

## **WORKSHOP 7**

### **Latest advances in the understanding of the genesis of Ni-Cu-PGE minerals systems and associated review on exploration targeting**

1 day - Pre-conference - 23<sup>th</sup> of August 2015

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**Venue:** Ecole Nationale Supérieure de Géologie (ENSG), Bât. G, 2 Rue du Doyen Marcel Roubault - TSA 70605 - 54518 Vandœuvre-lès-Nancy Cedex, France

**Duration:** 1 day - 23<sup>th</sup> of August 2015

**Leaders:** Marco Fiorentini, CET and Steve Barnes and Margaux Le Vaillant, CSIRO

**Attendants:** 15-50

This short course will only accept 50 participants on the base “first registered-first served”  
Inscription to the SGA2015 congress is required to take part in the SGA2015 workshops/fieldtrips.

**Registration deadline:** 31<sup>th</sup> of Mai 2015

**Price:** covers courses, lunch (23<sup>th</sup> of August 2015), break refreshments and documents.

SGA student member/non-member: 50€/100€

SGA member /non-member: 200€/300€

The field of magmatic sulfide research has seen substantial recent advances in a number of aspects: large scale tectonic controls, magmatic geochemistry of the platinum group elements, and new understanding of physical processes of sulfide melt formation, transport and deposition. This workshop will present latest research results relevant to genetic models, targeting and mine-scale vectoring for magmatic Ni-Cu-PGE ore deposits, and will be of interest to explorers and academic researchers. The major goal is to make academic research findings accessible to the Ni and PGE exploration industry.

#### **Topics:**

- ✓ Mineral system understanding of magmatic Ni-Cu-PGE sulfide deposits
- ✓ Craton margin model and regional targeting criteria
- ✓ Geochemistry of magmatic sulfide systems (Ni-Cu and PGE dominant) – new developments and controls on ore compositions
- ✓ Physical processes in magmatic ore deposits – fluid mechanics of suspensions and deposition mechanisms
- ✓ High tonnage low grade disseminated ore systems

#### **Case studies:**

- ✓ New understanding in world-class systems including Noril'sk-Talnakh, Voisey's Bay; sulfide breccias, vari-textured rocks and other characteristic features
- ✓ Lithogeochemical exploration and vectoring techniques – use of PGEs and other indicators in Ni-Cu exploration.