

18<sup>th</sup>



# World Copper Conference 2019

8–10 April 2019, Santiago, Chile

## Gold sponsors:



**JACOBS**<sup>®</sup>



**FLUOR**<sup>®</sup>



**Fitch**Ratings



## Silver sponsors:

**BHP**



Monday 8 April

**08:00 Registration opens**  
Sponsored by **JACOBS**

**JACOBS**

**08:00 Exhibition opens**

## Exploration Forum

**09:00 Chairman's Opening Remarks**

**09:05 Inaugural presentation**

**Vice minister of Mining, Government of Chile**

**09:20 Panel discussion: Exploring the landscape for copper exploration**

- *How are the lessons from the last super cycle being implemented differently by junior and major mining companies?*
- *Will increased recycling rates, substitution and technologies for processing of low-grade ores derail exploration?*
- *What role with above ground risks such as political and societal pressures affect exploration in an ever more connected world?*
- *Analysing the impact of technical risks such as underground mining on the exploration sector*

**Ignacio Del Río**, Partner, Director, General Manager, **Mineria Activa** (TBC)

**Luis Albano Tondo**, President, CEO & Director, **Coro Mining**

**Angus McFarlane**, Program Director, **CSIRO Mineral Resources**

**John Black**, CEO, **Regulus Resources**

**10:45 Refreshment break**

**11:15 Examining the factors determining the long-term outlook for copper and copper co-products - What are the opportunities and threats for copper price?**

- *Will deficits in the copper market ever materialize?*
- *What is the demand & price outlook for molybdenum, copper and gold?*
- *How will the growth in vehicle electrification affect copper demand and prices?*
- *What are the opportunities and threats for copper price?*

**Robert Edwards**, Managing Consultant, **CRU**

## Innovation showcase

**11:00 – 13:00**

**Hamish Sampson**, Consultant, **CRU**

**12:00 Panel discussion: What should Chile do to boost exploration in the country?**

- *Comparing and contrasting taxation, incentive systems and other measures to boost exploration in Chile, Canada, Australia and other Latin American countries*

**Jerónimo Carcelén P**, Partner, **Carcelén, Demery, Guzmán & Tapia**

**Rony Zimmerman**, Partner, **Bofill Mir & Alvarez Jana**

**BHP**

**13:00 Lunch sponsored by BHP**

**14:00 What role will new developments in finance such as crowd funding play and how they will impact on the more conventional models such as earn-in and JVs?**

**14:25 Top 5 Risks for mining in Latin America in 2019**

**Raúl Gallegos**, Associate Director, **Control Risks**

**14:50 Keynote presentation**

**Juan Luis Kruger Sayán**, Chief Executive Officer, **Minsur**

**15:10 Refreshment break**

**15:40 Panel discussion: Developments in geophysics and other exploration technologies**

**Rohan Cobcroft**, Chief Geologist, **Geological Survey of South Australia**

**Marco Nieto**, Business Development Manager, **MPX Geoservices Ltd**

**17:00 Closing remarks**

## ICA Workshop

**14:00 ICA Workshop – Demand**

- *Energy Storage*
- *Renewables*
- *Substitution*
- *Smart Homes*

Moderator: Ernest Scheyder, Mining and Future Energy  
Correspondent, Reuters

**Benjamin Freas**, Principal Research Analyst, **Navigant Research**

**Na Jiao**, Technology Analyst, **IDTechEx**

**Francisco Carranza**, Managing Director, **Nissan Energy**

**Adrien Coudurier**, **Enel Green Power**

Anette Meyer Holley, **BSRIA**

Martin Bergemann, **Siemens**

**Krisztina Kalman-Schueler**, Managing Partner, **DMM Advisory Group**, in cooperation with **MetalsPlus**

**18:00 Welcome reception sponsored by SNC Lavalin**

Tuesday 9 April

---

## World Copper Conference

**08:00 Registration opens**  
*Sponsored by **JACOBS***



**08:00 Exhibition opens**  
*Conference Auditorium sponsored by **Bechtel***



**09:00 Chairman's Opening Remarks**  
Moderator: **Robert Perlman**, Chairman, **CRU**

**09:10 Opening presentation - Chilean Minister of Mines**

**09:30 CEO Panel - Creating value**

- *The relevance of shareholder value in guiding mining companies' investment decisions today*
- *Are the lowest operating cost solutions associated with the best returns on capex?*
- *How good is the industry's track record in creating shareholder value?*

