### Thursday 4 June 2009

#### Session A – Opening & Technical Plenary Session
*(Chaired by Molefi Motuku, Mintek)*

- **08:30**
  - Conference Opening and Welcome
    - (Abe Mngomezulu – CEO, Mintek)

- **09:00**
  - Twenty five years of UG2 processing – what have we learned?
    - (Keith Liddell – Platmin Ltd)

- **09:45**
  - Developments in hydrometallurgy since Mintek 50
    - (Mike Nicol - Murdoch University)

#### Session B - Hydrometallurgy 1
*(Chaired by Roger Paul, Mintek)*

- **11:00**
  - Ferric ion: God's gift to hydrometallurgists to keep them humble
    - (Chris Fleming - SGS Minerals Service)

- **11:25**
  - Solvent extraction technology transforms base-metal hydrometallurgy
    - (Peter Cole - TWP Matomo Process Plant)

- **11:50**
  - Environmental considerations in hydrometallurgical base metal refining circuits
    - (Christoph Pawlik - Mintek)

- **12:15**
  - Skorpion Zinc: Facilitating mine-to-metal zinc production through solvent extraction
    - (Kathy Sole - Anglo Research)

- **12:40**
  - Troubleshooting at Zincor and improvements of the overall process
    - (Jacolien Wyethe – Exxaro)

- **13:05**
  - Lunch

#### Session D - Hydrometallurgy 2
*(Chaired by Peter Craven, Mintek)*

- **14:00**
  - Landmarks in minerals biotechnology
    - (Petrus van Staden - Mintek)

- **14:25**
  - CYCAD Process – Simulation and design software for the metallurgical industry
    - (Frank Crundwell - CM Solutions)

- **14:50**
  - PGM hydrometallurgy
    - (Les Bryson – Anglo Platinum)

- **15:15**
  - Using computer power in process development
    - (Mike Dry – Arithmetek, Inc.)

- **15:40**
  - Tea

#### Session F - Hydrometallurgy 3
*(Chaired by Kathy Sole, Anglo Research)*

- **16:00**
  - The evolution of uranium extraction technology
    - (Merrill Ford – Paladin Energy)

- **16:25**
  - The resurrection of hydrometallurgy’s own RIP van Winkle – Uranium
    - (Marthie Kotze- Mintek)

- **16:50**
  - Practical aspects of cyanide management
    - (Peter Lotz – Mintek)

- **17:15**
  - Finish
**Friday 5 June 2009**

### Session H – Plenary Session
*(Chaired by Chris Fleming, SGS Minerals Service)*

- **08:30**
  - De Beers – Leading through Technology
    *(David Noko, MD, De Beers Consolidated Mines)*
  - The Leaders Dilemma – A bird in the hand or to chase two in the bush?
    *(Tony Filmer – Filmer Consulting)*

- **09:00**
  - Enhancing long-term retention of South African women in chemical and metallurgical engineering careers
    *(Kathy Sole – IWFSA/GIBS)*
  - The NUM and Technology
    *(Frans Baleni – NUM)*

- **10:15**
  - The world crisis and its impact on minerals
    *(Bernard Lorient – Best Asset Class)*

### Session I - Mineral Processing
*(Chaired by Alan McKenzie, Mintek)*

- **11:15**
  - Converting a platinum resource into a reserve; progress in understanding UG-2 ore variability as regards metallurgical parameters
    *(Mike Bryson – Mintek)*

- **11:40**
  - Scale-up of grinding and flotation tests and plant optimization
    *(Brian Loveday – University of KwaZulu-Natal)*

- **12:05**
  - Accounting for the froth in batch flotation tests
    *(Peter Harris – University of Cape Town)*
  - The application of flotation testwork to plant design and operation
    *(Mike Valenta – Metallicon Process Consulting)*

- **12:55**
  - High Pressure Grinding Roll (HPGR) testwork at Mintek
    *(Johnny Kalala – Mintek)*

### Session J – General & Advanced Materials
*(Chaired by Sindiswa Gaven, Mintek)*

- **11:15**
  - Quest for a high-performing freight logistics system
    *(Petras Fusi - Transnet)*

- **11:40**
  - Risk management and OHS – the importance of human factors
    *(May Hermanus – University of the Witwatersrand)*

### Session K - Mineral Processing
*(Chaired by Brian Loveday)*

- **14:15**
  - The latest developments in iron ore processing
    *(Isabel King - Mintek)*

- **14:40**
  - New developments in sensor-based sorting
    *(Lütke von Ketelhodt – Commodas)*

- **15:05**
  - Modelling for concentrator design and optimization
    *(Casper Steenkamp- Mintek)*

### Session L – Mineralogy & Fluidization
*(Chaired by Amanda Quadling, Mintek)*

- **14:15**
  - The composition and crystal structures of pyrrhotite: a common but poorly understood mineral
    *(Johan de Villiers – University of Pretoria)*

- **14:40**
  - Automated SEM study of PGM distribution across a UG2 flotation concentrate bank
    *(Desh Chetty - Mintek)*

### Session M - Mineral Processing & Economics
*(Chaired by Johnny Kalala, Mintek)*

- **16:00**
  - How important is ore variability? The ethics of feasibility studies
    *(Alan McKenzie - Mintek)*

- **16:25**
  - Ore Sorting
    *(Carl Bergmann - Mintek)*

- **16:50**
  - Challenges in technology commercialisation
    *(Leon Coetzer – Braemore Resources)*

- **17:15**
  - Closing comments
    *(Roger Paul - Mintek)*

**Finish**