

NOVEMBER 30TH
DECEMBER 1ST
2016
NANCY, FRANCE



INTERNATIONAL WORKSHOP
**RECENT ADVANCES
IN W-SN AND
RARE METAL
DEPOSIT
METALLOGENESIS**



INTERNATIONAL WORKSHOP RECENT ADVANCES IN W-SN AND RARE METAL DEPOSIT

The International Workshop "Recent advances in W-Sn and Rare Metal deposit metallogenesis" will take place in Nancy (France) and is hosted by the Laboratory of Excellence Resources 21 and GeoRessources at the Aiguillettes Campus of the Université de Lorraine. This specialized workshop is a 1 ½ day event and is open to all interested parties at an international level. 4 keynote lectures, 14 oral communications and 15 posters are scheduled to promote a wide discussion. This workshop is of cross-disciplinary appeal in covering all the processes involved in the formation of Sn-W and Rare Metal deposits spatially related to granites.

From analytical advances to metallogenic models, the meeting topics will provide opportunities for friendly exchange between scientists, thus offering the potential for all to accelerate knowledge/technology sharing and explore new observations that advance understanding of key metallogenic questions. Additionally, we anticipate many opportunities for useful new international collaborations to nucleate during the workshop. This workshops will support overall advances within the ore deposit groups and will help to create pathways between scientific research and industrial challenges.

WEDNESDAY NOVEMBER 30TH

08:00 – 08:45: Registration

08:45 - 09:00: **CUNEY Michel** (GeoRessources/CNRS/Lorraine University, Nancy - France)

Introduction

09:00 - 09:40: **LINNEN Robert** (University of Western Ontario, London, Canada)

Some aspects on the behavior of tungsten in magmatic-hydrothermal systems

09:40 - 10:00: **VAN LICHTERVELDE Marieke** (GET, IRD/CNRS/Université de Toulouse France)

Rare metal mineralization processes in pegmatites : constraints from crystallisation experiments

10:00 - 10:20: **VILLAROS Arnaud**, Laurent O., Pichavant M. (ISTO, Orléans, France)

Timing of Sn-W (and rare metals) deposits in the French Massif Central. What recent datings tell us?

10:20 - 10:40 Break + Posters

10:40 - 11:20: **MUCHEZ Philippe** Hulsbosch, N., Boiron, M-C., Dewaele, S. (KU Leuven, BELGIUM)

Magmatic differentiation processes and the origin of pegmatite Nb-Ta-Sn and vein-type W-Sn deposits in Rwanda

11:20 - 11:40: **ZHU Zeying**, Wang, R.C., Marignac, C., Cuney, M., Mercadier, J., Chea, X.D., Lespinasse, M. (GeoRessources/CNRS/Lorraine Univ., Nancy, FRANCE – Nanjing Univ., China)

A Nb-rich granite with Nb rich Li-Fe mica: the 130Ma (Late Yanshanian) Huangshan granite

11:40 - 12:00: **MICHAUD Julie**, E. Marcoux, M. Pichavant, C Gumiaux, E. Gloaguen, F. Noronha, A. Lima, (Université d'Orléans/CNRS/ISTO/BRGM, Orléans, France)

Sn et W associés aux granites à métaux rares : résultats concernant le granite d'Argemela et comparaison au granite de Beauvoir

12:00 - 12:20: **MOON Charlie**, (Moon Geology, Calstock and Camborne School of Mines, University of Exeter, Great Britain)

Elvan (rhyolite/quartz-porphyry) dykes of SW England: New data on their relation to Sn-W mineralisation and interaction with lamprophyres

12:20 - 14:00 Lunch

WEDNESDAY NOVEMBER 30TH

14:00 - 14:20: **JACQUES Dominique**, Vieira, V, Muchez, P., Sintubin, M. (Catholic University, Leuven, Belgium)

Residual stress release and cross-fold jointing controlling post-orogenic vein-type W-Sn mineralisation: examples from Minas da Panasqueira, Portugal.

14:20 - 14:40: **LAUNAY Gaëtan**, Sizaret, S., Guillou-Frottier, L., Gloaguen, E., Melleton, J., Champallier, R., Pichavant, M. (BRGM/ISTO, Orleans, France)

Hydrodynamic of ore deposits related to granitic intrusion: application to the Panasqueira Sn-W-(Cu) deposit (Portugal)

14:40 - 15:00: **Eleonora Carocci**, Marignac, C., Cathelineau, M., Pinto, F. (GeoRessources/ CNRS/Lorraine University, Nancy, France)

Tourmaline + W-rutile assemblage as an immediate precursor of wolframite deposition in the Panasqueira deposit

15:00 - 15:20: **LEGROS Hélène**, Marignac, C., Richard, A., Mercadier, J., Cuney, M., Charles, N., Kouzmanov, K., Tarantola, A., Vennemann, T., Wang, R.C., Lespinasse, M.Y. (GeoRessources/ CNRS/Lorraine University, Nancy, France)

Insights on hydrothermal fluids from Li-mica compositions and fluid inclusions: case of the W-Sn Maoping and Piaotang deposits (Jiangxi, China)

15:20 - 15:40 Break + Posters

15:40 - 16:20: **RAITH Johann G.**, (Montanuniversität Leoben, Austria)

Strata-bound scheelite deposits revisited - the Felbertal tungsten deposit in the Eastern Alps

16:20 - 16:40: **MIKULSKI Stanislaw** (Polish Geological Institute-National Research Institute, Warszawa, Poland)

W-Sn-Rare Metal mineralization associated with a highly fractionated granites – a few examples from the Variscan orogenic belt and its foreland in the southern Poland

