



Society of Mining Professors Societät der Bergbaukunde

Email: mineprofs@gmail.com; Web: www.mineprofs.org

SOMP Newsletter

Number 53, December 2021



Gracias Colombia

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and Geology, Vietnam

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Nacional de Colombia, Colombia

Ronny Webber-Youngman, University of
Pretoria, South Africa

COVER PHOTO

A group photo of participants at 2021
SOMP Annual General Meeting in
Medellin, Colombia



*Harmony Musiyarira
2021-2022 SOMP President*

A word from our SOMP President

Dear Colleagues,

It is an absolute honour to assume the role of President of this great Society. My career development has been tremendously influenced and shaped by the seasoned members of this incredible and reputable Society. I pledge to fulfill the responsibilities attached to this role with dedication and commitment. I also request your support as we collectively build this Society, as we together continue to mould a great legacy

founded in a rich history. I am grateful to the past President Prof Oscar Jaime Restrepo Baena who, together with the SOMP Council and Committees, successfully navigated the ship through a stormy and unprecedented period characterized by the COVID-19 pandemic.

Having closed the curtain on the just-ended successful annual meeting in Medellin, Colombia, I wish to draw your attention to the next annual meeting and conference to be hosted in the beautiful and clean City of Windhoek in 2022. Namibia University of Science and Technology's leadership and staff are ready to welcome you to the beautiful land of the brave-Namibia.

We are working with a team of dedicated members and the Southern African Institute of Mining and Metallurgy (SAIMM) to ensure that this meeting becomes a success. Indeed, this is a landmark occasion as it marks the second time a SOMP annual meeting and conference has been hosted on the African continent, further signifying SOMP's commitment to broaden its global footprint and consolidate its position as a leading community of mining professors.

The African SOMP membership is delighted to host the 2022 annual meeting. We are all conscious of Africa's role in the global mining industry, particularly as a critical source of minerals and, even more importantly, a growing source of expertise for the same industry. While a lot still needs to be done on multiple fronts, ranging from conflict resolution, policy formulation, capacity development, mineral beneficiation, and access to technology, we remain resolute in building the necessary expertise to address all these issues in a sustainable and gradual manner.

Allow me to take this opportunity to make this clarion call to all members of this Society to increase our membership. Increased membership will improve our engagement and influence. Specifically, during my tenure, I wish to see significant growth in Africa, Asia, and Latin America while maintaining our presence in Europe, Australia, and America. To that end, I challenge every member to have brought at least one additional member to the Society by the time we hold the annual meeting and conference in 2022. As highlighted, an increased membership will increase our sphere of influence and resource mobilisation, thereby creating a more fertile platform for active engagement, collaboration, and scientific output. Ultimately, this should strengthen our thematic committees by bringing more ideas to the table and striving for greater effectiveness and efficiency.

The Education, Membership Development, and the Research and Development and Industry Committees played a significant role in keeping us connected when we could not meet in person during the pandemic, and I salute the resilience and commitment they displayed. The Capacity Building Committee has planned two regional meetings in Peru (June 2022) and Vietnam (October 2022). This presents an opportunity for reaching out to a more significant number of professors in these regions. We need to rethink new ways of reaching out and supporting each other by sharing the available opportunities in our countries and circles. That will go a long way in increasing our influence.

Finally, allow me to acknowledge the immense contributions that the senior members within the Society have made to catapult us to where we find ourselves today. Through their unreserved efforts and commitment, the Society commands significant respect amongst the global scientific and academic community. While the context may have changed, our collective role and mission as a Society remain the same. Let us continue to glean on the wisdom of our senior members on how best we can navigate these trying times, continue to refine our curricula to embrace the emergence of the fourth industrial revolution, and prepare our graduates for mines of the future. I am confident that this approach will go a long way in maintaining our relevance as a growing Society with a rich history and spirited courage for an exciting yet uncertain future. I look forward to a session in Windhoek with our senior members sharing how best to navigate our chosen careers and avoid the pitfalls of academia and another session with the upcoming professionals to share their perspectives on the evolving global challenges. Namibia University of Science and Technology and Namibia awaits you with warmth and open arms in September 2022.

From the desk of SOMP Secretary-General



*Vladislav Kecojevic
SOMP Secretary-General*

Dear SOMP Members,
Greetings from Morgantown, West Virginia, and welcome to the 53rd Newsletter from the Society of Mining Professors (SOMP) / Societät der Bergbaukunde! I am writing this note in mid-December, and I do hope you are all staying safe and healthy.

In June, I met with the 2019-2021 SOMP President Oscar Jaime Restrepo Baena, his organizing team and students in Medellín, Colombia. Together, we visited all facilities for our 2021 AGM in Medellín and discussed technology support for our hybrid conference. And indeed, Oscar Jaime has organized a wonderful Annual General Meeting (AGM) of our Society. It was an exceptional event in a COVID-constrained world. The full report on this meeting is given in this newsletter (pages 6-8).

We have organized the SOMP panel on recruitment and retention strategies with the participation of panelists from all around the globe; conducted a joint survey with SME on undergraduate and graduate students, and faculty members in mining engineering programs across the world; and our Members Development Committee was very active with its mentoring program. I have presented SOMP activities and our mission to students and professors at Universidad Nacional Mayor de San Marcos in Lima and Facultad de Ingenieria de Minas, Universidad Nacional del Altiplano de Puno, both in Perú, in support to our 10th SOMP Regional Meeting in Lima in June of 2022.



*Oscar Jaime Restrepo Baena and Vlad Kecojevic with the students
of School of Mines in Medellín, Colombia*



*Mario Cedron, Vlad Kecojevic and Jorge Soto at Universidad
Nacional Mayor de San Marcos in Lima, Perú*

We have renewed the membership in many of our SOMP committees. The complete list of committee members can be found in this newsletter (pages 33-37) and at the SOMP website: <https://miningprofs.org/the-committees>

I invite you to become actively involved with one or more of our committees, our meetings, and by contributing to our SOMP vision and mission. Our current Education Committee Chair, Rudra Mitra, and Research Development and Industry Committee Chair, Kwame Awuah-Offei, have served these two committees for the last four years. Rudra and Kwame have decided to step down from these positions after our AGM in Namibia in September of 2022. I sincerely thank them for their service to our Society. The SOMP Council invites nominations and applications for these two committee chair positions. If you are interested in serving as the chair of either of these committees, please send your one-page vision and plan of activities directly to me, or one of the Deputy Secretary Generals, Serkan Saydam or Elisabeth Clausen.

Currently, our Society membership is at 289, with 238 male and 51 female members, representing 120 institutions in 49 countries. We welcomed 21 new members in 2021. The highest number of SOMP members are in the United States (49), followed by Germany (36), Australia (35), South Africa (23), and China (13).

We have been able to keep the SOMP on stable financial ground, and our budget is at the record level. I invite you to propose to SOMP Council new initiatives that will benefit all SOMP members.

I am very much thankful to Michael Karmis, our former Secretary-General and President, for his generous donation to the Michael Karmis SOMP PhD Fellowship Award. This donation was extended to two recipients of this award during the AGM in Colombia.

There were so many achievements and accomplishments of our members in 2021. I do hope that you will enjoy reading about them in this newsletter.

We intend to have our AGM in Windhoek, Namibia under the leadership of our 2021 – 2022 SOMP President Harmony Musiyarira in September of 2022; the 10th and 11th SOMP Regional Meetings in Peru and Vietnam, respectively, in June and October of 2022, respectively.

Please do not hesitate to let the 2021-2022 President Harmony Musiyarira and/or myself know how SOMP can support your continued professional development. I look forward to serving you all and continuing to build our Society. I wish you all a safe, healthy, and happy New Year.

Vlad Kecojevic
SOMP Secretary General

Welcome to new SOMP Members

We are very pleased to report that in the last 12 months, up to the beginning of December 2021, we have welcomed 21 new SOMP members. Congratulations and welcome to all of our new members! We look forward to meeting with you in the future and to your active participation in the Society. Thanks also to those members who encouraged and supported you through nomination. All members are once again reminded that membership is not restricted just to those of us who are full professors. Under the constitution of the Society, any person who is directly involved or affiliated with mining engineering education is eligible to join SOMP. We strongly encourage younger mining academics or faculty members who are just setting out on a mining academic career to consider joining SOMP to benefit from its ever-increasing international network of fellow mining academics. Current members, please encourage your younger colleagues to consider membership. This includes current PhD students or post-docs who may be considering an academic career in the future – they can apply to join SOMP as a Junior member, where they can gain access to all that the Society is doing in the international network of mining academics. Prospective new members should contact Zach Agioutantis (University of Kentucky) with any queries regarding the online membership application process (or any other website inquiries). Zach's email address is: zach.agioutantis@uky.edu

Last Name	First Name	Affiliation	Country
Hefni	Mohammed	King Abdulaziz University	SAUDI ARABIA
Mayhua	Juan	Universidad Nacional del Altiplano - Puno	PERU
Tabelin	Carlito	UNSW Australia	AUSTRALIA
Thiruchittampalam	Sureka	UNSW Australia	AUSTRALIA
Shields	Lauren	University of Kentucky	UNITED STATES
Rojas	Néstor	National University of Colombia	COLOMBIA
Jaramillo Urrego	Linda Mishell	Colorado School of Mines	UNITED STATES
Oportus	Patricio	Universidad Santo Tomas	CHILE
Barros Daza	Manuel	Virginia Polytechnic Institute and State University	UNITED STATES
Costa	Joao Filipe Coimbra Leite	Federal University of Rio Grande do Sul	BRAZIL
Peroni	Rodrigo	Federal University of Rio Grande do Sul	BRAZIL
Diaz Martinez	Juan C	University of Kentucky	UNITED STATES
Delgado Olivares	María Luisa	Universidad Santo Tomas	CHILE
Dinis	Maria de Lurdes	University of Porto	PORTUGAL
Bukasa Mukendi	Pitchou	NUST Namibia University of Science and Technology	NAMIBIA
Radl	Alexandra	RWTH Aachen University	GERMANY
Halim	Adrianus	Lulea University of Technology	SWEDEN
Vila	M. Cristina	University of Porto	PORTUGAL
Aguilar Miraglia	Johns	Ignacio Domeyko Institute	CHILE
Ali	Zulfiqar	The University of Adelaide	AUSTRALIA



