of the SME Student Chapter UCE was the II “Tecmin 2019” Technical Conference, an event that brought together students from different universities in Ecuador and companies from the mining sector who participated as assistants and speakers. The event was held on November 12 and 13, 2019, and was attended by around 150 people in the main auditorium of the Faculty of Engineering in Geology, Mines, Petroleum and Environmental Sciences of the Central University of Ecuador.

The event had the academic endorsement of the Career of Mining Engineering of the Central University of Ecuador and the support of the Association of Mining Engineers of Ecuador (AIME), the topics exposed being the following:

- "Advanced exploration in the Cascabel mining project" by Eng. Santiago Vaca, Project Manager of the SolGold ENSA company.
- "Industrialization of ornamental rocks" by Eng. Galo Romero, Executive President of Minerosa S.A.
- "Mapping of hydrothermal alteration with the use of spectrometry" by Eng. Franklin Viera, General Manager of Geomining S.A.
- "Transport and sampling of concentrates" by Eng. Gustavo Delgado, General Manager of ISG Ecuador - Colombia.
- "Opencast mining in the Mirador project" by Eng. Ángel Cueva, Manager of mining operations for the company Ecuacorriente S.A.

- "Natural disaster risk management in mining projects" by Eng. Francisco Arteaga of Ferlat Corporation.
- "Solvent Agents for Non-Cyanided Gold" by Eng. Ernesto de la Torre, PhD. Head of the metallurgy department of the National Polytechnic School.



International master conferences.

On November 22, 2019, the SME Student Chapter UCE together with the Mining Engineering degree from the Central University of Ecuador and in collaboration with the Institute of Geological and Energy Research of Ecuador (IIGE) presented two master conferences for university professors and students with the themes "Exploration and exploitation of Lithium" by Luis Martins (President of the Portugal Mineral resources Cluster) and "Sustaining underground works" by Eng. Freddy

Gutierrez (Technical Manager for Colombia and Central America DSI Underground mining and tunneling).

The conferences were attended by 40 people, including authorities from the IIGE and the Faculty of Engineering in Geology, Mines, Petroleum and Environmental.



Datamine software training workshops.

As part of the training campaign in mining software that SME Student Chapter UCE has been developing, an agreement was made with the software company Datamine in Ecuador, thus, it seeks to promote different continuous workshops with special discounts for members of the student chapter.

The training workshop "Datamine NPV Scheduler" focused on long-term mining planning in an open pit was promoted, providing attendees with internationally recognized certifications in handling Datamine software modules and in which 3 members of the student chapter were able to participate.

The “Datamine Studio UG” workshop for underground mining design and planning was in planning; course that had to be rescheduled due to the COVID - 19 pandemic.

TALLER DE PLANIFICACIÓN ESTRATÉGICA A LARGO PLAZO PARA MINERÍA A CIELO ABIERTO

DATAMINE

TALLER DE NPV SCHEDULER

Fecha: 22-23-24 de enero de 2020

Lugar: Quito, Av. De los Shyris N35-71 y Suecia, Edif. Argentum, Of. 1402.

Horario: 8h30 a 16h30

Informes e inscripciones: alexandra.echeverri@dataminesoftware.com

PRECIO ESPECIAL PARA ESTUDIANTES DE LA UNIVERSIDAD CENTRAL DEL ECUADOR \$ 100.00 + IVA



DATAMINE

Taller de Diseño y planificación para minería subterránea con Studio UG

24-25-26 DE ABRIL 2020

SME
Student Chapter

CUPOS LIMITADOS

Av. Shyris N35-71 y Suecia, Edif. Argentum, Of. 1402, Quito, Ecuador

Inscripciones: alexandra.echeverri@dataminesoftware.com; ronald.herrera.t@hotmail.com

Ecuamining Webinars.

