
“Mining: Potentials, Perspectives and Needs in the Chilean-German collaboration”

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Chile has abundant metals and minerals, especially in its northern desert region. None of these is more important than copper, for which Chile is widely known as the world’s number one producer. This has made mining a key sector of Chile’s economy. In addition, Chile is also one of main producers of lithium and is among the top 20 world producers of gold. New and long-term tendencies in Chilean mining like higher environmental and social awareness, increasing importance of underground mining and the lower average of the metal content in the ores on the one hand, and the increasing global demand for additional elements like rare earths on the other hand, faces the mining industry with new technical challenges. Currently Chile is moving towards environmentally friendly techniques including water and mining waste management, bioleaching, “robotic mining” and energy efficiency. Furthermore sustainability in association with mine closure and social aspects is playing a significant role in the mining related industry.

Due to the present needs, Chile increases the investment in the cooperation with other mining related countries both at innovative research projects and at human capital formation.

Seen from the other side, presently there is an increase in high-tech industries demand for metals, lithium and rare earths, what becomes apparent in the Resource Strategy of the German government, existing since October 2010. In this connection Chile plays an important role, because of its mentioned natural resources and of its reputation as one of the most attractive business destinations in South America, with a well-functioning market economy, financial markets, and high political stability. The Scientific-Technological Cooperation between Chile and Germany bases on a long tradition and is considered as very fruitful, as we can see in the “German-Chilean Resource Partnership for the Cooperation in Mining and Mineral Resources” signed in October 2013.

Germany possesses advanced knowledge and technical experience in mining and environmental management, including secondary mining from wastes and water treatment processes from mining industries. There is also long experience in mine closure and in dealing with the social impacts. In Europe in general there is an interest to develop green biotechnologies in the mining industry, with a tendency to enhance metal recoveries through recycling technologies, including recovery from dumps.

Consequently, environmentally friendly techniques, such as biomining, and sociocultural strategies must be developed together with Chilean and German academic, industrial and public representatives to meet this demands in both countries.
The symposium “Mining: Potentials, Perspectives and Needs in the Chilean-German collaboration aims to:

i) discuss ways to obtain a better coordination between publicly / politically initiated Chilean-German investigation programs,

ii) to summarize the academic offers of Chilean-German teaching and research projects with regard to innovative resource technologies sustainability, in accordance to the needs and future challenges of the mining industry and related areas and,

iii) discuss new potential industrial/academic partnerships within both countries

This symposium attends to attract representatives from the Chilean and German governments, universities and research institutes from both countries as well as representatives from companies related to environmental biotechnology and the mining sector.

Date: 19 of June 2015  
Duration: 09:00 – 17:30  
Place: TU Bergakademie Freiberg  
Language: English

Schedule:  
08:45 – 09:00 Registration  
09:00 – 09:15 Welcome  
09:15 – 10:30 Potentials  
10:30 – 11:00 Break  
11:00 – 12:30 Perspectives  
12:30 – 14:00 Lunch  
14:00 – 15:30 Needs  
15:30 – 16:00 Break  
16:00 – 17:30 Discussion

Organization: Domeyko-Network, Red Inveca and Technische Universität Bergakademie Freiberg

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