37th APCOM BANQUET
2015

RECOGNITION & AWARDS

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Fairbanks AK

Tuesday Evening
May 26, 2015
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PROGRAM SCHEDULE

- **6:30-7:00 PM** Cash Bar

- **7:00 PM** Welcome & Recognitions Debu Misra

- **7:05 PM** Dinner
  → Plated Salad
  → Roasted Tenderloin & Shrimp; or Chef's Veg and Starch Rolls and Butter
  → Classic Cheese Cake
  → Coffee & Tea

- **7:45 PM** APCOM Awards Debu Misra
  J. Steven Gardner (2015 SME President)
  Sean Dessureault (Int. APCOM Council Chair)

  2015 APCOM Scholarship Award SME President
  Int. APCOM Council Chair
  2015 APCOM Chair

  Appreciation for the Platinum Sponsor 2015 APCOM Chair

  Appreciation for the SME President 2015 APCOM Chair

- **8:00 PM** Cultural programs Athabaskan Fiddle
  Gwich’in Dancers

  Alaska – An Elder’s Patience A. Faulkner
  View of Today with A Smile
AWARD RECIPIENTS

APCOM PIONEER AWARD

1. Raja V. Ramani
2. Stanley C. Suboleski

APCOM RECOGNITION AWARD

1. Ernest Y Baafi
2. Sukumar Bandopadhyay
3. João Felipe Coimbra Leite Costa
4. Kadri Dagdelen
5. Sean Dessureault
6. Clayton V Deutsch
7. Roussos Dimitrakopoulos
8. Peter Dowd
9. Uday Kumar
10. Harry M. Parker
11. Biswajit Samanta

APCOM YOUNG PROFESSIONAL AWARD

1. Snehamoy Chatterjee
2. David F. Machuca-Mory
3. Vaibhav Raj
4. Ebrahim Karimi-Tarshizi

2015 APCOM SCHOLARSHIP

1. Taraprasad Bhowmick
Raja V. Ramani

Raja V. Ramani, Ph.D., P.E., is Emeritus George H. jr. and Anne B. Deike Chair in Mining Engineering and Emeritus Professor of Mining and GeoEnvironmental Engineering at the Pennsylania State University. He is a certified first class mine manager [1965] under the Indian Mines Act and a registered professional engineer in Pennsylvania [1971]. He was elected a member of the U.S. National Academy of Engineering in 2005.

Ramani is a mining engineering graduate of the Indian School of Mines, Dhanbad. At Penn State, he obtained his master’s and doctoral degrees in Mining Engineering. He was the Chair of the Mineral Engineering Management program from 1974 to 2001, the Head of the Department of Mineral Engineering from 1987 to 1998, and the Director of the Miner Training Program from 1992 to 2001. He co-directed the Generic Mineral Technology Center on Respirable Dust from 1983 to 1998 and the Standard Oil Center of Excellence from 1983 to 1989. He has directed 80 graduate students to advanced degrees in mineral engineering and has authored over 200 research papers and over 50 research reports.

Ramani was the 1995 President of Society for Mining, Metallurgy and Exploration, Inc. [SME]. He was a member of the AIME Board of Trustees [1994-97] and the President of SME Foundation [2001-04]. From 1984 to 1987, he was the Chair of the International Council for the Application of Computers in the Mineral Industry [APCOM].

Ramani was named a distinguished alumnus of the Indian School of Mines in 1978 and was awarded the Doctor of Science degree (honoris causa) by the School in 1997. He was elected a distinguished member of SME in 1988 and an honorary member of AIME in 2010. In 1989, he was awarded a senior Fulbright Fellow Award to the Soviet Union and in 2014-15, the Fulbright–Nehru Distinguished Chair in Engineering to India. He is the recipient of the Eavenson [1991], Stefanko [1993] and Hartman [1996] awards from SME, the Environmental Conservation [1990], Mineral Industry Education [1999], and Erskine Ramsay [2005] awards from AIME, and the Percy Nichols Joint Society Award [1992] from AIME-ASME. At Penn State, he has received the Wilson Outstanding Teaching award [1987], Stefanko Distinguished Alumni Award [2003] and Charles Hosler Scholar Medal [2006]. In 1989, he was awarded the APCOM Distinguished Achievement Award for his contributions to computer applications in the mining industry. In 2000, he received the Thornton Medal from the Institution of Mining and Metallurgy (London, U.K.). The first recipient (1986) of the Educational Excellence Award of the Pittsburgh Coal Mining Institute of America, in 2013, he received its Donald Kingery Memorial Award for his contributions to the health and safety of the miners. In 2013, he also received Prof. S.K. Bose Memorial Award for Excellence in Teaching Mining Engineering from the Mining, Geological and Metallurgical Institute of India.
Stanley C. Suboleski

