



International workshop
Geochemical cycle of Ni, Co and Sc:
from mining exploration to ecotoxicity
October 17-19, 2017

Amphitheater 8, Lorraine University, FST Campus Aiguillette

Vandoeuvre les Nancy, France

Preliminary programme overview of the early received contributions, and Key notes

October 17

9h00 Introduction

F. Villieras- Vice-President of the Lorraine University: *welcome adress*

M. Cathelineau : *RESSOURCES21 and the research projects on Nickel and associated elements at Lorraine University - The objectives of the workshop*

9h30

General overview of needs in the scientific and industrial fields

France Bailly-(CRNT director, Noumea, New Caledonia) - The CNRT "Nickel" in New Caledonia:

Shared vision and transverse programmes from mining to natural and human environment

Maite LeGleuher (BRGM, Orleans France): Ni market overview

Ore formation

Ni in saprolites

C. Villanova (Barcelona Univ.)-key note: The formation of Ni rich serpentines and other silicates in Dominican Republic

B. Quesnel- The role of preexisting discontinuities and geomorphology in the formation of Ni-enrichments in the saprolite

M. Cathelineau et al- The multistage formation of Ni-enrichment in New Caledonia deposits

A. Miagkyi, F. Golfier, L. Truche: Subsurface Reactive Transport Modelling of the Lateritic Ni mineralization in New Caledonia: A coupled Thermo-Hydro-Geochemical approach

Ni in laterites

R. Herrington (NHM, London)-key note: Palaeo Ni-Co-Sc laterites of Europe: diversity, formation and future potential (Ok)

E. Ramanaidou (Csiro, Perth, Australia)-key note: Ni-goethites in nickel laterites

Scandium : a hidden resource ?

J-P Ambrosi (Cerege, France)-key note: Main lateritic ore types and Ni-Sc speciation

Y. Teitler: Behaviour of scandium from source rocks to laterites

J. Cauzid : In situ analyses of Ni-Sc (Ti, V,...) using XRF

M. Munoz, M. Ulrich: "Distribution and speciation of Sc in lateritic profile of New Caledonia using synchrotron-XRF and Sc K-edge XANES spectroscopy".



October 18

Processing Ni-laterites

S. Farrokhpay- (UQ, Australia)-key note: Processing of fine grained lateritic ores: new challenges

Phytomining-Agromining

W. Hawker (Faculty of Engineering UQ, Australia)-key note: The extractive metallurgy of agromined nickel - sub OK

G. Echevarria (LSE, Nancy, France): Ni Phytoaccumulators in Indonesia and New Caledonia

M.O. Simmonot- JB Lauby- Processing of ashes issued from hyperaccumulator ashes

Ni geochemical cycle

Cécile Quantin (Paris Sud)-key note: *Ni Isotopic fractionation in the surficial cycle of nickel*

I. Zelano, C. Cloquet (CRPG, Nancy): *Biogeochemical cycle of Ni and its impact on Ni-hyperaccumulators*

October 19

Ecotoxicology and environment

C. E. Schlekat (NiPERA, Durham, USA)-key note: *The mechanisms of nickel toxicity in aquatic environments*

S. Lopez, G. Echevarria (LSE, Nancy, France): *The bacterial community diversity in the rhizosphere of Ni-hyperaccumulator plants growing in Halmahera Island*

L. Minguéz, E.M. Gross, D.A.L. Vignati, P. Wagner, P. Rouselle, S. Pain-Devin, S. Devin, F. Guérold, L. Giambérini (LIEC): *An integrated approach to the ecotoxicity assessment of nickel and other metals in aquatic organisms: A case study at Lake Ohrid (Albania)*

Remediation programmes

Fabrice Colin (IRD scientific Vice-director)-key note: *Ecosystems and mining activity in New Caledonia: impact, remediation et co-valorisation of the biodiversity*

Celestino Quintela-Sabarís, Jean-François Masfarau, Geoffroy Séré, Guillaume Echevarria et Sophie Leguédois. (LSE, Nancy): *Evaluation of soil decompaction and amendment with organic wastes on the revegetation of serpentine technosols: a mesocosm study*