## Day 2 - Tuesday 3 December 2019

**Stream 1:**
- **9.00 am - 9.40 am**
  - Keynote Presentation: Economies of Mine Planning and Equipment Selection - Ian Runge, Director, Runge International Pty Ltd

**Stream 2:**
- **9.40 am - 10.20 am**
  - Session Chair: TBA
  - Keynote Presentation: A simulation study of underground coal mining logistics and roadway development performance - B. Afrish, A. Phaswana, A. Olsson

### Session 1A: Mine Planning and Design
- **10.20 am - 11.15 am**
  - Effective ex post validation study on mine operation - O. F. Thembe, J. K. Thale
  - Analysis of Capital Allocation by Mine Competitive JMM: A Tool - D. Saurabh, T. J. Racleb

### Session 2A: Sustainable Development of Mining Resources
- **11.15 am - 12.10 pm**
  - Strategic and tactical geometallurgical application in an underground high-grade narrow-vein gold operation - P. Mao, T. Sasaoka, H. T. Tachibana
  - Solution using a bat meta-heuristic method - J. E. Lélvez, N. Morales and J. M. Martinez

### Session 3A: Advances in Surface Mine Planning Design and Computer Applications
- **12.15 pm - 1.10 pm**
  - A new search algorithm for finding candidate crusher locations inside open pits - J. M. Prahl, A. O'Sullivan
  - A new algorithm for finding candidate crusher locations inside open pits - P. M. Allan

### Session 4A: Mine Equipment Selection, Utilisation and Computer Application II
- **1.15 pm - 2.10 pm**
  - Remote sensing satellite data - I. Runge, R. Oberdiek, B. Miller, S. Chudnovsky
  - Review of mathematical models applied in open pit mining 2 - G. Edser, C. D. Happich

### Session 5A: Advances in Underground Mine Planning and Design
- **2.15 pm - 3.05 pm**
  - Developing a tool for automatic mine scheduling at Metsoch, Afghanistan - W. Abdollahi, M. Madani
  - Block modeling based on grade domain in iron ore - R. Ayre, A. Willard

### Session 6A: Mine Equipment Selection, Utilisation and Maintenance I
- **3.10 pm - 4.00 pm**
  - Field scale assessment of artificial topsoil: A Victorian coal mine case study - S. Neill, N. O'Sullivan, J. R. B. A. Credland

### Session 6B: Mine Planning and Design Modelling
- **4.05 pm - 5.00 pm**
  - Devlopment of an integrated system for stress modelling system for mining safety using multi sensor data and mini-drilling technology - T. Chaston, W. Bickley, T. Tholana

### Lunch Break & Exhibition
- **12.30 pm - 2.30 pm**
  - Lunch Break
  - Exhibition

**Keynote Presentation:**

**Conference Chair:**
TBA