Stanley C. Suboleski joined Evan Energy as Senior Vice President in June, 2011 following the sale of Massey Energy, having previously been on Massey’s Board of Directors and serving as a mining consultant to the company. Previous to his term expiring in August, 2006, he was Commissioner at the Federal Mine Safety and Health Review Commission, in Washington, DC. Prior to this position, he was Executive Vice President and Interim Chief Operating Officer of Massey Energy Company, a position he came into after returning from his earlier retirement from Massey. Between retirements he served as Professor and Department Head of Mining and Minerals Engineering at Virginia Tech. He had earlier retired as Vice President, Operations-Strategy for A. T. Massey Coal Company, Inc. and President of Massey’s United Coal Company subsidiary.

He received his BS and PhD degrees from Penn State and his MS degree from Virginia Tech. He has also worked for the North American Coal Corporation, as a mining engineer, and for Consolidation Coal (now Consol Energy), where he held several positions, ending up as General Superintendent of Underground Mines for Consol’s Central Division. He has also been Vice President at Continental Illinois Bank and Chairman of the Mining Engineering program at Penn State. He has served on the Board of Directors of several mining and mineral companies, including OKD Coal Company in the Czech Republic.

Stan is a Distinguished Member of the Society for Mining, Metallurgy and Exploration (SME), a recipient of the SME’s Howard Eavenson Award, and the AIME’s (American Institute of Mining, Metallurgical and Petroleum Engineers) Erskine Ramsey Award. In 2004, he was elected to the National Academy of Engineering.
Ernest Y Baafi

Ernest Y Baafi holds PhD from University of Arizona, MS from Penn State and BE/ACSM from Camborne School of Mines, UK. Ernest has had an extensive involvement with APCOM, attending his first APCOM symposium in 1979 in Tucson as a graduate student. Since 2007 Ernest has been the Australasian Institute of Mining and Metallurgy representative on international APCOM Council. He chaired the 35th APCOM Symposium 2011 in Wollongong and was responsible for its ultimate success.

Ernest is the current mining engineering program coordinator at University of Wollongong, Australia. Ernest’s interests extend well beyond the sphere of the University of Wollongong. He has been responsible, with assistance of Australian Agency for International Development, for setting up geostat and operations research subjects at University of Technology, Papua New Guinea. Ernest continues to spend considerable time with Engineers Australia accrediting mining engineering programs for Australian universities.
Sukumar Bandopadhyay

Dr. Sukumar Bandopadhyay is a professor of Mining Engineering at the University of Alaska Fairbanks. He has served for several years as the Dean of the School of Mineral Engineering, Director of the Mineral Industry Research Laboratory, and Director of the Petroleum Development laboratory at the University of Alaska Fairbanks. He received his B.Sc. degree in mining engineering and M.Tech degree in mine planning from Banaras Hindu University, India. He also holds an MS degree in mining engineering and operations research and a Ph.D. degree in mining engineering from the Pennsylvania State University. He is a registered professional engineer in the State of Alaska.

Dr. Bandopadhyay has received the Carol Feist award for outstanding undergraduate advising at the University of Alaska Fairbanks. He received the 2000 Society for Mining, Metallurgy & Exploration’s (SME) Coal Division Distinguished Service Award, and also the 2007 Ivan B. Rahn Education Award, and the 2010 Howard N Eavenson award from SME. He also received the 2011 Percy W Nicholls Award from SME and the 2012 AIME Mineral Industry Education Award. Dr. Bandopadhyay is a distinguished alumnus of the Indian Institute of Technology –BHU, and a Centennial Fellow of The Pennsylvania State University. He is a Distinguished Member of the Society for Mining, Metallurgy, and Exploration. Dr. Bandopadhyay has worked in coal and metal mines in various supervisory capacities for over five years. He has served in various capacities in SME/AIME and in the Coal Division. He is a past chair of the Coal Division, Past-chair and Vice-President of the Golden Northwest Region, and has served on the SME Board of Directors. He is a past chair of the Alaska Section of the AIME. He is currently serving on SME’s Education and Professional Development Strategic Committee.