Joao Felipe Coimbra
Leite Costa



Maria de Lurdes
Dinis



Adrianus
Halim



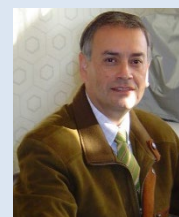
Ali Zulfiqar



Rodrigo de Lemos
Peroni



Juan Diaz



Patricio A. Oportus
Romero



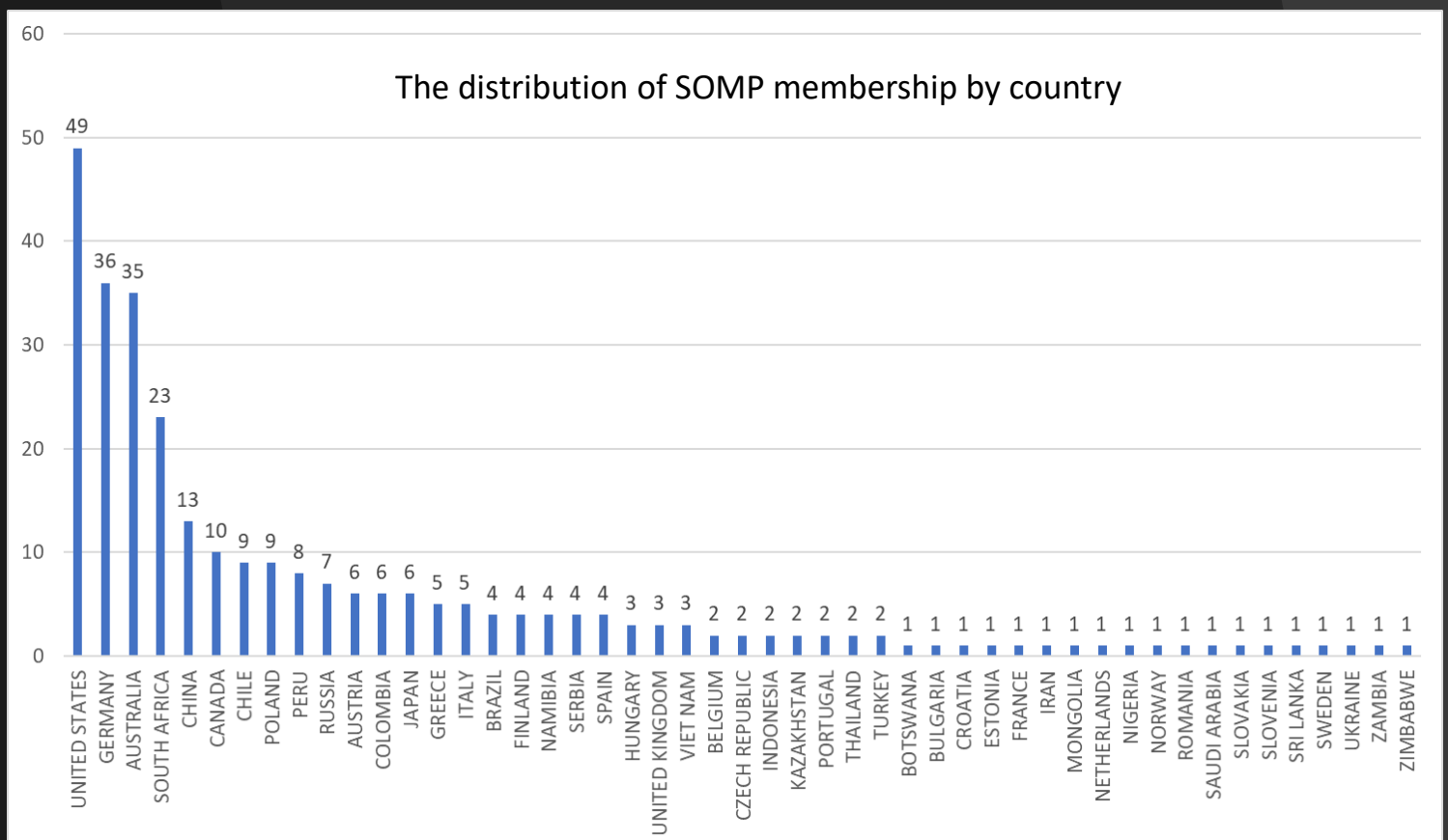
Carlito Tabelin

Join SOMP for the professional support and growth

<https://miningprofs.org/Members/Register>

SOMP by numbers

- Total Active Members: 289
- Full Members: 223
- Associate Members: 1
- Emeritus Members: 15
- Retired Members: 18
- Junior Members: 32
- Male Members: 238
- Female members: 51
- Total Countries: 49
- Total Affiliations: 120



Report from the Past Meeting

The 31st SOMP Annual General Meeting, Medellin, Colombia, September 19 – 25, 2021

The 31st SOMP Annual General Meeting (AGM) was held in Medellin, Colombia, between September 19 and 25, 2021. The meeting was hosted by the School of Mines at Universidad Nacional de Colombia and Association of Mining Professionals of Colombia (AIMC) under the leadership of 2019-2021 SOMP President Oscar Jaime Restrepo Baena. It included a four-day program (September 21-24, 2021) with a plenary session on the morning of the first day of technical meeting. It also included technical tour of the Antioquia Gold mine on September 25, 2021. The participants have also had an opportunity to tour the School of Mines, a variety of attractions in the city of Medellin, the colorful city of Guatapé, and travel and climb unique El Peñol rock.

The meeting was attended by 66 in-person and 68 on-line participants representing 19 countries, 16 students and five members of the supporting team. These were exceptional numbers in a COVID constrained world. Many thanks to those members who travelled long trips to be in Medellin, as well as those who participated online.

The SOMP Council and Committee Meetings were held on September 21st at the School of Mines. Opening, welcome, and keynote talks were delivered by Oscar Jaime Restrepo Baena (2019-2021 SOMP President, Universidad Nacional de Colombia), Juan Camilo Restrepo (Vice Chancellor, Universidad Nacional de Colombia – Medellin), Veronica Botero (Dean, School of Mines, Universidad Nacional de Colombia), Jorge Jaramillo (Mines Secretary, Antioquia Regional Government), and Santiago Cardona (CEO of Mineros S.A). Following these talks, the SOMP Business Session was conducted by Vlad Kecojec (SOMP Secretary-General).



Opening and Welcome Session



SOMP Business Session

The afternoon sessions included a series of presentations on education (chaired by Harmony Musiyarira, Namibia University of Science and Technology), the Tim Shaw Award Lecture by Emily Sarver (Virginia Tech), and two Michael Karmis SOMP PhD Fellowship Award Lectures by Natalija Pavlovic (University of Belgrade) and Juan Jose Monsalve (Virginia Tech).

The second day of the SOMP meeting continued with a session on education (chaired by Jurgen Brune, Colorado School of Mines), an interactive workshop on Members Development (chaired by Andrea Brickey, South Dakota School of Mines and Natalija Pavlovic, University of Belgrade), and the Capacity Building session (chaired by Domingo Carvajal, University of Huelva).

The last day of the SOMP conference covered topics related to the IT Committee by Zach Agioutantis (University of Kentucky), several presentations on variety of research topics (chaired by Marilena Cardu, Politecnico di Torino), and presentations on upcoming 2022 AGM in Namibia, 2023 in Germany, and Regional meetings in Peru and Vietnam.

All presentations from the meeting have been posted on the SOMP website:

<https://miningprofs.org/presentations-at-annual-meetings>



Education Session



Capacity Building Session

During the Awards Dinner, several SOMP members were recognized for their accomplishments. Oliver Langefeld (TU Clausthal) was the recipient of the Gunter Fettweis Award for his leadership in advancing mining engineering research and education, his commitment to capacity building and diversity of the Society, and his impact and contributions to the values and mission of the SOMP. Zach Agioutantis (University of Kentucky) was named the recipient of the Ludwig Wilke Award for his distinguished international education and research activities and his tireless and enduring contributions to the successful management of the SOMP. The fifth annual presentation of the Tim Shaw Award for Innovation in Teaching and Learning was made to Emily Sarver (Virginia Tech) for her devoted significant effort to develop teaching and learning innovations, promote educational excellence and motivate and inspire students to learn. Natalija Pavlovic (University of Belgrade) and Juan Jose Monsalve (Virginia Tech) were first two recipients of Michael Karmis SOMP PhD Fellowship Awards for 2020 and 2021, respectively. The Bruce Hebblewhite SOMP Best Paper Award was given to Johann Uys and Ronny Webber-Youngman (University of Pretoria) for their contribution to the body of knowledge with the paper and presentation on “A 4.0D Leadership Model for Mining and Related Industries in the Context of the Fourth Industrial Revolution” at the 2019 SOMP Annual General Meeting in Bochum, Germany, in 2019.



Gunter Fettweis Award to Oliver Langefeld (accepted by Sandra Nowosad)



Zach Agioutantis receives Ludwig Wilke Award



Tim Shaw Award to Emily Sarver (accepted by Juan Jose Monsalve)



Natalija Pavlovic and Juan Jose Monsalve receive the Michael Karmis SOMP PhD Fellowship Award



Bruce Hebblewhite SOMP Best Paper Award to Johann Uys and Ronny Webber-Youngman (accepted by Harmony Musiyarira)



SOMP Members during the Awards Dinner



Closing Ceremony

We sincerely thank our 2019-2021 SOMP President Oscar Jaime Restrepo Baena, his supporting staff and students, School of Mines of the Universidad Nacional de Colombia, and Association of Mining Professionals of Colombia (AIMC) for organizing a successful and unforgettable SOMP AGM. Oscar Jaime and his team have been our SOMP pioneers in organizing a hybrid SOMP meeting, and they did an exceptional job. All facilities of our AGM meeting were equipped with technology needed to have a hybrid meeting and, at the same time, complemented with Colombian charm, brought to us a unique experience.



Visit to Gold Mine



Visit to School of Mines

The hospitality and help we have received during the meeting were felt among all the participants and we have enjoyed attending the meeting in Medellin. Once again, many thanks to Oscar Jaime for all his hard work, passion and commitment to our Society and the AGM in Medellin, Colombia. Special thanks to the students of the School of Mines who proved once again how big hearts they have; we have nothing but the deepest admiration for all of them.

For those who have not yet seen them, there is a comprehensive collection of high-quality photographs on the SOMP website, recording every aspect of the Medellin meeting. To access them, please go to the following website:

<https://www.flickr.com/photos/143881546@N05/sets/72157719954471157/>





Education session at 2021 SOMP Meeting in Medellín, Colombia

Education Committee Report

The Education Committee met in a hybrid mode at the 31st SOMP Annual General Meeting organised in Medellín, Colombia. We welcomed two new members to the Committee – Simit Raval from UNSW Sydney and Juan Jose Monsalve from Virginia Tech.

The Committee agreed on developing some potential modules/ topics that will be essential for future mining engineering education. This will be presented at the 32nd SOMP Annual General Meeting in Namibia.

We are currently discussing options for our next education webinar which will be held early next year. If you have any suggestions or ideas, please send an email to Rudra Mitra (rmitra@amt.rwth-aachen.de) for further discussion.