3 EDICIÓN

ECUAMINING

CONGRESO UNIVERSITARIO DE MINERÍA

MASTER CLASS
INTERNATIONAL

GEORRECURSOS: EL ROL DE LAS CIENCIAS DE LA TIERRA EN LA COOPERACIÓN AL DESARROLLO
MADRID - ESPAÑA

RAFAEL JORDÁ BORDEHORE
GEOLOGO, MSc., PhD
COORDINADOR DE PROYECTOS GEOLOGOS DEL MUNDO - WORLD GEOLOGISTS

VIERNES 27 MARZO / 11AM • LIVE / GOTO MEETING

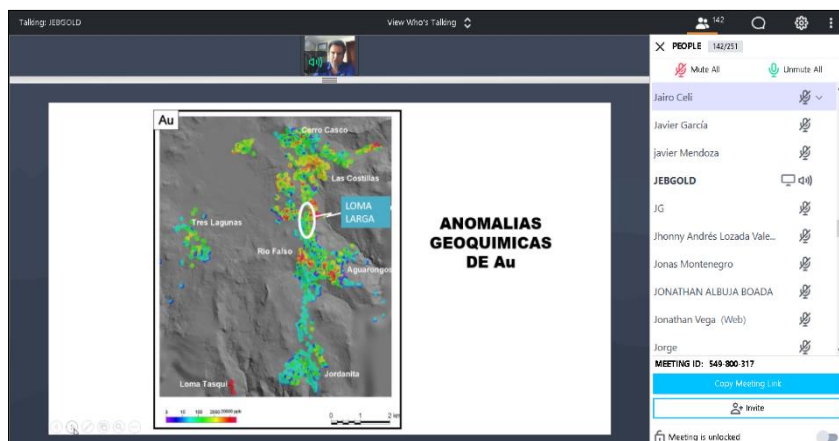
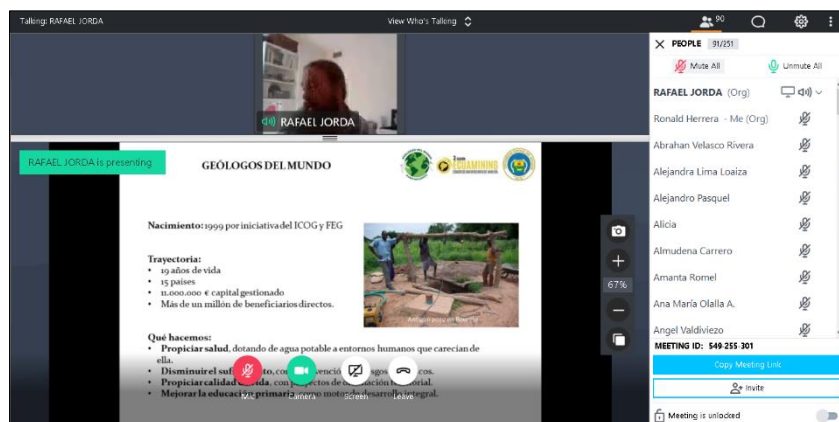
In February 2019, the previous administration of the SME Student Chapter UCE and the Association of Students of the Faculty of Engineering in Geology, Mines, Petroleum and Environmental of the Central University of Ecuador received from SME ESPOL and ASO FICT (Guayaquil - Ecuador) the proposal to organize and transfer the holding of the ECUAMINING event to Quito for its third edition in 2020. ECUAMINING is a university mining congress that convenes different Ecuadorian universities and companies in the country's geology and mining field, and which has lately been constituted as one of the most important mining events in Ecuador.

SME Student Chapter UCE has worked during the last weeks in the logistics that this event demands, and has contributed its mining knowledge to establish the thematic

axes of the congress and to contact national and international exhibitors; however, this event is currently suspended due to the global health crisis by COVID -19 and is waiting to set a new date for it.

The organizing committee of ECUAMINING decided to promote free webinars as part of the promotion of the congress and joining the “Stay at home” campaign that worldwide has sought to safeguard people's health in the face of the pandemic.

The first webinar was attended by the geologist Rafael Jorda (Spain) with the theme "Geosources: the role of earth sciences in development cooperation" and the virtual attendance of 90 participants; subsequently, a second webinar was held with the participation of Ing. Jorge Barreno (General Manager of INV Metals Ecuador) with the theme "Discovery and development of the Loma Larga mineral deposit" and which had the outstanding attendance of 148 people.



Virtual geology and mining conferences and workshops.

As previously mentioned, the global health emergency caused by COVID 19 has caused hundreds of people to remain in quarantine to prevent the spread of this virus, which has left serious human and economic losses, and which in Ecuador has not been the exception. Faced with this problem, SME Student Chapter UCE was forced to innovate and adapt to continue working for the benefit of its associate members despite the confinement; for this reason, the student chapter focused its new projects virtually.