Dr. Bandopadhyay is the Founder-Chair of the International Arctic Mining Council and was a co-editor of the proceedings of the First and the Second International Symposium on Mining in the Arctic. He is also the editor of the Proceedings of the 30th International Symposium on the Application of Computers and Operations Research in the Mineral Industry, and a co-editor of the Proceedings of the 10Th. US/North American Mine Ventilation Symposium. He has over one hundred sixty peer-reviewed publications in professional journals and symposium proceedings. He served as a visiting professor at Lulea University, Sweden. He has also served on the United Nations’ Development Program (UNDP) as a TOKTEN consultant. The first APCOM he attended was the 14th APCOM at Penn State in 1976, and his first APCOM paper was presented at the 16th APCOM conference in 1979 in Tucson. Since then he has presented papers regularly at various APCOM conferences. Including he was the organizer of the 30th APCOM in Phoenix. He served as the Chair of the International APCOM Council from 2007 to 2011.
João Felipe Coimbra Leite Costa

Dr João Felipe Costa is Professor at Mining Engineer Department at Federal University of Rio Grande do Sul, Brazil where he joined in 1986. Before joining the University he served as Mining Engineer at a major coal operation in south Brazil for seven years. During this time he was involved in mining unit operations optimization including computer applications in the early 80s. He received a BSc and MSs in mining engineering from the same University where he serves up to this day, respectively in 1983 and 1992. He also was awarded a PhD degree in Geostatistics from the University of Queensland in 1997.

As a mining engineering professor, he taught subjects in the topics of open cast mining, mineral exploration and ore deposits evaluation. Presently his duties are focused in research and teaching geostatistics for undergraduate and graduate courses. Dr Joao Felipe advised more than 50 thesis and dissertations to the present and published more than 300 peer reviewed papers at journals and conference proceedings. He received a distinguished professor award at various occasions from the graduates in mining engineering from the Federal University in the last 20 years. He was also the head of mining engineering department during two occasions in the last decade. Professor Joao Felipe is a member of the Australasian Institute of Mining and Metallurgy, AusIMM, the International Association for Mathematical Geology, IAMG; the Society of Mining Engineers – SME, USA; Society of Mining Engineers – Brazil and the South African Institute of Mining and Metallurgy - SAIMM

He coordinates the mineral exploration and mine planning research lab at his University for the last 20 years and has been involved with APCOM since 1996 when he published his first paper at the conference proceedings. Since then, Joao Felipe has been part of APCOM meetings regularly publishing papers and serving at the technical committee.

He was the chairman of the 2013 APCOM in Brazil also the co-editor of the previous conference proceedings.
Dr. Kadri Dagdelen received his BSc, MSc and PhD Degrees in Mining Engineering from the Colorado School of Mines in Golden, Colorado, USA and a ME in Geostatistics from the Ecole des Mines in Paris, France. Dr. Dagdelen started his professional career as a mining engineer at Homestake Mining Company (now Barrick Gold Corporation) in USA and was the Manager of Technical Services at Homestake before leaving to join Colorado School of Mines as an Assistant Professor in 1992. He has been on the academic faculty at Mines for the past 23 years during which time he was also involved in numerous research and consultant projects in the area of Geostatistics, large scale mathematical optimization and applications of Operations Research techniques in mining throughout the world. Dr. Dagdelen is currently Professor and previously has been the Head of the Mining Engineering Department at the Colorado School of Mines. Dr. Dagdelen served on the Board of Directors of the Society of Mining, Exploration and Metallurgy (SME) in USA for six years as well as being the Chair of the APCOM International Council for four years. He has received Distinguished Service award from SME in 2005 as well as SME’s Distinguished Member award in 2013. He is currently on the Board of Directors of Randgold Resources.
Sean Dessureault

Dessureault is an associate professor at the University of Arizona, engaged in applied research related to the integration and effective use of modern mining information systems. He directs the Mining Intelligence Re-search Group (MIRG) laboratory, having data warehouses from over twenty mines, an integrated control room for distance control of mines with real-time data stream from mines throughout the United States, and cloud as well as local servers to implement big-data research on industrial data sets and sustainability/social media data. (www.mirg.arizona.edu).