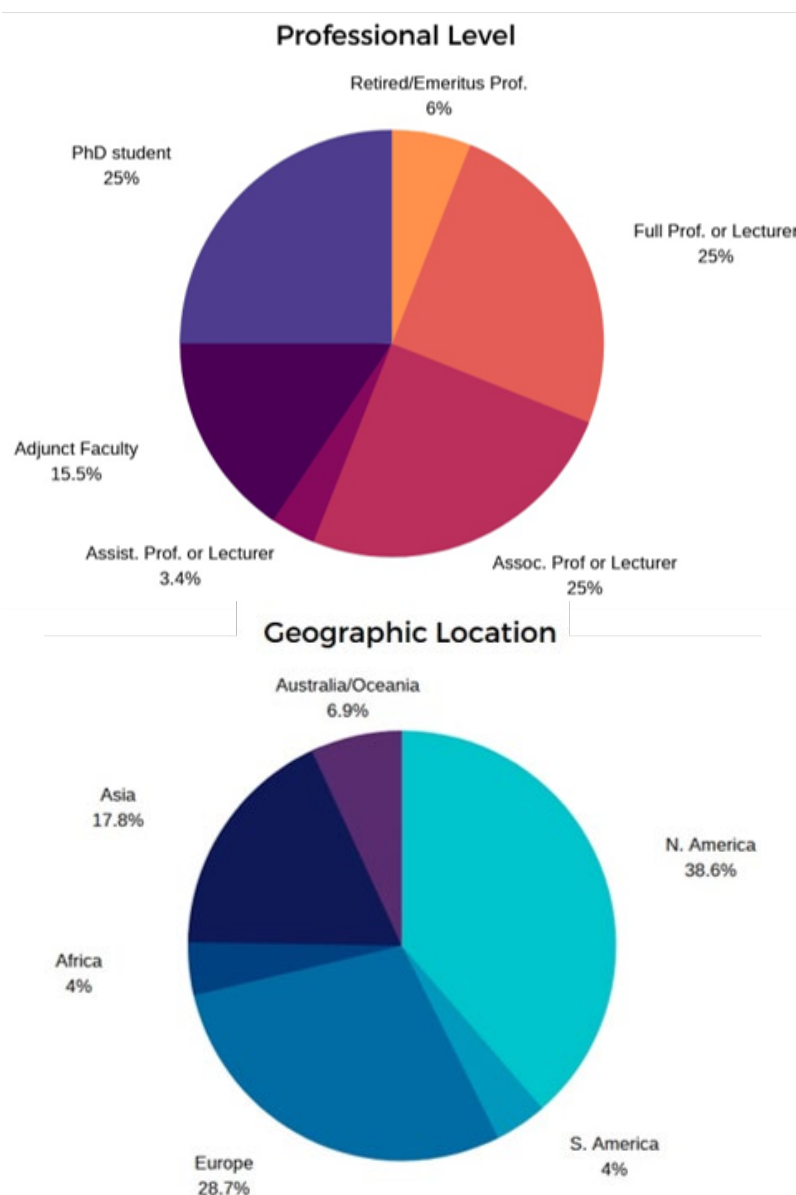
The Committee is also in discussion on updating the survey on mining engineering schools. Once completed, it will be sent to the members.

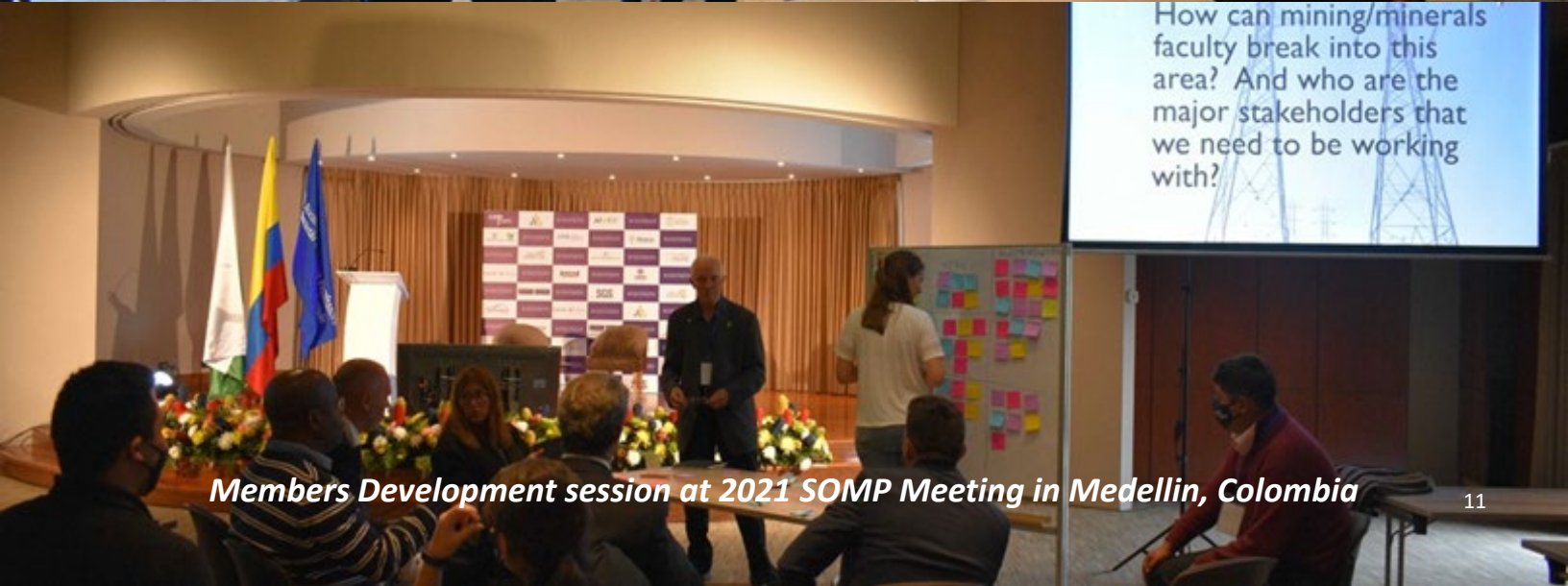
Members Development Committee Report

MDC is a small but active committee. Our aim is to facilitate professional growth, development, and networking for SOMP members. This year, MDC's work has been focused on two primary initiatives: the Mentoring Program, and opening up new discussion on emerging directions for mining education.

The Mentoring Program was established in 2016. After five years of supporting one-on-one mentoring pairs, we decided to change things up for 2021. This year, participants were placed in small groups based on shared interests. A total of 30 participants form eight groups with a mix of mentors and mentees (see figures below for a breakdown of professional level and geographic location). Feedback to date has been limited—we welcome your comments as we gear up for the 2022 Mentoring Program! (Contact esarver@vt.edu and Andrea.Brickey@sdsmt.edu).

At SOMP's 2021 AGM in Medellin, we dedicated the MDC session to a brainstorming activity focused on three *Game-changing Topics for Mining Education: Mine Automation, Electrification, and Infrastructure and Urban Growth*. Attendees were divided into small groups either online or in the physical meeting room. Groups were tasked to discuss each topic and answer the following questions: (1) What are the biggest needs for the mining/mineral curricula? (2) How might this topic play into recruitment of undergraduate students into mining/mineral programs? (3) How can mining/minerals facility break into this area? And who are the major stakeholders that we need to be working with? Then, all groups joined back together to report out. Over the coming months, MDC will be synthesizing and sharing the responses, along with plans to support SOMP members as they advance these topics in their home programs.





Members Development session at 2021 SOMP Meeting in Medellin, Colombia

Research, Development and Industry Committee

The main initiative of the Research, Development and Industry Committee (RDI) in 2021 was the effort to update the SOMP publications practices survey. The Committee designed the survey, received Institutional Review Board (IRB) exemption, and deployed it to members. Seventy-six SOMP members participated in the survey. The Committee processed and analyzed the results to present preliminary results at the SOMP Meeting. Below are highlights of the results. The Committee plans to present the full results in a journal paper in the International Journal Mining Science and Technology, SOMP's official journal.

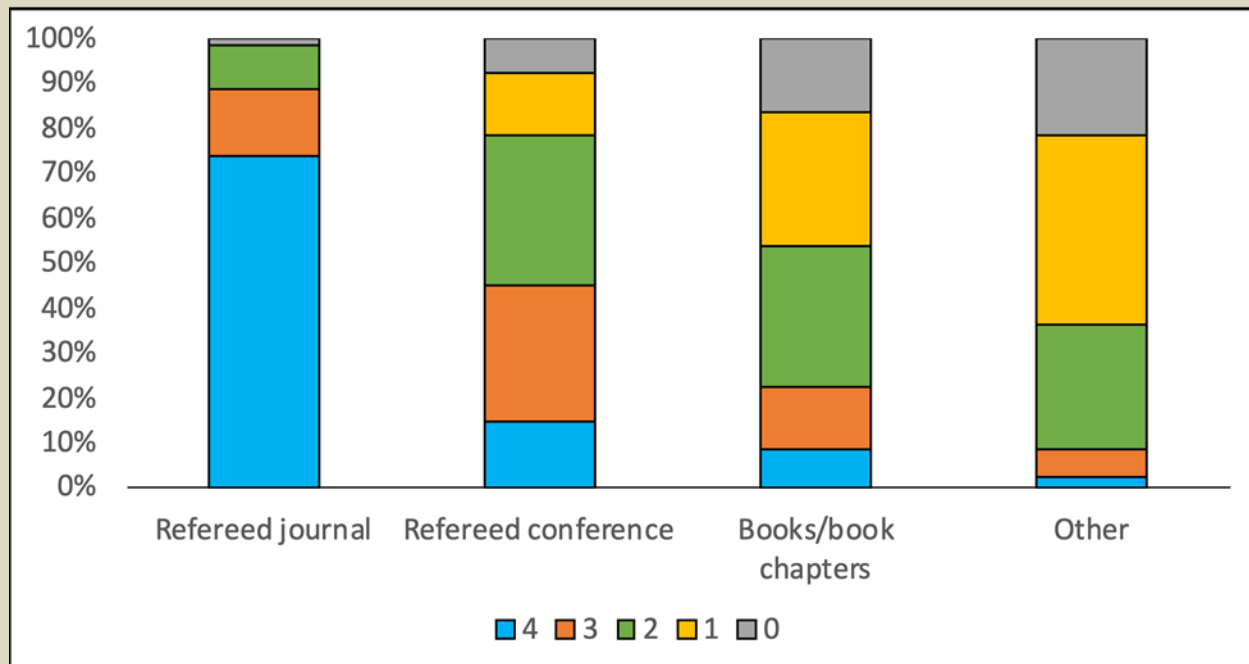


Figure 1: Participant's publication preferences. Preferences were recorded using a range of values 0 – 4 with 0 indicating "do not prefer at all" and 4 indicating "prefer a great deal"

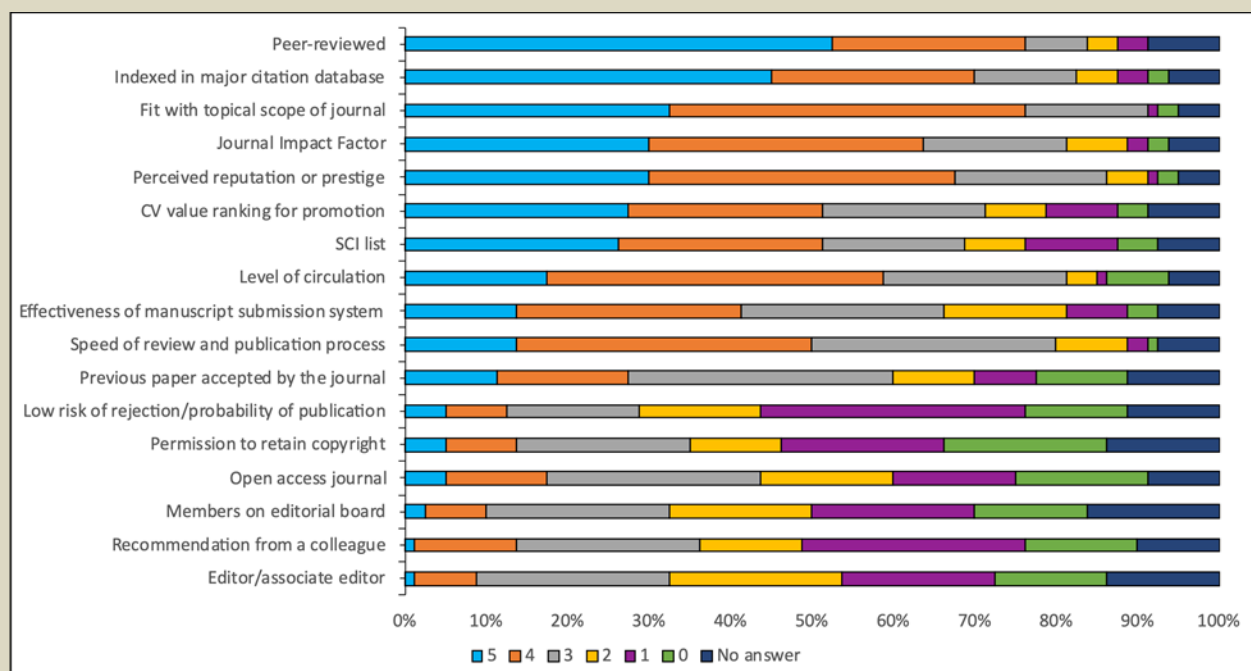


Figure 2: Factors influencing participants' decision to publish in a journal. Preferences were recorded using a range of values 0 – 5 with 0 indicating "not at all important" and 5 indicating "extremely important".

