### Program Topics

#### Nickel-Cobalt-Copper

*Including Pressure Acid Leaching* forum & panel  
15-17 November

- Nickel, cobalt and copper extraction and refining
- Pressure leaching
- Heap, tank and vat leaching
- In-situ leaching
- PAL of laterites
- Processing of subsea ores and nodules
- Processing of sulphides - pressure-ox, bio-ox, chloride leach, etc
- Ore upgrading technology
- Plant design and operation reviews and issues
- New and developing projects
- Application of mineralogy and geometallurgy
- Testwork, scale-up, process development and modelling
- Purification, preparation and recovery by SX, IX, EW, precipitation etc
- SX plant fire protection
- Solid/liquid separation and clarification
- Application of membranes
- New technology developments, applications and experience
- Materials of construction and corrosion
- Equipment design and reagent developments
- Tailings disposal and environmental

**Uranium Rare Earths**

*Including Rare Earth Process Development* forum & panel  
18 November

- Uranium ore treatment processes
- Recovery and refining of rare earths
- Recovery and refining of scandium
- Operational reviews and issues
- New technology developments, applications and experience
- Ore upgrading technology
- Recovery of other products - vanadium, base metals
- By-product uranium from phosphoric acid, copper leaching, etc
- By-product rare earths
- Plant design
- Application of mineralogy and geometallurgy
- New and developing projects
- Heap, vat and tank leaching
- Testwork, scale-up, process development and modelling
- In-situ leaching
- Solid/liquid separation and clarification
- SX/IX/CIX/RIP/RIL and precipitation processes
- Application of membranes
- Equipment design and reagent developments
- Tailings, environmental and safety issues
- SX plant fire protection
- Materials of construction and corrosion

**Gold-PM**

*Including Refractory & Complex Gold Ores* forum & panel  
18 November

- Refractory and complex ore treatment - ultrafine grinding, pressure-ox, bio-ox, roasting
- Processes for ores with copper, arsenic, mercury, antimony
- Alternative leaching mediums - chloride, thiosulphate, bromide etc
- Fit for purpose leaching systems
- New and developing projects
- Heap and vat leaching
- Cyanidation, CIP and CIL
- In-situ leaching
- Elution and gold room technology
- Gravity treatment and intensive cyanidation
- Recovery of silver and precious metals
- Application of membranes
- Operation reviews and issues
- Application of mineralogy and geometallurgy
- Cyanide recovery, recycle, detox and alternative reagents
- Solid/liquid separation and clarification
- New technology developments, applications and experience
- Plant design and new project reviews
- Testwork, scale-up, process development and modelling
- Equipment design and reagent developments
- Tailings, environmental and safety issues
- Sampling, instrumentation and control
- Application of simulation and modelling
- Materials of construction and corrosion

**In-Situ Recovery (ISR)**

*Including Enhancing ISR Permeability* forum & panel  
19 November

- Developments in uranium ISR
- Application to other metals
- Application to remnant low grade ores and mines
- Technology for enhancing orebody permeability
- Product recovery
- Applications and developments of IX, SX, and membranes
- Operational reviews
- Lessons learned from ISR operations
- Environmental protection and remediation
- Social, community and regulatory aspects
- Alternative lixiviants and leaching chemistry
- Orebody characterisation
- Geometallurgical implications
- Mineral and gangue chemistry
- Application of bio-leaching
- Process monitoring and control
- New and developing projects
- Testwork, design and operation
- Application of simulation and modelling
- Project development and feasibility studies

**Lithium & Battery Technology**

*Including Developments in Battery Technology* forum & panel  
19 November

- Lithium ore treatment processes
- Recovery of lithium from brines
- Ore preparation and leaching processes
- Purification of leach solutions
- Production of battery grade lithium product
- Battery technology
- Alternatives to lithium
- Battery recycling
- Solid/liquid separation and clarification
- Application of SX and IX
- Application of membranes
- Characterisation of lithium ores
- Operational reviews and issues
- New technology developments, applications and experience
- Ore upgrading technology
- Recovery of other products
- Application of mineralogy and geometallurgy
- New and developing projects
- Testwork, pilot plant design operation and scale-up
- Plant design and construction
- Process development and modelling
- Equipment design and reagent developments
- Tailings, environmental and safety issues
- Materials of construction and corrosion

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