He founded MISOM Technologies Inc., a mine technology company that implements and supports real-time data warehouses, develops and deploys mobile app solutions with next-generation sensors, big data analytic services and provides technology consulting (www.misom.com). He is a recognized expert in both underground and surface mobile fleet mine automation, fleet management systems, as well as big-data in mining and data-driven sustainability.

Another company, Stakeholder Listening & Analysis co-founded by Dr. Dessureault, provides stakeholder monitoring, listening, dashboards, and online content creation and management, largely from social media and online news, to help companies better understand and communicate to stakeholders during the sensitive permitting phase of mineral development. Dr. Dessureault was awarded the Foundation of the South West American Mining Hall of Fame Medal of Merit under 40 for his entrepreneurial and academic work supporting the technological transformation of mining.
Dr. Deutsch is a Professor in the School of Mining and Petroleum Engineering, Department of Civil & Environmental Engineering at the University of Alberta. He teaches and conducts research into better ways to model heterogeneity and uncertainty in petroleum reservoirs and mineral deposits. Prior to joining the University of Alberta, Dr. Deutsch was an Associate Professor (Research) in the Department of Petroleum Engineering at Stanford University. His employment history also includes time with Exxon Production Research Company and Placer Dome Inc. Dr. Deutsch has published eight books and over 200 research papers. Dr. Deutsch holds the Alberta Chamber of Resources Industry Chair in Mining Engineering and the Canada Research Chair in Natural Resources Uncertainty Characterization. Dr. Deutsch first presented at APCOM in 1992 in Tucson. He and his students have made many presentations at various APCOM symposiums since then.
Roussos Dimitrakopoulos

Roussos Dimitrakopoulos is Professor and Canada Research Chair (Tier I) in Sustainable Mineral Resource Development and Optimization under Uncertainty, and the founder of COSMO - Stochastic Mine Planning Laboratory, McGill University, Montreal, Canada, supported by a global mining industry consortium composed of AngloGold Ashanti, Barrick Gold, BHP Billiton, De Beers, Newmont Mining and Vale, as well as National Science and Engineering Research Council of Canada and Canada Research Chairs Program. Roussos holds a PhD from Ecole Polytechnique, Montreal, and a MSc from the University of Alberta, Edmonton. He has been working during the last decades on risk-based and stochastic optimization in mine design and production scheduling. Roussos has been Senior Geostatistician with Newmont Mining, Denver, and Senior Consultant with Geostat Systems Int., Montreal. He has taught and worked in Australia, North America, South America, Europe, the Middle East, South Africa and Japan. URL: http://people.mcgill.ca/roussos.dimitrakopoulos/
Professor Peter Dowd has more than 40 years of experience in academic research, teaching and administration and in consulting to industry. His research interests include geostatistical modelling and prediction in mineral resource, petroleum reservoir and environmental applications; geological modelling and mathematical geology; stochastic modelling and quantified risk assessment in natural resource and environmental applications; definitions and reporting of ore reserves; mineral economics; financial analysis and modelling; operational research; and computer-aided mine design.

Professor Dowd’s contributions to the development and application of geostatistics were recognized by the Royal Academy of Engineering in 1998 when he was elected to Fellowship of the Academy. The citation particularly noted his “distinguished international contributions” to the application of geostatistics in mine planning and design. In 2006 he was elected Fellow of the Australian Academy of Technological Sciences and Engineering in recognition of his contributions to geostatistics and for his leadership in engineering education.

He has been cited as one of Australia’s 100 most influential engineers by the Institution of Engineers Australia.

Professor Dowd was Vice-President (2007-2008) and President (2009-2010) of the Australian Council of Engineering Deans and Chair of the Group of Eight Engineering Deans and Associates 2007-2012. He was Vice-President (1996-98) and President (1998-99) of the Institution of Mining and Metallurgy (now the Institute of Materials, Minerals and Mining).

He has consulted extensively in geostatistics and mineral economics to the mining industry in Africa, Australasia, Europe, North America and South America and the petroleum industry in the UK and Saudi Arabia. Consultancies include ore reserve estimation, reporting of reserves, mine planning, geological modelling, feasibility studies, valuation, input to the development of mining codes and assessment of the micro- and macro-economic effects of mining taxation systems. These consultancies have included evaluations of many of the world’s major orebodies and mineral deposits, particularly in Australasia, Europe and the Americas.