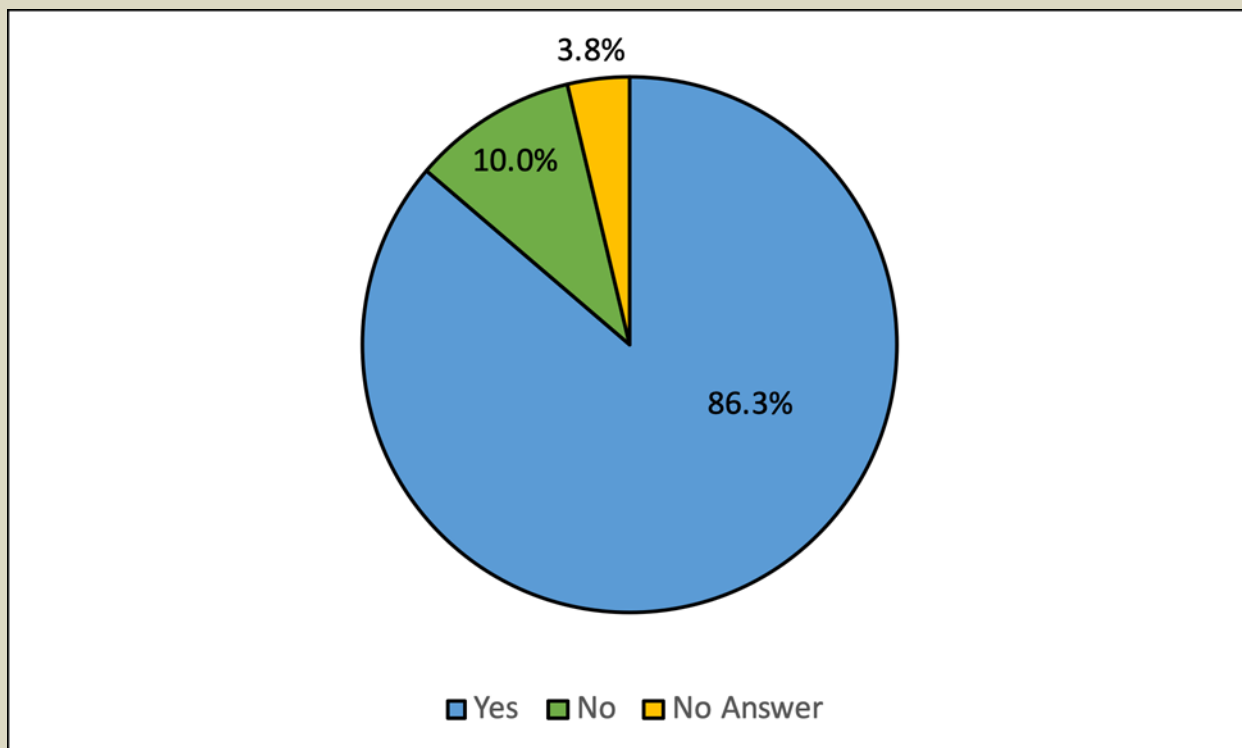


Figure 3: Participants' willingness to publish in open access journal, provided they can verify it is not predatory.

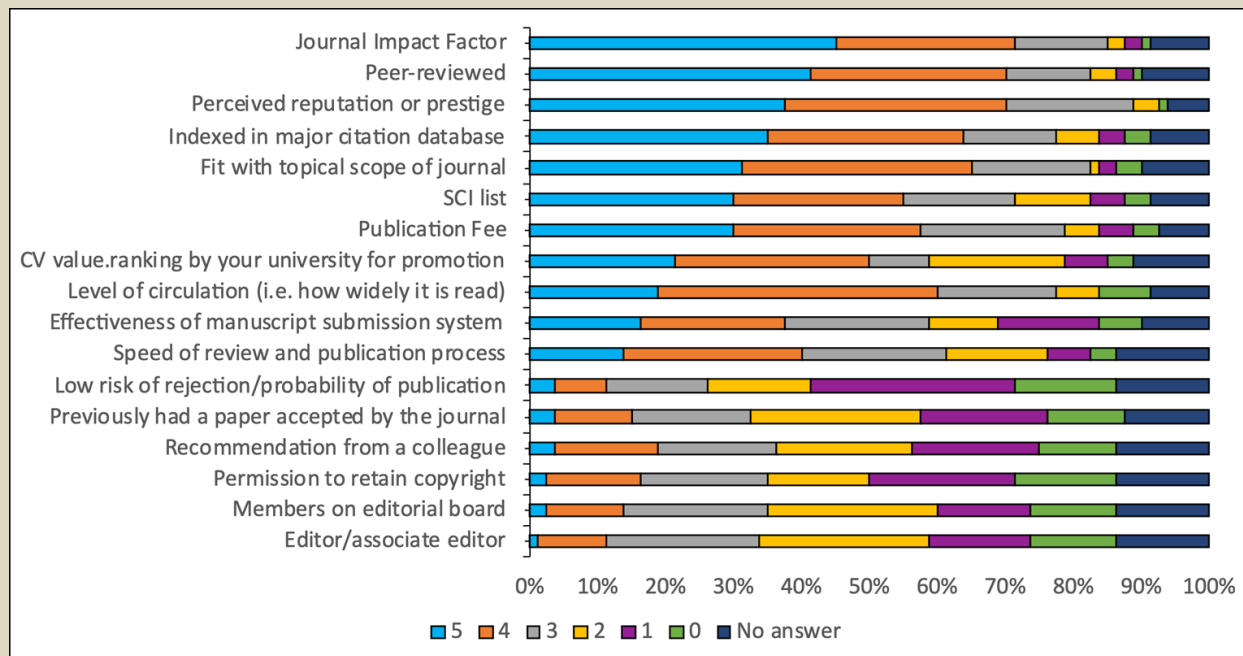


Figure 4: Factors influencing participants' decision to publish in an open access journal. Preferences were recorded using a range of values 0 – 5 with 0 indicating "not at all important" and 5 indicating "extremely important".

Student Recruitment and Retention in Mining Engineering Schools

SOMP Panelists



Elisabeth Clausen
RWTH Aachen
Germany



Kray Luxbacher
Virginia Tech
United States



Yang Li
China Univ. of Mining
and Tech. Beijing
China



Violetta Sokół-Szewiła
Silesian University of
Technology
Poland



Mario Cedron Lassus
Pontificia Universidad
Católica del Perú
Perú



Rudy Sayoga Gautama
Bandung Institute of
Technology
Indonesia



Cuthbert Musingwini
University of
Witwatersrand
South Africa



Oleg I. Kazanin
Saint Petersburg
Mining University
Russia

Date:

Friday, April 9, 2021

Time:

9:00 am New York City time, United States

Zoom link:

<https://www.zoom.us/j/93935074351>

Moderated by:

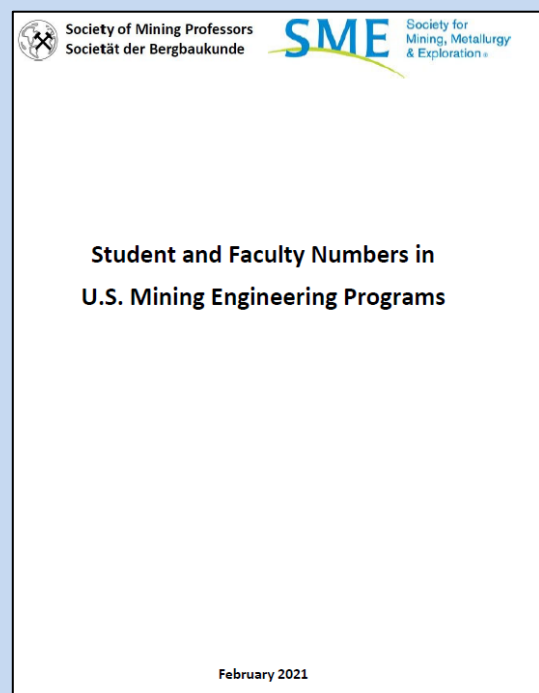
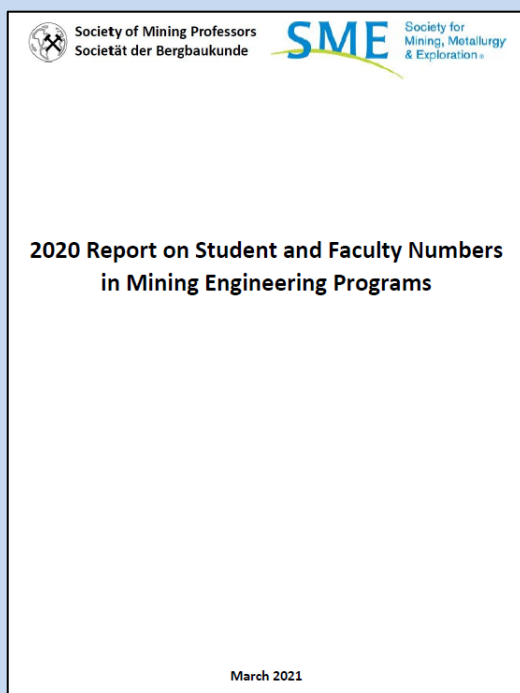
Vladislav Kecojevic, SOMP Secretary General,
West Virginia University
Oscar Jaime Restrepo Baena, SOMP President,
Universidad Nacional de Colombia

SOMP Survey

A survey on undergraduate and graduate students, and faculty members in mining engineering programs across the globe was conducted in February 2021 as a joint effort of the Society of Mining Professors (SOMP) and the Society for Mining, Metallurgy, and Exploration (SME). A copy of the report can be downloaded from the SOMP web site:

<https://miningprofs.org/Documents/DocumentsList?tp=SOMPSurvey>

An extended report on mining engineering programs in the United States was also published as the joint effort of SOMP and SME.





Society of Mining Professors Societät der Bergbaukunde

Call for Nominations and Applications

- **SOMP Education Committee Chair**
- **SOMP Research, Development and Industry Committee Chair**

Please send your one-page vision and plan of activities for respective committee to either SOMP Secretary General Vlad Kecojevic (Vlad.Kecojevic@mail.wvu.edu), Deputy Secretary General Serkan Saydam (s.saydam@unsw.edu.au) or Deputy Secretary General Treasurer Elisabeth Clausen (eclausen@amt.rwth-aachen.de) by March 30, 2022.



Meet our new Council Member from Latin America

Jorge Soto Yen

I am a Professor in the School of Mining Engineering and Environmental Management at the University of San Marcos (UNMSM), Lima, Perú. Before joining academia, I worked as a mining engineer with more than 15 years of professional experience in management positions for prestigious companies like Buenaventura Mines, Dynacor Gold Mines, Málaga INC, Barrick Gold Mines, Graña y Montero, Veta Dorada Mines, Pacific Mining Construction and General Manager in Prevconsult. I have been an active Society of Mining Professors (SOMP) member since 2016. I have decided to join SOMP to bond with high qualified colleagues from other universities. My main objective was research because it stimulates critical thinking and allows us to learn from each others. Another of my purposes was to make mining schools of Perú become known in the world.