**Nelson Pizarro**, Chief Executive Officer, **Codelco**

**Arnaud Soirat**, Chief Executive, Copper & Diamonds, **Rio Tinto**

**Don Lindsay**, Chief Executive Officer, **Teck Resources Ltd**

**Ivan Arriagada**, Group CEO, **Antofagasta**

**Shuwei Luan**, President & CEO of **Minera Chinalco Peru S.A.** Vicepresident of China Copper

**Vanessa Davidson**, Director of Copper Research and Strategy, **CRU**

**11:00 Refreshment break**

**11:30 Keynote presentation**

**Robert Friedland**, Founder, Executive Co-Chairman, **Ivanhoe Mines**

**12:15 Panel discussion – technical innovation project risk management and costs**

**Paige Wilson**, (SVP), President, Bechtel Mining & Metals, **Bechtel**

**Nick Bell**, Vice President, Sales, Mining, Minerals and Technology, **Jacobs**

**Brandon Spencer**, Managing Director, ABB Process Industries, Industrial Automation Division, **ABB**

**Patrick Sikka**, Vice-President, Engineering, North America, Mining & Metallurgy, **SNC-Lavalin**

**Stream 1**

**14:45 Exploring key opportunities and threats to copper demand**

Moderator: Ernest Scheyder, Mining and Future Energy Correspondent, Reuters

- *Energy Storage*
- *Renewables*
- *Substitution*
- *Smart Homes*

**Benjamin Freas**, Principal Research Analyst, **Navigant Research**

**Na Jiao**, Technology Analyst, **IDTechEx**

**Francisco Carranza**, Managing Director, **Nissan Energy**

**Adrien Coudurier**, **Enel Green Power**

Anette Meyer Holley, BSRIA

Martin Bergemann, Siemens

**Krisztina Kalman-Schueler**, Managing Partner, **DMM Advisory Group**,  
in cooperation with **MetalsPlus**

**Stream 2**

**14:45 Outlook and opportunities in the mining equipment and services sector**

- *Introductions to METS sector*
- *What's the market outlook for the METS market?*
- *How is technology shaping the METS sector?*
- *How can the mining industry contribute to domestic diversification?*
- *What challenges will technological/environmental disruption bring?*

**Ben Jones**, Managing Consultant, **CRU**

**Pascual Veiga**, President, **APRIMIN**

**Charles O'Donnell**, Group Head of Supply Chain and Business Planning,  
**Anglo American**

**Julian Sparks**, Strategy and Development Services Manager, **Wood**

Wednesday 10 April

---

## World Copper Conference

**JACOBS**

**08:00 Registration opens**  
*Sponsored by **Jacobs***

**08:00 Exhibition opens**  
*Conference Auditorium sponsored by **Bechtel***



**08:00 Pre-conference workshop**  
*Chinese stimulus measures: Most analysts, including CRU, have been expecting China's economic transition to result in a marked deceleration in growth of Chinese copper consumption. But despite strong evidence that the Chinese economy is slowing, might government stimulus measures once again support copper demand growth?*

**Jumana Saleheen**, Chief Economist, **CRU**  
**Victor Garay**, Market Coordinator, **Cochilco**  
**Natasha Kaneva**, Executive Director, Global Commodities, Investment Bank, **J.P. Morgan**

**09:00 Chairman's Opening Remarks**

**Charlie Durant**, Principal Consultant, **CRU**

**09:05 Ruben Fernandes**, Chief Executive Officer, Base Metals, **Anglo American**

**09:20 Copper shaping the future - Today's global trends are tomorrow's drivers of demand**

**Javier Targhetta**, Senior Vice President Marketing & Sales, **Freeport-McMoRan**, President, **Atlantic Copper**

**09:35 Future preparedness of Indian Copper Industry**

**Jagdish Chandra Laddha**, CEO - Birla Copper, **Hindalco Industries Ltd**

**09:50 Boliden Mines**

**Stefan Romedahl**, President, **Boliden Mines**

**10:05 Panel discussion Ratings, finance and capital allocation**

**Ian Linnell**, President, **Fitch Ratings**

**Alvaro Ossio**, VP Senior Commercial, Finance and Business Support, **MMG Limited**  
**David Coombs**, Head of Copper Consulting, **CRU**

#### 11:00 *Refreshment break*

#### 11:30 **Sustainable copper: What is the market potential and how could it impact prices and premiums?**

**Christophe Koenig**, Senior Vice President, Commercial, **Aurubis**  
**Charlie Murrah**, Executive Vice President, Metals, **Southwire Company**  
**Mark Loveitt**, President, **International Wrought Copper Council**  
**Hugo Brodie**, AVP – Responsible Sourcing, **LME**