He has published over 200 papers and parts of books in the fields of geostatistics, stochastic modelling and spatial statistics, operational research, computer-aided mine design, mineral economics, mine finance and valuation and has developed commercialized software products for the minerals industry.

His first APCOM paper was presented at the 11th APCOM conference in 1973 in Tucson. Since then he has presented 26 papers at 17 APCOM conferences including three keynote addresses; he has been a member of the organizing committee for three APCOM conferences.
Uday Kumar

Dr. Kumar obtained his B. Tech from India during the year 1979. After working for circa 7 years in Indian mining industries (NMDC), he joined the postgraduate program of Luleå University of Technology, Luleå, Sweden and obtained a PhD degree in field of Reliability and Maintenance of mining equipment during 1990. In 1997, he was appointed as a Professor of Mechanical Engineering at University of Stavanger, Stavanger, Norway. Since July 2001, he is Professor and Head of Div. of Operation and Maintenance Engineering at Luleå University of Technology, Luleå, Sweden. Currently, he is also Director of Research and Innovation (Sustainable Transport) at Lulea University.

He is also a Visiting Guest Professor and Advisor at National Science Foundation sponsored Center of Excellence for Intelligent Maintenance Systems at University of Cincinnati, Ohio, USA since April 2011. Earlier he has been a visiting faculty at Imperial College London (2000-2001), Helsinki University of Technology (1997-2006), Helsinki and Stavanger University in Norway (2002-2004), Tromsö Univ. (2011-2014) and External examiner for Graduate Program in the area of Asset and Reliability Engineering at Manchester University, UK (2014-2018)

Dr. Kumar has more than 25 years of experience in consulting and finding solutions to industrial problems directly or indirectly related to maintenance. His research and consulting efforts are mainly focused on enhancing the effectiveness and efficiency of maintenance process at both operational and strategic levels and visualizing the contribution of maintenance in an industrial organization. Some of the manufacturing and process industries he has advised through sponsored R&D projects are ABB, ALSTOM Transport, Atlas Copco, SAAB, Statoil, LKAB, SANDVIK, Vattenfall, Swedish Transport Administration, SKF, etc. Dr. Kumar has been a guest lecturer and invited speaker at numerous seminars, industrial forums, workshops and academic Institutions both in Scandinavia and overseas.

His research & consulting interests are equipment maintenance, reliability and maintainability analysis, Product support, Life Cycle Costing, Risk analysis, System analysis, etc. He is also member of the editorial boards and reviewer for many international journals. He has published more than 250 papers in International Journals and Conference Proceedings. He is also Strategic Research Program reviewer for Canada, Belgium, The Netherlands, etc.

He is Chairman, Master & PhD Thesis award Committee of European Federation of National Maintenance Societies (EFNMS) and Chairman of Scientific Council, National Swedish Maintenance Society.

He is the recipient of the coveted Nordeas Scientific Foundation award for significant contribution to science, society and region for the year 2014 and Distinguish alumnus award from Dept. of Mining IIT BHU among others.
Harry M. Parker

Dr. Parker obtained a BSc (Stanford, 1967) and an AM (Harvard, 1969) and was engaged in mineral exploration at The Hanna Mining Company for nickel, copper and other base metals until 1972. He returned to Stanford and studied mathematical geology and geostatistics with Professors John Harbaugh and Paul Switzer. He received an MS in statistics and a PhD in Geology in 1974 and 1975. His research consisted of determining recoverable reserves using lognormal conditional probability distributions, which was published at the 1975 APCOM in Clausthal, Germany. With the help of Andre Journel the method was applied to the Imouraren uranium deposit (Niger) and was published at the APCOM in 1979.

From 1975 to 1989 he worked for Fluor Mining and Metals, starting as a mining geologist and ending up as a general manager of geology and geostatistics. He put his education to good use and was soon programming all sorts of resource estimation, mine planning, and metallurgical applications. He was involved in introducing geostatistics to China. He also did (1978) a conditional simulation of a uranium deposit located in New Mexico using sequential indicator simulation (barren and mineralized) and then a sequential lognormal simulation. This was used to assess uncertainty of resource estimates versus drill spacing.