Alexandra Radl



I am a scientific research assistant and PhD student at the Institute for Advanced Mining Technologies (AMT) from RWTH Aachen, Germany. Before I joined the institute as a scientific research assistant in 2018, I graduated from RWTH Aachen in Environmental Engineering with a specialization in Recycling. I have joined SOMP in the beginning of 2021 and have been active in the Members Development Committee since then. For me, to get in contact with colleagues from other universities, was one of the reasons to join SOMP. I enjoy the concept that SOMP promotes the exchange of information and partnerships in research and teaching among its members.

A portrait of a man wearing a black graduation cap and gown with an orange and maroon stole. He is smiling and looking slightly to the right. The background is a blurred stone wall.

Meet our new Education Committee Member

Juan Jose Monsalve

I am a Colombian mining and metallurgical engineer, and PhD Candidate at Virginia Tech. I was recently awarded the Michael Karmis SOMP PhD Fellowship. A focus of my research is on integrating laser scanning with stochastic discrete element numerical modeling to evaluate and assess rock fall hazards in underground tunnels, and pillar failure in underground mines. I am also interested in the design and application of ground control management plans as an administrative control tool for reducing ground-control-related accidents and improve safety in underground excavations. I believe education at all levels is the best way to transform realities and thrive as industry and society. I joined SOMP in 2019 because my long-term goal to serve society by preparing the mining engineers of tomorrow. SOMP is a great community where I can learn from the experience and perspective of professors from different countries on how to make a better and more sustainable world through the responsible extraction of minerals. This year I will be part of the Education Committee.

Meet our new Research, Development and Industry Committee Member

Sandra Nowosad



I am a scientific research assistant at the Institute of Underground Mining Methods and Machinery at TU Clausthal in Germany, where I am also a PhD student. Previously, I obtained a masters degree by CUT and a bachelors degree at Pontificia Universidad Catolica del Peru, both in Mining Engineering. I joined SOMP by the end of 2020 and been a member of the Research Committee since September 2021. I decided to join SOMP to be able to learn, exchange ideas, knowledge, research opportunities and also memorable experiences with our colleagues from other universities all over the world.



Meet our new Members Development Committee Member

Chengguo Zhang

I am a Senior Lecturer in the School of Minerals and Energy Resources Engineering at UNSW Sydney. I received my B.E. in Mining Engineering from China University of Mining and Technology in 2010 and Ph.D. in Mining Engineering from UNSW Sydney in 2015. I work in the discipline of mining engineering, particularly in mine geomechanics research throughout my career, aiming to improve safety and sustainability in mines by conducting fundamental and applied research. Specifically, my research interest focuses on the critical areas in the mining industry, such as dynamic rock mass failures, the interaction of mining and groundwater, thick seam mining and mine data analysis and visualisation. I have been the lead investigator for many industry funded projects in mine geotechnical engineering, and the chief investigator for many multidisciplinary research projects. My research leads to novel and unique solutions that previously have limited understanding and directly applies and translates to industry practices. Inspired by my mentors who already are SOMP members, I became an active SOMP member in 2018. The Society provides me an unique opportunity to interact with other mining academics over the world and to accelerate my career development, particularly as an early career academic.

Future SOMP Annual General Meetings

The 2022 SOMP Annual General Meeting



Namibia University of Science and Technology

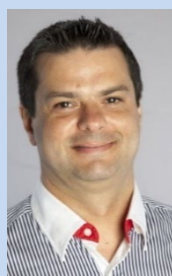
Regarding the conference's program, we look forward to a session in Windhoek with our senior members sharing how best to navigate our chosen careers and avoid the pitfalls of academia and another session with the upcoming professionals to share their perspectives on the evolving global challenges. Namibia University of Science and Technology and Namibia awaits you with warmth and open arms in September 2022.

The 32nd Society of Mining Professors Annual Meeting and Conference will be hosted by the Namibian University of Science and Technology at the Windhoek Country Club and Resort from 8–14 September 2022. Namibia University of Science and Technology (NUST) is honored to collaborate with the Southern African Institute of Mining and Metallurgy (SAIMM) to host the annual meeting and conference. Our country is richly endowed with mineral resources, and the mining industry significantly contributes to the national economy. Namibia is home to the world's oldest desert and has the highest dunes globally, and is home to some of Africa's most spectacular natural sights. The Southern part of Namibia (Karas region) hosts the Fisher river canyon, the second largest canyon after the Grand Canyon in the USA, and Sossusvlei's spectacular scenery rust-red sand dunes set against white pans. Delegates will have an opportunity to experience the warm hospitality of the Namibian people and their cultural activities. There will be opportunities to visit some operating mines and unique game parks home to a diversity of wildlife, including the big five. Swakopmund, Walvis Bay, and Lüderitz are notable coastal towns where the dunes meet the ocean. With a stable political climate, diverse cultural heritage, sound infrastructure, and a beautiful climate, this country is a shining jewel on the African continent. I can express it with certainty and confidence that the warmth of the Namibian people can only be ideal for our delegates and the country has a lot to offer to the delegates, pre-conference and post-conference itinerary.

The 2023 and 2024 SOMP Annual General Meetings



Oliver Langefeld



Serkan Saydam

At the SOMP Council meetings in Beijing, China and Bochum, Germany (in 2018 and 2019, respectively), and Council online meetings, because of COVID pandemic in 2020 and 2021, the decision was made for the future leadership of the Society through 2024, and hence the annual meeting venues for 2023 and 2024. The SOMP Council and membership confirmed the 2022-2023 Presidency of Oliver Langefeld (TU Clausthal), and the 2023 SOMP Annual General Meeting will be held in Clausthal, Germany under his leadership. Serkan Saydam (University of New South Wales) was elected as the 2023-2024 SOMP President, and for the second time the SOMP Annual General Meeting will be held in Australia. Proposals to host either annual or regional meetings should be made to the Council of the Society and submitted through the Secretary-General. The next Council meeting is scheduled for September 2022 in Namibia, so any proposals to be considered should be received by the Secretary-General no later than May 31st, 2022.



NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY

32nd Society of Mining Professors' Annual Meeting and Conference

Dates: 08-11 September 2022, Tours and Technical Visits

12- 14 September 2022, Annual Meeting and Conference

Venue: Windhoek Country Club and Resort, Windhoek, Namibia



Society
of Mining
Professors



SAIMM
THE SOUTHERN AFRICAN INSTITUTE
OF MINING AND METALLURGY



10th SOMP Regional Meeting
hosted by
Universidad Nacional Mayor de San Marcos
Lima, Peru
June 22 – 24, 2022
Contact: Prof. Jorge Soto Yen
Email: jsotoy@unmsm.edu.pe



Society of Mining Professors
Societät der Bergbaukunde

11th SOMP REGIONAL MEETING
IN SOUTHEAST ASIA



Location: Hanoi University of Mining and Geology

Duc Thang, Bac Tu Liem, Ha Noi, Viet Nam

Date: 10-11, Oct 2022

Contact: Nga Nguyen (nguyenthihoainga@humg.edu.vn)

In connection with the International Conference on Geo-spatial Technologies and Earth Resources (GTER2020)

<http://qter2022.humg.edu.vn>



Memorandum of Understanding (MOU)

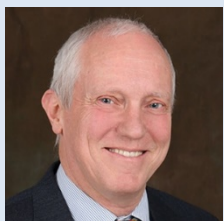
In recognition of shared educational, research, capacity building and strategic interests, the Society of Mining Professors/ Societät der Bergbaukunde (SOMP) and Facultad de Ingenieria de Minas Universidad Nacional del Altiplano de Puno Perú (FIM UNAP) agreed to support Memorandum of Understanding to advance and promote the mutual interests of mining engineering educators, students and professionals.

SOMP Members Awards and Recognitions



Zach Agioutantis

Zach Agioutantis (University of Kentucky, USA) received the Stephen McCann Award for Excellence in Education from the Pittsburgh Coal Mining Institute of America (PCMIA). The PCMIA annually recognizes an individual for his/her exemplary contributions to minerals education.



Jürgen F. Brune

Jürgen F. Brune (Colorado School of Mines, USA) received the Howard Hartman Award, recognizing him for outstanding contributions to the field of mine ventilation. The Howard L. Hartman Award, established in 1989, recognizes distinguished contributions in practice, teaching or research in the

field of underground ventilation engineering. The award is presented every other year at the North American Mine Ventilation Symposium.



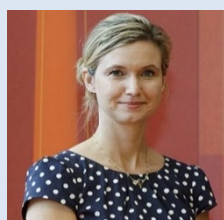
Peter Moser



Philipp Hartlieb

Peter Moser (Montanuniversitaet Leoben, Austria) was re-appointed as high level group member of the European Innovation Partnership of the European Commission.

Philipp Hartlieb (Montanuniversitaet Leoben, Austria) has been promoted to Associate Professor Level.



Elisabeth Clausen

Elisabeth Clausen (RWTH Aachen, Germany) was appointed as member of the Scientific Advisory Board of the Australian Research Council Industrial Transformation Training Centre for Integrated Operations for Complex Resources.



Vadim Petrov

Vadim Petrov (National University of Science and Technology, Moscow, Russia) received the Medal of Honor of the Technische Hochschule Georg Agricola University (THGA) for his special contribution to strengthen the international academic partnership in education between the National University of Science and Technology (MISIS) in Moscow and THGA.



Nguyen Thi Hoai Nga

Nguyen Thi Hoai Nga (Hanoi University of Mining and Geology - HUMG, Vietnam) was elected as the Vice President for Asia of International Social Security Association, Prevention in Mining (ISSA Mining).



Bui Xuan Nam

Bui Xuan Nam (Hanoi University of Mining and Geology - HUMG, Vietnam) received the national title of Meritorious Teacher for his excellent performance in education and training. The national title is granted every three years for teachers and lecturers in the education system of Vietnam to honor their good ethics, dedication to teaching profession and wide influence on their professional field and society.



Jürgen Kretschmann

Jürgen Kretschmann (THGA Bochum, Germany) was appointed as the member of the Advisory Board of the International Safety and Security Association Mining (ISSA Mining), and a member of the International Advisory Board of the World Engineering Convention 2023 in Prague, Czech Republic.



Joao Felipe Coimbra Leite Costa

Joao Felipe Coimbra Leite Costa (Federal University of Rio Grande do Sul, Brazil) received The Wardell Armstrong Prize for the best paper published in Transactions B: Applied Earth Science. The title of the paper is "The treatment of missing 'not at random' geological data for ore grade modelling", and it was co-authored with Camilla Z da Silva.



Angela Binder

Angela Binder (TU Clausthal, Germany) received the "Digital Education" award by TU Clausthal. The award is a tribute to individual staff members of all status groups, but usually not professors, for implementing creative, sustainable ideas in the digital semester.



Vlad Kecojevic

Vladislav Kecojevic (West Virginia University, USA) has received the Society for Mining, Metallurgy, and Exploration's Fellow Award. SME presents its Fellow Award to a select few members who have made sustained and notable contributions to the society and industry. Only 1.8% of the more than 15,000 memberships spanning more than 100 countries receive this prestigious award.



