

**9-10 August, 2014**  
**WORKSHOP**

**Processes in magma chambers with implication to genesis of ore deposits**

**Leaders: Rais Latypov and Steve Barnes**

Pre-symposium Workshop, 12<sup>th</sup> International Platinum Symposium, Yekaterinburg, Russia (9-10 August 2014) (2 days)

**Preliminary program**

(Each talk is 45 mins, 10 mins for discussion and 5 mins for changeover.)

**9 August 2014 (Saturday) Morning**

1. **8:00-9:00:** "Platinum group elements – from the mantle to the crust" by Dr. Steve Barnes (CSIRO, Australia)
2. **9:00-10:00:** "Structural controls on intrusion emplacement, filling of magma chambers and growth of plutonic bodies" by Prof. Alexander Cruden (Monash University, Australia)
- 10:00-10:30: coffee break**
3. **10:30-11:30:** "An introduction to magma physics: physical constraints on magma flow and magmatic ore formation" by Dr. Jess Robertson (CSIRO, Australia)
4. **11:30-12:30:** "Phase equilibria constraints and dynamics of magma differentiation in small to large magma chambers" by Prof. Alexey Ariskin (Vernadsky Institute, Russia)

**12:30-13:30: lunch break**

**9 August 2014 (Saturday) Afternoon**

5. **13:30-14:30:** "Initial stage in the development of magma chambers" by Prof. Rais Latypov (Wits University, South Africa)
6. **14:30-15:30:** "Intermediate stage in the development of magma chambers" by Dr. Olivier Namur (University of Cambridge, UK)
- 15:30-16:00: coffee break**
7. **16:00-17:00:** "Advanced stage in the development of magma chambers: the case for *in situ* crystallization" by Prof. Ian Campbell (Australian National University, Australia)
8. **17:00-18:00:** "Final stage in the development of magma chambers" by Dr. Ilya Veksler (GFZ, Helmholtz Centre Potsdam, Germany)

**10 August 2014 (Sunday) Morning**

1. **8:00-9:00:** "Ore forming processes in magmatic sulfides – lessons from komatiites and disseminated sulfide ores" by Dr. Steve Barnes (CSIRO, Australia)

2. **9:00-10:00:** “Relative roles of in-situ crystallization, mechanical transport, and dynamic upgrading in the formation of komatiite-associated chromite deposits” by Prof. Michael Lesher (Laurentian University, Canada)

**10:00:00-10:30: coffee break**

3. **10:30-11:30:** “Petrological constraints on the formation Ni-Cu-PGE sulphide ores of the Noril’sk intrusions” by Dr. Nadezhda Krivolutskaya (Vernadsky Institute, Russia)
4. **11:30-12:30:** “The role of *in situ* crystallization in the origin of PGE deposits in layered intrusions: old and new insights from the Bushveld Complex” by Prof. Rais Latypov (Wits University, South Africa)

**12:30-13:30: lunch break**

#### **10 August 2014 (Sunday) Afternoon**

5. **13:30-14:30:** “Structures in cumulates and the role of gravitational slumping in the origin of ore deposits in layered intrusions” by Prof. Wolf Maier (Cardiff University, UK)
6. **14:30-15:30:** “New insights into the origin of magmatic Au-PGE mineralization in the Skaergaard intrusion, Greenland” by Prof. Reid Keays (Monash University, Australia)

**15:30-16:00: coffee break**

7. **16:00-16:30:** “The role of As as a collector of PGE in magma chambers“ by Prof. Hazel Prichard (Cardiff University, UK)
9. **16:30-17:30:** “The role of magma differentiation and post-magmatic processes in origin of PGE-rich chromitites in the Ural-Alaskan-type mafic-ultramafic intrusions” Dr. Evgeny Pushkarev (Institute of Geology and Geochemistry, Russia)

**10 August, 18:00 – Shuttles begin travelling from the Ural Federal University, (Lenin Avenue, 51) to “Family House” Café. Ice Break Party in the Uktus Ural-Alaskan-type massif.**