In this way, an event called “Geological-Mining Days” took place, which lasted 11 days and provided the academic and business community with several virtual free conferences and workshops. This event became a trend in social networks and allowed the participation of students from different universities not only from Ecuador, but also from countries like Colombia and Peru; and likewise, from many professionals in the mining sector.

The virtual event was held with the help and support of the Mining Engineering Career and the Faculty of Engineering in Geology, Mines, Petroleum and Environmental Sciences of the Central University of Ecuador, and had exhibitors with great experience in Ecuadorian and Peruvian mining; in addition to having an average of 70 attendees per conference.

#Mineriaentuhogar
#Quédateencasa

WEBINARS: Jornadas Geológico Mineras

Evento gratuito con profesionales de gran experiencia en investigación geológica y operaciones mineras.

Live / Go To Meeting - Facebook

Del 12 al 22 de mayo 2020

Organizado por:

Con el respaldo de:

Formándonos para una minería responsable

escuela.minas.fgempa@uce.edu.ec
dsurbano@uce.edu.ec

SME - Universidad Central del Ecuador
SME Student Chapter UCE / @smeuce

#Mineriaentuhogar
#Quédateencasa
MINERÍA PARA TODOS

JORNADAS GEOLÓGICO MINERAS SEMANA UNO

"SEGURIDAD EN PERFORACIÓN SUBTERRÁNEA"
Martes, 12 de mayo de 2020
18h00
Ing. Efraín Andrade Ruiz
Gerente Técnico de HCT Mining Consulting Training

"DISEÑO DE VOLADURAS"
Miércoles, 13 de mayo de 2020
18h00
Ing. Cesar Augusto Caceres
Ingeniero Experto de HCT Mining Consulting Training

"EXPLORACIÓN DEL YACIMIENTO TIPO VMS BASADOS EN DATOS GEOLÓGICOS, GEOQUÍMICOS, MAGNETOMÉTRICOS Y RADIOMÉTRICOS"
Jueves, 14 de mayo de 2020
18h00
Ing. Percy Zamora
Jefe de Proyectos INGENMET

ORGANIZADO POR: **FGMPA**
CON EL RESPALDO DE: **FGMPA**
GoToMeeting
Cupos Limitados

#Mineriaentuhogar
#Quédateencasa
MINERÍA PARA TODOS

JORNADAS GEOLÓGICO MINERAS SEMANA DOS

"GESTIÓN DE SEGURIDAD Y SALUD EN MINERÍA"
Martes, 19 de mayo de 2020
18h00
Ing. Omar Piñero Rodríguez, MSc
Ingeniero de Minas
Especialista en Seguridad y Salud Ocupacional

"RESEARCH OF LOW TOXICITY SOLVENTS FOR DISSOLVING GOLD"
Miércoles, 20 de mayo de 2020
18h00
Ing. Ernesto de la Torre Chantún, PhD
Profesor Principal y Jefe del Departamento de Metalurgia Extractiva - DEMEX - EPN

"OPTIMIZACIÓN DE PROCESOS EN PLANTAS CONCENTRADORAS"
Jueves, 21 de mayo de 2020
20h00
Ing. Darwin Carlos Quijpe
Gerente de Operaciones en Minería, SODIM

ORGANIZADO POR: **FGMPA**
CON EL RESPALDO DE: **FGMPA**
GoToMeeting
Cupos Limitados

#Mineriaentuhogar
#Quédateencasa
MINERÍA PARA TODOS

JORNADAS GEOLÓGICO MINERAS SEMANA DOS

"DESARROLLO DE ADOQUINES A PARTIR DE RELAVES DE MINA"
Viernes, 22 de mayo de 2020
18h00
Ing. Juan Francisco Jácome Calderín
Ingeniero de Minas
UCE - FGMPA

"ELABORACIÓN, ANÁLISIS Y ESTRATEGIAS DE REDUCCIÓN DE COSTOS DE RELAVES DE MINA"
Aplicación en una Mina a Tajo Abierto con Software FP Cost. v7.0
Sábado, 23 de mayo de 2020
18h00
Ing. Eddy Ponce Ramirez
Consultor e Implementador de Relaves y Voladuras e Ingeniería de Costos en Minería y Construcción

ORGANIZADO POR: **FGMPA**
CON EL RESPALDO DE: **FGMPA**
GoToMeeting
Cupos Limitados

The realization of this event caught the attention of different professional and student organizations, which showed their interest in working on future projects with the SME Student Chapter UCE. Based on the aforementioned, SME UCE in the coming days will participate as a collaborator in the First International Virtual Congress of Geology and Geophysics (based in Peru), and a forum for the analysis of the economic benefit that Ecuador will have with the development of strategic mining projects ; events in which the student chapter will be happy to participate because they promote the internationalization of its associate members.