In the mid-1980s in Zambia he developed a keen interest in reconciliation of reserves, ore control, and mill feed. The F1, F2, and F3 factors in common use today were adopted from the survey department at the Nchanga mine. He also did early work in geometallurgy, partitioning ASCu and AiCu among various concentrates and SXEW plants.

In 1989, he left Fluor for Mineral Resources Development, where he started geology/resource estimation. A very interesting assignment was to develop kriging programs for Bingham Canyon Utah. This was published at the 2001 APCOM in Beijing. The algorithms are still used on the mine with some updating over a 20+ year period.

Two major projects stand out from the 1990s: 1) Leading a 25 person team to assess and value the Mineral Rights of CVRD, now known as Vale (1996), where the Government of Brazil was selling half its share in the corporation, 2) Serving as a Competent Person for the privatization of the Zambian Copper belt including the restructuring of Zambia Copper Investments, a subsidiary of the Anglo American Group (1997-2000).

During the past several years he have become involved with CRIRSCO, the Committee for Mineral Reserves Reporting Standards and the SME Committees on Resources and Reserves, Valuation, and Ethics.
Biswajit Samanta is currently working as an Associate Professor in the Department of Mining Engineering, IIT, Kharagpur. He completed his Bachelor in Mining Engineering from Bengal Engineering College. He did his Master and PhD from Indian Institute of Technology, Kharagpur. He worked as post-doctoral research associate at Oregon health and Science University as well as at university of Alaska, Fairbanks. He was also an adjunct faculty at the University of Alaska, Fairbanks for a short-period. He is currently serving as an associate editor of SME Transactions, and Mining Engineering. He was also an editorial board member of the Journal of wireless Engineering and Technology. He was also a co-convener of 34th ICSMRE. He was involved with more than 30 research and Industrial consultancy projects for mining industry. He has published more than 70 research papers in various reputed journals and conference proceedings. His research areas include mine planning, geostatistics, Operations Research, Mine ventilation, and Computer applications in Mining.
Snehmoy Chatterjee

Snehmoy Chatterjee, an Assistant Professor of Department of Geological and Mining Engineering and Sciences, Michigan Tech. Before joining to Michigan Tech, Chatterjee was working as an Assistant Professor at National Institute of Technology, India. Chatterjee specializes in ore reserve estimation, short- and long-range mine planning, mining machine reliability analysis, mine safety evaluation, and application of image analysis and artificial intelligence in mining problems. He received his PhD in Mining Engineering from Indian Institute of Technology Kharagpur, India.

During his PhD research, Chatterjee solved quality control-related problems using image analysis and statistical methods for the National Mineral Development Corporation (NMDC), India's largest iron ore producer and exporter. Chatterjee then worked as a Post-Doctoral Fellow at the University of Alaska Fairbanks where he mostly worked on ore reserve estimation of gold and platinum resources off the coast of Alaska for the US Minerals Management Service (MMS). Chatterjee then joined the COSMO Stochastic Mine Planning Laboratory at McGill University, where he focused on mine planning optimization and ore-body modeling under uncertainty. He completed ore-body and rock-type modeling projects of several other mining operations in India, Australia and Canada.

Presently, Chatterjee is actively involved in research work in the field of resource modeling, production planning, and online quality monitoring integrating multiple data types. He is teaching courses and advise students in topics related to mine planning, mineral resource modeling, mining machine reliability, and vision-based online quality monitoring. He has completed a number of sponsored research and consultancy projects in these fields for different Government organizations and mining companies in India, including the largest public sector coal company, Coal India Limited.

Chatterjee is active member of International Associate of Mathematical Geosciences (IAMG), the Society for Mining, Metallurgy and Exploration, Inc. (SME), Society of Exploration Geophysics (SEG), and the Society of Petroleum Engineers (SPE). He has served as co-convener as well as technical committee member for several international mining conferences. He is a reviewer for more than ten journals, and has received Outstanding Reviewer Status from Elsevier.
David F. Machuca-Mory

Dr. Machuca-Mory holds a doctorate degree in Mining Engineering from the University of Alberta. For his doctoral dissertation he developed a methodology for geostatistical modelling using local statistics and distributions. Previously, he obtained a postgraduate diploma in Mining Geostatistics from L'École des Mines de Paris -MINES ParisTech-, and graduated with a B.Sc. in mining engineering at Pontificia Universidad Católica del Perú.