Antonio Nieto

Antonio Nieto, with co-author J.F. Medina, received Silver Medal for the paper entitle "Development of a socio-economic strategic risk index as an aid for feasibility assessment of mining projects and operations" by the South African Institute of Mining and Metallurgy. Silver medals are awarded for papers which make a major contribution to the professions of mining and metallurgy and to the prestige of the Institute.

SOMP Members Awards and Recognitions



Hamed Lamei Ramandi



Chengguo Zhang



Joung Oh



*Patricio A. Oportus
Romero*



Victor Arad

Joung Oh (UNSW Sydney, Australia) was promoted to Associate Professor level and **Chengguo Zhang** and **Hamed Lamei Ramandi**, both UNSW Sydney, were promoted to Senior Lecturer level.

Patricio A. Oportus Romero (Universidad Santo Tomas, Chile) has completed a new textbook on Global Trends and the Mining of the Future.

Victor Arad was elected as the Full Member of the Romanian Academy of Technical Sciences. This promotion at the highest level was achieved due to his scientific activity in the field of research.

Sezer Uludağ (University of Pretoria, South Africa) was awarded the Daniel Krige Award for the Best Student Paper during the APCOM conference. The paper title is "Application of system dynamics principles to surface mining problems" and it was co-authored with Leon Pretorius.



Biljana Kovačević Zelić

The University of Miskolc awarded an honorary doctorate degree to **Biljana Kovačević Zelić**, professor at the Faculty of Mining, Geology and Petroleum Engineering, University of Zagreb in a special ceremony on the occasion of the beginning of the new academic year in September 2021. The honorary title was conferred to Biljana at the initiative of the Faculty of Earth Science and Engineering for her exceptional contribution to the cooperation between the University of Miskolc and the University of Zagreb, and her scientific contribution in the field of clay materials research. In the presence of the Senate members and guests, after a speech given by the promotor, professor Gabor Mucsi, Dean of the Faculty of Earth Science and Engineering, the honorary doctorate degree certificate was

awarded to professor Biljana Kovačević Zelić by professor Zita Horváth, Rector of the University of Miskolc. Considering the fact that the Faculty of Earth Science and Engineering in Miskolc, founded in 1735, is one of the oldest scientific and educational institutions in the world in the field of mining and geology, the award represents a great honour to both Biljana Kovačević Zelić and the University of Zagreb.



Awards Dinner at 2021 SOMP Meeting in Medellin, Colombia

Research Highlights



Adrianus Halim



Elisabeth Clausen



Rudrajit Mitra

Luleå University of Technology of Sweden and RWTH Aachen of Germany are involved in a large consortium that has started a new European Union (EU) funded collaboration project, Next Generation Carbon Neutral Pilots for Smart Intelligent Mining Systems (NEXGEN SIMS). The project started on May 1, 2021 and will run until April 30, 2024. The total budget for this project is EUR 16 million. Beside these two universities, other members of the consortium are EU's major Original Equipment Manufacturers (OEMs), mining companies, and mining consulting firms from four EU member

states Sweden, Finland, Germany, and Poland, and an Australian mining company OZ Minerals. The Swedish OEM Epiroc is the project leader. Detail of the project can be found in <https://www.nexgensims.eu/>.



Adrianus (Adrian) Halim from Mining and Rock Engineering research group at Luleå University of Technology is working on Work Package 1 of the project where he and his PhD student Jenni Hooli are developing a concept for designing an underground mine where all machines are Battery Electric Vehicles (BEVs).

Elisabeth Clausen and **Rudrajit Mitra** with a team of Scientific Research Assistants from the Institute for Advanced Mining Technologies (AMT) at RWTH Aachen University are working on four different work packages. One task is the development of a system for the short-term provision of a communication network in areas without any infrastructure. Furthermore, a sensor system is being developed to monitor air quality in mines, especially when switching to battery-powered vehicles. As a contribution to autonomous driving and to increase the safety of workers and machines, the AMT is also developing a sensor technology for automatic muck pile detection.



Oscar Jaime Restrepo Baena



Juan Jose Monsalve

Oscar Jaime Restrepo Baena (Universidad Nacional de Colombia) and **Juan Jose Monsalve** (Virginia Tech) were awarded a \$5,000 grant from the Society for Mining, Metallurgy and Exploration (SME). This grant was awarded to support a program on "Building Capacities for Mining Professionals". The purpose of this project is to build capacities for Colombian mining professionals on health and safety, and technical aspects to improve Colombian mining industry standards. With this project the SME Colombia Section and its key partners seek to create capacities through the development of training, workshops, and graduate certificates, in relevant topics for Colombian mining industry, such as mining occupational health and safety, ground control, resource and reserves estimation international standards, and sustainable mining

territories. The project will address undergraduate and graduate students as well as professionals from the industry including lawyers, geologists, metallurgists, and engineers working in related mining fields that are part of the AIMC and SME Colombia Section.

THGA, Bochum, Germany has started a new Master Program in English language called Material Engineering and Industrial Heritage Conservation.

Research Highlights



Serkan Saydam



Ismet Canbulat



Hamed Lamei Ramandi



Chengguo Zhang



Joung Oh



Binghao Li



Simit Raval

Serkan Saydam, Chengguo Zhang, Joung Oh and Hamed Lamei Ramandi (UNSW Sydney, Australia), received a Cooperative Research Centres Projects (CRC-P) Grants on “Developing high-capacity dynamic rock reinforcement for underground mines”. Total Grant amount: \$3m - Total Project Value: \$8m with Jennmar Australia, JIMACK Pty Ltd.

Binghao Li and Ismet Canbulat received a Cooperative Research Centres Projects (CRC-P) Grants on “Underground mine LoRa network for monitoring/control/backup/rescue/robotics”. Total Grant amount: \$2m - Total Project Value: \$5m with Roobuck Pty Ltd, Newcrest Mining Limited, Roboworks Pty Ltd.

Ismet Canbulat, Simit Raval, Binghao Li and Chengguo Zhang joined a team to successfully win \$5m funding for the Australian Research Council Industry Transformation Research Hub for Resilient and Intelligent Infrastructure Systems (RIIS) in Urban, Resources and Energy Sectors. This hub aims to capture the benefits of the 4th industrial revolution by using new technologies to improve global competitiveness, boost sustainability and solve industry challenges.

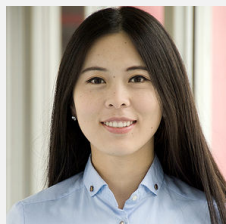
Serkan Saydam successfully chaired the 5th International Future Mining Conference (fully on-line) between 6 and 10 December of 2021, organised together with the AusIMM. **Peter Moser** (University of Leoben), **Peter Knights** (University of Queensland), **Rudrajit Mitra** (RWTH Aachen), **Steven Schafrik** (University of Kentucky) and **Chengguo Zhang** (UNSW Sydney) were included in the organising committee. SOMP was also recognised as the Conference Supporter.

Ismet Canbulat and Serkan Saydam won the bid for International Society of Rock Mechanics (ISRM) Regional Symposium – AusRock 2022 in December of 2022. The conference will be organised together with AusIMM in Melbourne.

Joung Oh and Serkan Saydam received Australia-Korea Foundation (AKF) Grant on “Determination of the stability of micro-tunnel opening in lunar regolith” in collaboration with Korean Institute of Civil Engineering and Building Technology (KICT).

Chengguo Zhang and Serkan Saydam received a grant for collaboration with **Rudrajit Mitra** from RWTH Aachen University and Youhei Kawamura from Hokkaido University to improve resources engineering education using digital and immersive technologies.

Chengguo Zhang and Ismet Canbulat received an industry-sponsored grant from Anglo American on “Development of a Digital Ground Control Management Plan”. Total Grant amount: \$500k.



Qingqing Huang



Berk Tulu

Qingqing Huang (West Virginia University, USA) has been working on selective recovery of critical minerals from acid mine drainage and its byproducts. The project is funded by the US Department of the Interior. She also leads a comprehensive study of the potential of extracting and processing critical minerals from coal-based resources, which is funded by the US DOE Small Business Innovation Research (SBIR)-RESPEC.

Vlad Kecojevic (West Virginia University, USA) has been working with the researchers from Penn State and coal mining company on development of integrated monitoring and response systems for respirable dust in surface mines and facilities. The project is sponsored by the Alpha

Foundation for the Improvement of Mine Safety and Health, Inc. The objectives of this project are to: (i) evaluate candidate dust sensor technologies and monitoring software systems for the connection, integration, and relay of data from wireless monitors to a centralized system; (ii) characterize respirable dust exposures by occupation and operation; (iii) design and deploy a wireless sensor network for respirable dust monitoring including a centralized monitoring platform with real-time situational awareness and response capabilities; and (iv) evaluate performance of the integrated monitoring and response system for respirable dust.

Berk Tulu (West Virginia University, USA) has been leading several research projects:

- Autonomous Robotic Early Warning System for Underground Stone Mining Safety (funded by the Alpha Foundation). This project proposed to develop a methodology for an enhanced monitoring and warning system for old workings in underground stone mines using an autonomous robotic system that is comprised of an Unmanned Aerial Vehicle (UAV) tethered to an Unmanned Ground Vehicle (UGV). This combination of remote vehicles can optimally provide high-resolution 3D maps, which are then used as input for assessment of pillar and roof damage, and stability analysis.
- Analysis of Longwall Mine Layouts (funded by US DHHS-CDC-NIOSH). The research project comprises the assessment of six different longwall mine layouts under various conditions using FLAC3D ver. 7. The intention is to supplement resources to analyze the monitored sites to examine impacts of various conditions such as different depositional conditions, depths of cover, panel layouts, bleeder layouts and pillar layouts. The final models will be expected to provide reasonable agreement with the measured and observed conditions at the mine sites using previously developed modeling procedures and developer's expertise.

Research Highlights

- Mine-Specific, Geology-Dependent Pillar and Standing-Support Design Tools (funded by the Alpha Foundation). This project proposes to develop geology-dependent mechanical loading models to improve pillar design, and a geology-dependent GRC to improve longwall gateroad support design.
- A Practical, Mechanics-based Approach to Pillar Design (funded by the Alpha Foundation). In this research, overburden mechanics under a variety of loading conditions and geologic conditions that extend beyond the range of the limited field monitoring case history sites were investigated with numerical models. Mechanisms affecting the behavior of an overburden and overburden/pillar interactions were studied by advanced calibrated models. Once the behavior is understood, then a pillar loading approach was developed and incorporated into the practical design tool.
- Minimizing Rib Failure Hazard through Improvement of the Coal Pillar Rib Rating System, Development of Stability-Mapping Tool and Feasibility Demonstration for Low-Cost, High-Resolution Rib Monitoring (funded by the Alpha Foundation). In this project, a portable SLAM based mobile mapping system will be used in an underground coal environment to evaluate its potential as a practical rib monitoring technology and necessary modifications to the system will be identified to accommodate intrinsic safety requirements.



Philipp Hartlieb

Montanuniversitaet Leoben, Austria started a new big Horizon Europe Project, entitled DigiEcoQuarry. **Philipp Hartlieb** is the project manager. This European project receives funding under the EU Horizon 2020 program and has a duration of four years. It aims to design, develop and validate an Innovative Quarrying System (IQS) comprising sensors, processes, tools and methods for data capture, processing and sharing to provide integrated, digitalised, automatic and real-time process control for aggregates quarries. We combine advanced technologies and integrate selected innovative digital solutions for application in quarry operations. The goal is to enhance health & safety conditions for workers, to improve selectivity and efficiency of the aggregates extractive sites, and to maximize sustainability and resource efficiency in the

quarry operations. Montanuniversitaet Leoben is one of 25 partners from Spain, Portugal, France, Germany, Italy, Austria, Sweden, Finland, Colombia and South Africa. The team at the Chair of Mining Engineering will dwell into digitalization of mining, and automated process recognition, with a special focus on environmental impact of distinct operations, as well as innovative tools based on picture recognition.