#### 12:15 **Beyond the base case – Copper price under different market scenarios:**

- *The impact of the recent fiscal changes in Zambia and the DRC on the cost competitiveness of copper mines and the wider implications for the global copper market*
- *US Inflation is one of the world's most important variables will the FED secure inflation expectations with a prompt and credible policy or will the restoration of price stability lead to a recession. How will these inflationary pressure and US monetary policy risk impact the global economy and commodity markets?*
- *Trade war escalates: Despite the apparent truce agreed at the G-20 meeting in Argentina, it is possible that trade war tensions could escalate again denting GDP growth.*
- *Full Chinese scrap import ban from end-2020: The Chinese category 7 scrap ban has had less of an impact on the Chinese market in 2018 than initially expected. However, a full scrap ban could be another matter, reducing Chinese imports of copper-in-scrap by over 1.5Mt from 2017 levels. How would China react? Are there enough processing plants outside China to convert the scrap into other forms of copper for the Chinese market? Or would the ban encourage the development of a modern, automated, large-scale scrap generation and processing industry in China?*

**Jumana Saleheen**, Chief Economist, **CRU**  
**Piotr Ortonowski**, Senior Market Analyst, **Eurasian Resources Group**  
**Duncan Hobbs**, Research Manager, **Concord**  
**Charlie Durant**, Principal Consultant, **CRU**  
**Mengjie Wu**, Senior Consultant, **CRU**

#### 13:00 *Lunch*

### Sulphuric Acid Seminar

#### 14:30 **Sulphuric acid seminar**

*Both sulphur and sulphuric acid prices have enjoyed significant rallies since this meeting last convened. The relative price trend between acid and copper price has diverged significantly impacting the cost structure of leaching operations has further deteriorated. When and by how much will prices weaken?*

- *CRU supply demand – Short terms pressures and long terms views*
- *Impact of Chilean smelting capacity additions*
- *Outlook for Peruvian demand*
- *Focus on the Chinese acid market*

- *Analysing developments in the acid tanker business.*

**Brendan Daly**, Markets & News Editor , Fertilizer Week, **CRU**

**Cristian Cifuentes G.**, Analista de Estrategias y Políticas Públicas, **Comisión Chilena del Cobre**

**Claudia Araya Bravo**, Head Chemetics - Latin America and Mexico, **Jacobs**



Thursday 11 April

## Site visit – El Teniente

<u>Group 1*</u>	<u>Group 2*</u>
<b>05:30 Depart Conference Hotel</b>	<b>06:00 Depart Conference Hotel</b>
<b>08:00 Arrival to Codelco El Teniente, Millán 1020, Rancagua</b>	<b>08:30 Arrival to Codelco El Teniente (Maitenes)</b>
<ul style="list-style-type: none"> <li>Welcome at Integrated Operations centre; coffee</li> </ul>	<ul style="list-style-type: none"> <li>Welcome at visitors' reception room; coffee</li> <li>Corporate and safety videos exhibition</li> <li>Equipment with personal protection equipment</li> </ul>
<b>08:30 Integrated operations centre visit</b>	
<b>09:00 Departure to Maitenes</b>	<b>09:00 Departure to the mine</b>
<b>09:30 Arrival to Maitenes</b>	<b>10:20 Arrival and Dacita Mine visit</b>
<ul style="list-style-type: none"> <li>Corporate and safety videos exhibition</li> <li>Equipment with personal protection equipment</li> </ul>	<ul style="list-style-type: none"> <li>Mine safety induction</li> <li>Visit Dacita crusher cavern</li> </ul>
<b>10:00 Departure to the mine</b>	<b>11:50 Departure to Colón Alto</b>
<b>11:00 Arrival and Dacita Mine visit</b>	<b>12:40 Lunch at company restaurant</b>
<ul style="list-style-type: none"> <li>Mine safety induction</li> <li>Visit Dacita crusher cavern</li> </ul>	<b>13:40 Departure to Maitenes</b>
<b>12:50 Departure to Colón Alto</b>	<b>14:10 Arrival to Maitenes. Return of the safety equipment. Departure to Rancagua</b>
<b>13:40 Lunch at company restaurant</b>	<b>14:40 Integrated operations centre visit</b>
<b>14:40 Departure to Maitenes</b>	<b>15:10 End of the visit</b>
<b>15:10 Arrival to Maitenes. Return of the safety equipment. Departure to Rancagua</b>	
<b>15:40 Arrival to Codelco El Teniente, Millán 1020, Rancagua. End of site visit</b>	

*\*Exact timings are subject to change*