Right after obtaining his B.Sc., he led the development of computer models and databases for the geology and the mine planning at several underground mines in his natal Peru. After his graduate studies, he worked as a postdoctoral an associate researcher at the McGill University Stochastic Mine Planning Laboratory, COSMO. There, he advanced the theory and the algorithms for applying high-order spatial statistics in the simulation of complex deposits.

Nowadays, he works as a Senior Consultant in Geostatistics at SRK Consulting Canada. Dr. Machuca-Mory has been contributing to the APCOM conference since 2005. Additionally, he has published over 15 papers in peer reviewed journals and conference proceedings, and he serves as peer reviewer of several mining and geomodelling journals.
Vaibhav Raj

Dr. Vaibhav Raj completed his bachelor's degree in mining engineering from BIT Sindri in 2006. After graduation, he worked at Central Mining Research Institute (CMRI) Dhanbad for a short period and went on to pursue master's degree at Indian Institute of Technology (IIT) Kharagpur.

At IIT, he was exposed to geostatistical ore reserve estimation techniques, production scheduling, and operation research applications in mining. His master’s work was on application of genetic algorithms on grade control for short-term production scheduling. During his tenure at IIT, he realized that a PhD degree is essential to pursue a career in research. He earned his PhD in Mining Engineering at the University of Alaska Fairbanks in May 2015. His research was focused on issues that directly impact the health, safety, and productivity of the mining industry. He applied CFD modeling for simulating pollutants transport in deep open pit under air inversion in Arctic region and based on the mitigation modeling proposed that the open pit can be cleared of the pollutants using cloud covers. He is the recipient of the prestigious Clarence Berry Fellowship in Mineral and Resources at University of Alaska Fairbanks. He has published various research papers ranging from open pit production scheduling to CFD application in open pit ventilation in reputed journals and conferences.
Ebrahim Karimi-Tarshizi

Ebrahim Karimi-Tarshizi is an assistant professor of mining engineering at Michigan Technological University Department of Geological and Mining Engineering and Sciences. Ebrahim received a Ph.D. degree in Geo-Engineering/Mining Engineering from the Mackay School of Earth Sciences & Engineering at the University of Nevada, Reno (UNR). He also received an MSc in Mining Engineering with a graduate minor in Business Administration from UNR, and an M.B.A. from the UNR College of Business. He earned his bachelor’s degree in Mining-Exploration Engineering in 2004 in Iran.

Prior to starting his graduate studies, Ebrahim conducted projects at various levels in the mining and petroleum industries. During his PhD research, he was employed part-time at Barrick Gold Corp. in the mining company’s Cortez Hills surface operation conducting a mine simulation project. During his post-graduate studies in mining, he has focused on mine systems optimization using simulation and animation techniques. He has completed simulation projects of several other mining operations in Europe and USA.

Ebrahim is actively involved in the Society for Mining, Metallurgy and Exploration (SME), where he serves in various technical and non-technical committees. He has served on different judge panels and chaired technical sessions on mine system simulation and mine health and safety for SME. He was a Program Area Manager (PAM) of Innovation and Technology for the M&E Division at the SME annual meeting 2015 held in Denver, Colorado. He is a member of the SME Young Leaders Committee and currently holds the position of Chair of the Young Leaders Membership Sub-Committee. He is on the Organizing Committee for the 37th International Symposium on the Application of Computers and Operations Research in the Mineral Industry (APCOM) in Fairbanks, Alaska. He is an SME Peer Reviewer (Scholar One Manuscript) and a technical reviewer for various mining journals. Ebrahim has been selected as the SME Henry Krumb Lecturer in 2014-2015 and has received several outstanding awards and honors from UNR and SME.
Mr. Bhowmick is a master’s of science student in Mining Engineering discipline in University of Alaska Fairbanks. His master’s research involves CFD modeling of fugitive dust transport in open-pit mines. He received his bachelor’s degree from IIEST Shibpur, India in 2013.

He is an organizing committee member for the 37th International Symposium on the Application of Computers and Operations Research in the Mineral Industry (APCOM) in Fairbanks, Alaska. He is a SME Peer Reviewer (Scholar One Manuscript) and authors of several technical papers involving researches on Mine automation, Geostatistics and Open-pit pollutant transport. His research interests are in health and safety in mining, mine ventilation, application of CFD in modelling pollutant transport in mines.