The Resources Innovation Center at Montanuniversitaet (headed by **Susanne Feiel**) has been granted a financial support by the Austrian government to continue its activities for the next 7 years. The focus of the work is on mine digitalization. Digitalization of the raw materials sector is a crucial factor for successfully leading it into the future and unlike other industries the raw materials sector still has vast ground to cover. A sustainable no impact raw materials value life cycle that gives something back to nature and the community can only be achieved with the help of innovative digital technologies as well as raw material solutions that focus on the nature of the materials and their suitability for societal application. Therefore, the Resources Innovation Center of Montanuniversitaet Leoben will focus its activities of the next seven years along the following outlines: (i) Digitization of extraction, processing and raw materials supply chains as well as digital innovation in technology and administration; (ii) Innovative raw materials for digitization and substitution of critical raw materials; and (iii) High-purity elemental carbon as a carrier material for digital applications. The scope of the activities planned at the RIC Leoben specifically addresses the Austrian and European raw materials industry in order to strongly guide and support it in its activities with scientific knowledge concerning these future-oriented topics. However, addressed are also all other stakeholders of the raw materials sector, including public authorities responsible for the management of raw materials as well as civic society as utilizing party of the raw materials in order to give them a more informed insight into the extractive sector and its relevance for sustainable development. Parts of the work will be covered through the preparation of several PhD theses and short theses as well as project preparation and coordination work with relevant partners. Networking and awareness raising events will be regular components of the portfolio as well as regular dissemination and media work.

The Mining Department of Montanuniversitaet Leoben has signed recently a contract with DSI/ Sandvik for the further development and industrialization of a new type of digital rock bolts for rock mass and ground support monitoring.

MOBI-US is an EIT RawMaterials education project that has set up a pilot student mobility network between raw materials-related master programmes of the partner institutions in the ESEE region (East and Southeast Europe): University of Miskolc, Wroclaw University of Science and Technology, University of Zagreb – Faculty of Mining, Geology and Petroleum Engineering, and AGH University of Science and Technology. With the help of the mentoring partners, the networking universities created mobility pathways for the students to develop their technical and soft skills in another university for one semester, as a complementary specialization. Each master program has its specialty, which may be missing or less focused in the curriculum of a related program of another university. Using the planned student mobility opportunities, the home programs may be complemented with specializations from the partner - in both directions, strengthening the partnership between the universities, and contributing to the development of a well-prepared work force for the raw materials sector in the ESEE region.

In Memoriam



Assoc. Prof. David Laurence
UNSW Sydney, FAusIMM
1953 – 2021

David was passionate about the mining industry and particular about issues associated with sustainability – long before this became such a widely used term. He engaged widely with industry, and in 2009 he achieved the support of Mitsubishi Development to fund a Chair at UNSW in Sustainable Mining Practice. David was appointed as the inaugural Mitsubishi Chair of Sustainable Mining Practice in 2010 and the Director of the newly established Australian Centre for Sustainable Mining Practice (ACSMP), which was officially opened in 2011. Through his efforts in leading research, teaching and consultative engagement on this important topic, David became actively involved in industry and government initiatives – both in Australia and internationally.

David was never one to turn away from hard work and was always willing to take on more. He was a Fellow of the AusIMM and had previously held the positions of Chair of both the Darwin and subsequently Sydney Branches of AusIMM.

He was also a strong and very committed member and leader within the Society of Mining Professors (SOMP). He was the inaugural Chair of the Capacity Building Committee of SOMP which was established to support and encourage mining professionals and their education in developing countries. He had a particular interest in the countries of South-East Asia and spent many years working with and supporting groups in countries such as Vietnam, Thailand, Laos, Cambodia, Philippines and Indonesia – as well as working in many other parts of the world such as in Africa, China and elsewhere. SOMP recognised David's service in 2016 at the annual meeting in the US when he was made an Emeritus Member.

David will be remembered by his friends and colleagues as a person with a very genuine and friendly disposition – always willing to help and provide advice and assistance. He had a very easy-going personality which endeared him to many, and he will be sadly missed by all. David leaves behind his wife, Anne, two sons Tom and James, and his now one-year old grandson Toby David – son of Tom and Chloe.

by Bruce Hebblewhite



Prof. i.R. Dr.-Ing. habil. Dr. h.c.
Karl Horst Gerhardt

David passed away on 29 April 2021 at the age of 67, after a short but devastating illness, suffering from multiple cancerous tumours which had spread through his body. He had also lived for many years with Parkinson's Disease, which forced him to step down from permanent employment to a part-time academic appointment at UNSW in 2013.

David has lived a very full and rewarding career in the mining industry. He was one of a very select group of mining professionals who held both geology and mining engineering degrees – both from the University of Sydney.

He gathered a wealth of diverse industry experience in his career, including Broken Hill, the gem fields of northern NSW, Africa, and the Northern Territory of Australia where he held the position of Chief Inspector of Mines for the Northern Territory.

From this position he moved into academia in 1998 when he joined the School of Mining Engineering at UNSW in Sydney. At this stage David did not hold a PhD, so in his usual fashion, he quietly and diligently went about undertaking and successfully completing a PhD while still carrying the full-time work-load of a mining academic.

Karl Horst Gerhardt was born on 24 February 1935 in Magdala, Thuringia. In the eighth year of school, he transferred to the Bad Liebenstein State Boarding School with the aim of obtaining the Abitur. The proximity of the iron ore mining industry in Trusetal was decisive for his future career.

Horst Gerhardt's career as a miner began on 1 July 1953 after his pre-enrolment at Freiberg Mining Academy with a 14-month internship in various mining companies. Starting on 1 September 1954, Horst Gerhardt began his Diplomingenieur-Studies in the field of mining engineering, which he successfully completed in 1959 after just under the regular study time of 5 years.

After he married his wife, who was from Freiberg and whom he had already met at the first semester ball in 1955 during his final year of studies, the family decided to stay in Freiberg and consequently Horst Gerhardt began his professional career as a mining engineer on 1 July 1959, first as a pit foreman, then as a technologist and eventually as head of mining technology at the Freiberg lead ore mines. From the beginning, he was entrusted with the introduction and further development of the latest processes and technologies in base metal mining.

In 1964, Horst Gerhardt moved to the Bergakademie as a senior assistant for just under a year as part of an exchange programme between industry and university, before taking over the mining department with the geology, mining, processing and drilling technology groups at the newly founded Scientific and Technical Centre (WTZ) for Ore Mining of the then VEB-NE metal industry group in Eisleben from March 1965. In this context, the family moved from Freiberg to Sangerhausen.

As part of an expert group of the Council for Mutual Economic Assistance (CMEA) he had the opportunity to travel to and evaluate ore mines in Poland, Bulgaria, Yugoslavia, Romania, Kazakhstan, Uzbekistan and Czechoslovakia over several years.

In 1968 he changed to a management position in copper shale mining at the Mansfeld Kombinat "Wilhelm Pieck". During that time, Horst Gerhardt successfully completed the Ph.D studies he had started at the WTZ in the field of rock drilling and he obtained the title of Dr.-Ing. in 1969 at the Freiberg Mining Academy as an external Ph.D. candidate. He worked as a technologist, chief technologist and technical manager in copper shale mining until 1980.

He was responsible for the extensive technological development and modernisation of the Mansfeld mining district. In this way, Dr. Gerhardt was able to help shape all the essential elements of these mines.

In 1978, Horst Gerhardt was faced with the decision of either moving to the new Zielitz potash plant, to the planning and development team for the planned Spremberg copper mine, or to the Bergakademie Freiberg Mining Academy as a professor of underground mining. He opted for Freiberg, habilitated in 1980, again as an external scientist, and received the call to Bergakademie Freiberg in September of the same year.

During his 20 years as an active mining professor, Prof. Gerhardt guided over 300 students to their Diplomingenieur-degrees. He supervised 17 doctorates and three habilitations, and took part as an examiner in an additional 13 doctoral and 7 habilitation procedures. He was convinced that teaching, training and education formed a unity and this had priority for him. Many of his students are still thankful for this today.

Prof. Gerhardt's scientific focus was in the field of rock breaking. From 1990 onwards, his work was also oriented towards rehabilitation mining and the use of underground spaces for disposal mining and underground repositories.

His research focused on the following main areas: blast hole drilling, blasting technology, mechanical mining, horizontal and vertical drifting, mining technologies in ore and potash mining, mine closure and subsequent use of underground cavities created by mining operations.

Prof. Gerhardt has published the results of his research, positions on mining education and views on global mining issues in 122 publications, numerous lectures and three textbooks on mechanical mining.

The confirmation of his continued employment as a university professor after the German Reunification in 1990 was not a matter of course. Nevertheless, Prof. Gerhardt was reappointed as one of only a few professors from GDR times to his previous chair on 1 October 1992 by an all-German commission as a professor under new law in accordance with § 48 Para. 1 SächsHEG.

Until he reached the age of 65 in 2000, he taught and researched at the newly re-founded Institute for Mining at Freiberg Mining Academy.

During his time as a university professor, Prof. Gerhardt actively contributed to the development of the Bergakademie Freiberg. From 1980 to 1992 he headed the Institute of Underground Mining, was dean of the Geotechnical Engineering and Mining Section from 1984 to 1988 and was subsequently elected Rector twice, in 1988 and 4 1990. At the same time he was a member of the Senate (1988 - 1992) and the Council (1990 - 1994) of the Bergakademie.

Prof. Gerhardt was at the helm of the university during the phase of political change, beginning in 1989. The first task was to ensure the survival of the Bergakademie. After much turbulence and the re-election of all the university's committees, he was reelected rector in July 1990 and held this office until the Saxon University Renewal Act came into effect in September 1991.

Important decisions were made for the Bergakademie under Prof. Gerhardt during this time of upheaval. In November 1990, the Bergakademie Freiberg became the first university in the new federal states to become a member of the German Rectors' Conference. This was followed by admission to the DFG, DFN and DAAD academic networks, which would not have been possible without Rector Gerhardt's commitment. From 1991 to 1996 Prof. Gerhardt was a member of the DAAD Executive Board and from 1991 to 1999 he was a DFG peer reviewer.

On Prof. Gerhardt's initiative, the foundation of the Faculty of Economics was prioritised early on as the basis for obtaining university status.

In addition to his involvement in the academic self-administration, Prof. Gerhardt was active in numerous mining-related committees on an honorary basis.

Prof. Gerhardt was also actively involved in the task group "Education and Training" of the then re-united Mining Trade Association. Freiberg graduates soon joined the list of the prestigious Helmuth-Burckhardt-Award winners as the best mining graduates in Germany. Prof. Gerhardt seized the opportunity at the end of the 1990s and campaigned for Freiberg students to participate in the European EMC and EMEC mine study courses.

Prof. Gerhardt was a member of the editorial board of various specialist journals and was as a member or honorary member of several mining associations.

It is also worth mentioning his significant involvement in the re-foundation of the Societät der Bergbaukunde/Society of Mining Professors, of which he was a founding and honorary member. Since 1991, the Society has reunited the international community of university professors in mining, and thrives to be the leading mining academic association worldwide.