16:40 - 17:00: **RÖDEL Tim** (Martin Luther University Halle-Wittenberg, Germany)

Primary mineralization and oxidation weathering of a scheelite skarn occurrence in Central Germany

17:00 - 17:20: **ZHAO Winston**, Mei-Fu Zhou, A.E. Williams-Jones, (Hong Kong University, Hong Kong, China)

Scheelite REE chemistry as a tracer of hydrothermal processes

Posters / Wine and cheese party

THURSDAY DECEMBER 1ST

08:30 - 09:10: **ROMER Rolf** (German Research Centre for Geosciences, Potsdam, Germany)

Controls on the distribution of Phanerozoic magmatic tin, tungsten, and tantalum mineralization

09:10 - 9:30: **BOULVAIS Philippe**, E. Gloaguen, M. Chevillard, R. Tartèse, L. Bailly, M. Poujol, Y. Branquet (Rennes University, FRANCE)

The syntectonic Lizio granite (Armorican Massif, France) and its Sn-W metallogenic system

09:30 - 9:50: **SIMONS Beth**, Andersen, J.C.Ø., Shail, R.K., Jenner, F.E. (Camborne School of Mines, University of Exeter, GREAT BRITAIN)

Controls on distribution of Sn-W and rare metals (Li, Be, In, Nb, Ta) in the peraluminous, post-collisional granites of the Cornubian Batholith, SW England

09:50 - 10:10: **SHAIL Robin K**, Beth, J., Simons, B. (Camborne School of Mines, University of Exeter, Great Britain)

Tectonic and structural controls on the genesis of early two-mica (G1) and muscovite (G2) Cornubian granites and their associated W-(Sn) mineralisation, SW England

10:10 - 10:30 Break + Posters

10:30 - 12:00: GENERAL DISCUSSION

14:00 - 14:45: **HARLAUX Matthieu** PhD defense

Tungsten and rare-metal (Nb, Ta, Sn) hydrothermal metallogenic systems in the late-Variscan orogenic context: example of the French Massif Central

14:45 - 16:30: Questions and discussions with the jury

16:30 - 17:00: Jury deliberation

17:00: Festivities (4th floor)

POSTERS

BONILLA A., Franco, J.A., Amaya, Z., Cramer, T. (Universidad Nacional de Colombia, Bogota, Columbia)
Tungsten in Colombia: FARC'S mine

CAROCCI Eleonora, L. Truche, M. Cathelineau, C. Marignac, (GeoRessources/CNRS/Lorraine University, Nancy, France)
Experimental study of tungsten speciation in hydrothermal solutions by Raman spectroscopy

CRUZ Claudia, Sant'Ovaia, H., Noronha, F. (Porto University, Porto, Portugal)
Magnetite-type granites and W (Mo) mineralizations. The example of the Lamas de Olo Pluton (Northern Portugal)

DAKOURE Hilaire, Fosso Tchunte, P.M., André-Mayer, A.S, Tchameni, R., Poujol, M., Turlin, F. (GeoRessources/CNRS/Lorraine University, Nancy, France)
Contraintes géochimiques et géochronologiques du granite à métaux rares de Mayo Salah, Nord Cameroun

GONÇALVES Ana, Lima, L., Mota, A., Ramos, V., Barros, J., Noronha, F. (Porto University, Porto, Portugal)
Santa Helena Breccia Pipe (Borralha): A new type of tungsten ore deposit in Northern Portugal)

HULSBOSCH Niels (K. Univ., Louvain, Belgium)
Residual boro-aluminosilicate melts in muscovite - rare-element class pegmatites: evidence from melt inclusions in tourmaline of quartz-tourmaline-muscovite pockets

LEAL Sara, Lima, A., Dias, C., Dias, F., Vieira, R., Noronha, F. (Porto University, Porto, Portugal)
Lithium exploration in Portugal: geochemical and mineralogical results from studies in the Barroso-Alvão area

MONNIER Lois, Bailly, L., Beziat, D., Melleton, J., Salvi, S., Vic G. (GET, Toulouse Univ., France)
Signatures géochimiques des quartz dans les veines minéralisées (W, Sn, Nb, Ta, Sb) de la zone de Beauvoir et des Colettes (Allier, Massif Central).

OLOBANIYI Samuel (Lagos University, Lagos, Nigeria)
Distribution of trace elements in rare metal granitic pegmatite around Lokoja, central Nigeria

RAMOS Violeta, Guedes, A, Ribeiro, M.A., Noronha, F. (Porto Univ., Porto, Portugal)
Tungsten skarn of Tabuaço: An ore deposit from the "Douro Scheelite Belt"

POSTERS

REICHL Pavel (European Metals Inc, Germany)

Last findings about Cinovec

SIMONS Beth, Shail, R.K., Andersen, J.C.Ø. (Camborne School of Mines, Exeter Univ., Great Britain)

Sn-W and rare metals (In, Nb, Ta) in the Variscan lamprophyres of SW England: inheritance from a Gondwanan continental crust and mixing with felsic melts

STERGIOU Christos, Melfos, V., Voudouris, P. (Thessaloniki, Greece)

Rare metals and uranium enrichment at the Vathi porphyry Cu-Au±U±Mo mineralization, N. Greece

VAN DAELE J., Reinders N., Hulsbosch N., Dewaele, S., Muchez, Ph.(K.Univ., Louvain Belgium)

Geochemical evolution and structural-lithological controls in the Nb-Ta-Sn mineralized granite-pegmatite-quartz vein system in the Rwamagana-Musha-Ntunga area (East Rwanda)

ORGANISING COMMITTEE

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