Travels.

MineXChange 2020 SME Annual Conference & Expo.



SME Student Chapter UCE was invited to participate in one of the most important mining conventions in the world, called “SME MineXChange 2020”, an event that is held annually and that brings together the outstanding business and academic sector around mining activity worldwide.

SME UCE carries out constant work for the benefit not only of its associate members, but also for the Faculty of Engineering in Geology, Mines, Petroleum and Environmental Sciences of the Central University of Ecuador, by promoting different technical-academic events that allow strengthening the training of future mining professionals, an industry that is shaping up to be one of the most important pillars of the national economy. In this context, the organization based in the United States of America proceeds to invite a delegation of students to attend this important event, which took place in Phoenix (State of Arizona) USA, during the dates 23 to 26 February 2020, at the Phoenix Convention Center.

SME UCE when presenting the opportunity to attend this event, set the following objectives based on the established work agenda:

- Attend technical sessions as a training opportunity in mining research and technology.
- Be part of the business talks of several of the most important representatives of the current mining industry.
- Participate in Networking activities, in order to establish new contacts that help the professional future of students, and that serve future international interrelation objectives of the student chapter and the mine engineering career at the Central University of Ecuador.

Among the outstanding activities, the opening ceremony of the convention was attended and later a conversation was held with Marisa Amico, general manager of SME Latin America, where it was possible to discuss the challenges of the mining industry in Ecuador and the contribution it can provide SME for the correct development of this important sector for the national economy, also discussed the work carried out by SME UCE, highlighting the series of activities that have praised the name of SME and the university in the eyes of the international mining community.



During the same discussion, SME UCE contacted different student chapters from Colombia and Peru, with which a student work network has been created to receive the contribution of these countries that have developed large-scale technological mining despite all associated problems.

At the convention, members of the student chapter attended the exhibition hall, where dozens of mining technology and service companies and universities from the United States participated, exhibiting their activities and products to the attending public; During this activity the SME UCE delegation spoke with different companies and collected information on innovation in mining technology.



Conversations and contacts were established with the metallurgy department of the National University of Engineering of Peru, in order to strengthen this specialty in the career of mining engineering at the Central University of Ecuador; in the same way with the institute of mining engineers of Peru, an organization with a great national

and international trajectory that promotes the development of mining in that country. The students also learned about the opportunities offered by the Colorado School of Mining Engineering, one of the most important mining schools worldwide, in order to be able to promote a student exchange project that allows UCE students and teachers train academically in this prestigious institution.

The SME Student Chapter UCE student delegation also attended different technical conferences held at the convention center, and likewise the social gatherings organized by the event's sponsors.



The president of the SME Student Chapter UCE, Mr. Ronald Herrera, was also invited to participate in the meeting of Latin American sections, a meeting in which leaders of SME Latin America and the main authorities of important mining companies and institutes of Colombia, Chile, Mexico and Peru participated. This meeting discussed issues of inter-institutional cooperation for the promotion of technical training and international certifications that favor students and professionals in the mining sector; having as a most relevant point, the collaboration and advice of the SME Latin America sections for the formation of the Ecuador SME chapter. This initiative will allow obtaining important agreements of the Ecuadorian mining sector with mining companies and institutions in the USA, and the search for an ABET quality certification for the mine engineering career at the Central University of Ecuador.



The experience of attending SME MineXChange 2020 was very enriching for the students of the SME UCE delegation, mainly due to the updating of mining knowledge learned from countries that have developed technological and large-scale mining with respect to Ecuador. This great event motivates the student chapter to take on new commitments and challenges, such as participating in SME MineXChange 2021, which will take place in Denver, Colorado USA, through a team at the Move Mining Contest, in order to raise the name of our university and from Ecuador; in addition to leading a larger delegation of students and teachers associated with the SME Student Chapter UCE.