A special mention has to be made of his membership in the International Organisation Committee (IOC) for World Mining Congresses from 1988 to 2001. He represented the interests of the universities in the national preparatory committees (NOK) both of the GDR and FRG.

Prof. Horst Gerhardt has been honoured many times for his work as a miner and university lecturer.

Amongst others, in 1996 he was appointed a full member of the Saxon Academy of Sciences and in 2002 as a member of the German Academy of Engineering Sciences. In 1999, he was awarded an honorary doctorate from the Technical University of Miskolc. In 2010, Prof. Dr Horst Gerhardt was granted the highest dignity of the TU Bergakademie Freiberg, that of honorary senator, for his special services to the development of the university.

Even after his retirement, Professor Gerhard always showed great interest both in the professional development of the mining industry, in the current developments of the Fourth Saxon Mining Boom and in the further development of mining at the Bergakademie Freiberg Mining Academy.

At all times he was well informed about all new technical and technological developments in underground mining, especially concerning the current challenges of securing the supply of our European national economies with strategic raw materials. He followed both, national and international mining projects with interest, but especially focused on the Saxon projects on lithium, indium, rare earth elements, industrial minerals, copper and tungsten. Due to his many years of experience, especially on the domestic deposits, he was able to provide valuable and critical advice.

He also followed the developments at the mining institute and the succession of his chair with great interest and he helped shape the future-oriented tender for the succession of the chair. His expertise, but also his networking with industry, authorities and officials have always been helpful for us.

Staff and companions appreciate Prof. Gerhardt above all as an amiable, balancing but at the same time consistent and demanding person. We will surely miss him in our midst.

by Helmut Mischo and Carsten Drebenstedt

SOMP Website and Facebook Page

Members are encouraged to regularly visit the Society website for up to date information about our activities and to seek out information concerning other members.

SOMP Website:

<https://miningprofs.org/>

SOMP Facebook Page:

<https://www.facebook.com/mineprofs/>

Members Details

Please check that your personal details on the website are correct. Where possible, you should make corrections yourself, but if not, then please advise our IT & Communications Director, Zach Agioutantis, and request corrections or updates to be made. His email address is: zach.agioutantis@uky.edu

All members are also strongly urged and encouraged to take 10 minutes to insert their teaching and research interests into the member database. It is simple to do – we are only seeking keywords to describe your three priority teaching areas and three priority research interest areas.

SOMP Secretary-General Contact Data

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West Virginia University

e-mail: Vlad.Kecojevic@mail.wvu.edu

<http://vladislavkecojevic.faculty.wvu.edu>

2021-202 SOMP President Contact Data

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SOMP Council (2021-2022)

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Deputy Secretary General and Treasurer: Elisabeth Clausen, RWTH Aachen, Germany

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Kecojevic

Saydam

Clausen

Restrepo Baena

Musiyarira

Langefeld

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Members for Asia: Zhongxue Li, University of Science & Technology Beijing, China; Nga Nguyen, Hanoi University of Mining and Geology, Vietnam

Member for North America: Zach Agioutantis, University of Kentucky, USA

Members for Europe: Jürgen Kretschmann, TH Georg Agricola University, Germany; Marilena Cardu, Politecnico di Torino, Italy

Co-opted Members: Oscar Jaime Restrepo Baena, Universidad Nacional de Colombia, Colombia; Ronny Webber-Youngman, University of Pretoria, South Africa



Hebblewhite

Soto Yen

Li

Nguyen

Agioutantis

Kretschmann

Cardu

Webber-Youngman

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Steve Schafrik, University of Kentucky, USA

Diana Lezcano Zapata, TH Georg Agricola, Germany



Agioutantis

Carvajal-Gomez

Schafrik

Lezcano Zapata

Education Committee (2021-2022)

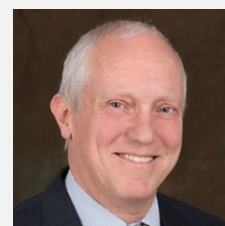
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 Oliver Langefeld, TU Clausthal, Germany
 Oscar Jaime Restrepo Baena, Universidad Nacional de Colombia, Colombia
 Biljana Kovacevic-Zelic, University of Zagreb, Croatia
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 Liu Li, Chongqing University, China
 Patrick Foster, University of Exeter, United Kingdom
 Simit Raval, UNSW, Australia
 Juan Jose Monslave, Virginia Tech, USA



Mitra



Foster



Brune



Binder



Kovacevic



Raval



Nelson



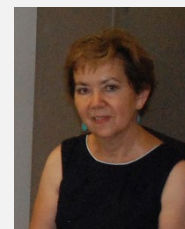
Li



Restrepo Baena



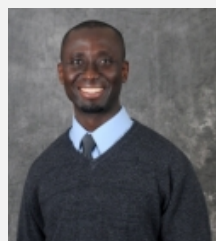
Monslave



Paszkowska

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Awuah-Offei



Silva-Castro



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Oh



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Sarver



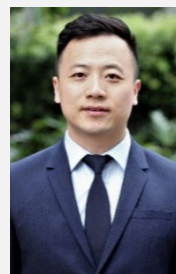
Brickey



Barakos



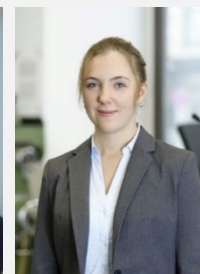
Shields



Zhang



Pavlovic



Radl

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Juan Mayhua, Universidad Nacional del Altiplano - Puno, Peru

Isabel Casasbuenas, Colorado School of Mines, USA

Helmut Mischo, TU Bergakademie Freiberg, Germany

Zhongxue Li, University of Science and Technology, Beijing, China

Nga Nguyen, Hanoi University of Mining and Geology, Vietnam

Jorge Soto, National University of San Marcos, Peru



Nguyen



Li



Mischo



Carvajal-Gomez



Musiyarira



Kretschmann



Casasbuenas



Mayhua



Soto

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Christoph Dauber, TH Georg Agricola University, Germany

Pierre Mousset-Jones, University of Nevada - Reno, USA



Pavlovic



Dauber



Mousset-Jones

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Karmis



Langefeld



Agioutantis



Mischo

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Member at Large: Oliver Langefeld, TU Clausthal, Germany



Hebblewhite



Musiyarira



Restrepo Baena



Langefeld

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Deputy Secretary General and Treasurer: Elisabeth Clausen, RWTH Aachen, Germany

President: Harmony Musiyarira, Namibia University of Science & Technology, Namibia

President-Elect: Oliver Langefeld, TU Clausthal, Germany

Immediate Past President: Oscar Jaime Restrepo Baena, Universidad Nacional de Colombia, Colombia

Director of IT and Membership: Prof. Zach Agioutantis, University of Kentucky, USA



Kecojevic



Saydam



Clausen



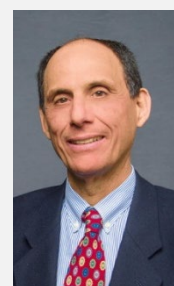
Restrepo Baena



Musiyarira



Langefeld



Agioutantis

Michael Karmis PhD Fellowship Award Committee (2021-2022)

Emily Sarver, Virginia Tech, USA, *Coordinator*

Elisabeth Clausen, RWTH Aachen, Germany

Oscar Jaime Restrepo Baena, Universidad Nacional de Colombia, Colombia



Sarver



Clausen



Restrepo Baena

Tim Shaw Award Committee (2021-2022)

The Tim Shaw Award is administered by the Education Committee, currently chaired by Rudrajit Mitra, RWTH Aachen University, Germany.

Bruce Hebblewhite SOMP Best Paper Award Committee (2021-2022)

The Bruce Hebblewhite SOMP Best Paper Award is administered by the session chairs at the SOMP Annual General Meeting and the SOMP Deputy Secretary General Serkan Saydam, UNSW Sydney, Australia.

Tim Shaw Award for Innovation in Teaching and Learning Guidelines & Procedures

Overview

The Tim Shaw Award recognizes distinguished achievement in Teaching and Learning Innovation to improve the quality of Mining Engineering education.

Eligibility:

The applicant must be and have been a member of SOMP in good standing for at least one (1) year before the call for applications. The applicant should ideally be an early or mid-career academic and must plan to attend the SOMP annual meeting. Members of the SOMP Education Committee may apply for this award but cannot serve on the Tim Shaw Award sub-committee or otherwise be involved in the selection or evaluation of awardees. The Award will not be presented posthumously.

Timeline

The Tim Shaw Award selection procedure typically adheres to the following timeline:

Due Date	Task
November 30	Call for nominations
January 31	Nomination deadline
February 1	Committee Chair provides qualified applications to members of the Sub-Committee
February 28	First round of voting complete, Committee Chair schedules conference call to discuss results (if needed)
March 11	Second round of voting complete (if needed)
March 18	Recipient name and citation provided to President and Secretary General
April 1	Recipient is notified
SOMP AGM	Award is presented. Awardee gives a Lecture

Nominations

Nominations for the Tim Shaw Award must include the following information:

1. Completed and signed application form with names of two nominators
2. A signed endorsement by the applicant's current Department or School Head
3. A signed endorsement by the Head of the student body in the applicant's current Department or School or an equivalent representative group of students. This endorsement should address the applicant's teaching ability
4. Applicant's CV
5. List of papers/publications only related to education
6. Award motivation letter, maximum 3 pages

Michael Karmis SOMP PhD Fellowship Award

Award Description

The Michael Karmis SOMP PhD Fellowship Award, established in 2019, recognizes a SOMP junior member who desires to pursue an academic career by acquiring a PhD in the field of Mining Engineering and/or Mineral Processing. The award shall consist of a cash gift (1,000 euros) and certificate. There shall be designated one award available (subject to suitable candidates) at the SOMP Annual General Meeting (AGM).

Rules

Section 1. Qualifications and Eligibility

The Michael Karmis SOMP PhD Fellowship Award is strictly limited to SOMP junior members who are currently enrolled or have been formally admitted in a PhD degree granting program with emphasis on Mining Engineering and/or Mineral Processing

Section 2. Application Requirements

Applicants are required to submit the following information as one PDF file:

- Curriculum vitae
- Proof of PhD enrollment
- Statement on short and long term career objectives, and motivating factors for seeking a career in academia (max one page)
- Three (3) letters of recommendation from active SOMP members (there shall be one letter from applicant's PhD advisor).

Section 3. Recipient Selection

The Fellowship Award Selection Committee will conduct: (1) a review of the applications, and (2) a formal interview of the top three candidates through video conferencing. Once the final candidate has been selected, her/his name will be submitted to the SOMP Council for final approval. Results of the review and rankings are strictly confidential and will not be released. The award recipient must be willing to present himself/herself in person to receive the award at the SOMP AGM, and give a presentation on his/her PhD research.

Section 4. Allowable Fellowship Award Expenses

The Fellowship Award funds are intended to cover the research related expenses, or to be used for traveling expenses to the SOMP AGM.

Timeline

Date	Task
January 1	Due date for submission of applications
January 15	Award Committee begins review of applications
February 10	Interviews are conducted for top three candidates
February 25	Award Committee submits recommendation to SOMP Council
March 1	SOMP Council notifies award recipient
September	Recipient recognized at SOMP AGM

<https://miningprofs.org/TimShawAward>

<https://miningprofs.org/michael-karmis-award>

welcome

SOMP
Medellin
Colombia
2021



Society of Mining Professors
Gesellschaft der Bergbaukundler



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