

1 – Exploration in 21th Century



SEG SPONSORED SHORT COURSE

MINISTRANTE: Cesar Aguirre – SEG/Teck Resoures, Peru

IDIOMA: Inglês

DATA: 19 de maio de 2016

LOCAL: Parque Metalúrgico de Ouro Preto, MG

CARGA HORÁRIA: 8 horas (1 dia)

CONTEÚDO: Mining exploration is an important industrial and economic activity that delivers the raw materials needed to sustain our civilization. From the start of humanity we went through different development phases; first as hunters-gatherers and then through the agricultural and scientific revolutions, during all these periods we needed to tap different mineral resources to build tools, cities and technological gadgets that have improved our life quality and expectancy. The course will focus on the mining exploration process and how to design effective exploration strategies to optimize the interaction of people, knowledge, process, and innovation and increase the probability of finding economic deposits for a particular commodity located in a specific metallogenic belt, thus contributing to add more high quality mineral resources to our society and value. Several aspects of the mining exploration will be reviewed: The science process and the exploration models, human and organizational considerations, characteristics of successful exploration groups, greenfields and brownfields exploration, area selection tools, data management, prospectivity analysis, portfolio management, value proposition in the exploration business, the business plan, the mining value chain, ranking and prioritization, toll gating, technical and non-technical risk management, doing business in exploration, budgeting and lean financial analysis, and the role of the supporting areas: Health, Safety, Environment, and Community; Finance and Accounting, Human Resources, and the Legal and Commercial. The course will also deal with the importance of building and innovation culture in the mining organization. The innovation module will deal with the current breakthroughs that are currently impacting mining exploration and the ones that will come in the future that will change the way we conduct the exploration business beyond recognition.

PERFIL DO MINISTRANTE: Cesar E. Aguirre is a certified exploration geologist with more than 25 years of experience. He is currently working as a Country Manager in Peru for Teck Resources Limited. Previously, Cesar held positions with several other companies, including Newcrest Mining, Yanacocha, Noranda Mining, Barrick Gold, Hochschild Mining, Verde Resources, and he was senior exploration geologist and mining consultant for several mining groups. He specializes in the design and execution of greenfields and brownfields exploration programs, property evaluation, and project management. His field of expertise is ore deposits that are associated with magmatic-

hydrothermal processes: epithermal, porphyry, skarn, carbonate replacement, iron oxide copper-gold, volcanic massive sulfide, and intrusion-related systems. Cesar graduated from the National Engineering University in Lima-Peru in 1990 and received an M.Sc. degree in economic geology from the CODES Program, University of Tasmania, in 2009. Other activities include membership (Fellow) of The Australasian Institute of Mining and Metallurgy (AusIMM), Director at Search and Rescue Control Center (SARCC)—assisting exploration field crews and also providing training in safety and security issues while doing field work in Peru. He has served as President of the International Congress of Prospectors and Explorers (Proexplo 2013), as a member of the Consultive Committee of Proexplo 2015 and 2017, and is a member of the Mining Engineering Institute of Peru (IIMP).