

## International workshop announcement



# Rare earth elements supply: challenges and perspectives

## 8-10 October 2019 Nancy, France

The Laboratory of Excellence RESSOURCES21 (LabEx R21) and the Lorraine Earth and Environment observatory OTELO will host the first International workshop on the challenges and perspectives for supplying rare earth elements in Nancy (France), from 8 to 10 October 2019. This workshop is a call for cross-disciplinary contributions.

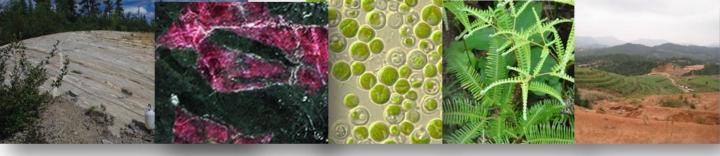
Rare earths are essential components of modern technologies. The workshop is intended to discuss the challenges and technologies to be implemented for the sustainable management of rare earth resources. Firstly, it will focus on the knowledge of deposits and ores but also on secondary resources that can contribute to ensure the supply of rare earth industries too. Rare earth extraction and separation processes will be tackled in the perspective of sustainable mining development. Finally, it will focus on the recycling of mining sites after exploitation, with a focus on ecological restoration and recovery using nature-based solutions.

Organised in four sessions, major topics will be introduced by keynote speakers.

- 1. Challenges
  - The needs and market of rare earth elements at world and European scales
  - Natural reserves, their distribution and characteristics
  - The potential of secondary resources
- 2. REE natural concentrations and REE geochemical cycle
  - Main deposits (carbonatites, alkaline intrusions...)
  - The cycle of REEs in the crust and subsurface
  - Secondary resources
- 3. Processes for sustainable mining and recovery
  - Is mining sustainable? Social integration of mining activities
  - Ecological and ecotoxicological consequences of REE mining
  - Extraction processes and value chains
  - Separation and recovery of REEs from various matrices
- 4. Recycling mining sites and restorating ecosystem services
  - Ecological engineering
  - Re-use of former REE mine sites

Open to all stakeholders at international level, we are planning keynote lectures, short communications and a poster session. The meeting and related activities will provide opportunities for warm exchanges between scientists.

We look forward to seeing all of you there!



### **Keynote speakers**

Rémi Marsac, Researcher in Geochemistry, CNRS Université de Rennes 1 (France )
Vincent Donnen, Founding Partner of Compagnie des Métaux Rares S.A. (Switzerland)
Susanne Heise, Professor for Environmental Toxicology, Hamburg University (Germany)
Dominique Horbez, R&I initiative leader at Solvay (France)
Mikas Mirod, Professor of geopolitics at the UEPI School of International Polations (France)

Mikaa Mired, Professor of geopolitics at the ILERI School of International Relations (France) Mia Pelletier, Environmental Geochemist, Geomega Resources Inc, Quebec (Canada) Alain Rollat, consultant in Rare Earths Technology at Alain Rollat consulting (France) Yetao Tang, Professor at Sun Yat-sen University (China)

Frances Wall, Professor of Applied Mineralogy, University of Exeter (UK) to be confirmed

### Registration deadline: 9 September 2019

Abstracts as shown in the template are due for 3 September 2019.

**Registration to the workshop is free.** LabEx R21 and the Faculty of Science of the Université de Lorraine are covering the organisation of the REE workshop. Lunches are included.

Two beer and cheese evening events will be held on 8 and 9 October during the posters sessions.

#### To register, please fill in the following:

Name
Surname
E-mail address
Institution
Department
Address
City
County / State (if any)
Postcode

Title

Country

## Letter of invitation to attend the conference

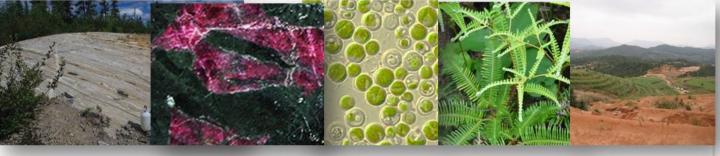
A letter of invitation will be issued for the sole purpose of assisting the participants in need of a visa application and/or to get funding for their attending of the conference. If you require a letter of invitation, please let us know long enough in advance when you register for the conference.











All details for the venue will later be sent to participants.

The REE workshop will take place over three days from 8 to 10 October 2019 at the Université de Lorraine (Faculty of Science, amphitheatre 8) on the Aiguillettes Campus, at Vandoeuvre-lès-Nancy.

Vandoeuvre-lès-Nancy is close to Nancy itself and easy to reach from Nancy railway station by tram within 20 min.

Each participant will receive an abstract volume, as well as documents on the scientific activities of the Labex RESSOURCES21 and the Geosciences laboratories (OTELO) of the Université de Lorraine.

## Abstract template

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First author<sup>1\*</sup>, second author<sup>2</sup>, third author<sup>1,2</sup> (underline the presenting author)

<sup>1</sup>First affiliation, address, city and postcode, country – (use Arial Narrow 12 font)

<sup>2</sup>Second affiliation, address, city and postcode, country

\*Corresponding author: e-mail address

Insert abstract text here.

Use Arial Narrow 14 font.

Paragraphs should be separated by a hard return.

The full abstract including title, affiliations and references should fit one page maximum.

Do not insert figures or tables.

LabEx R21 and the Lorraine Earth and Environment observatory OTELO will host the first international workshop on the geochemical cycle of nickel, in Nancy (France), on 8-10 October 2019.

**References:** (use the following style)

Cathelineau, M. et al. (2016) Miner. Dep. (2016) 51: 271

Golightly J.P. (1981) Econ. Geol., 75th anniversary volume 710-735

Name your file "lastname\_oral.doc" or "lastname\_poster.doc". Send it to <u>workshopREE-RESSOURCES21-contact@univ-lorraine.fr</u> and specify your preferred mode of presentation (oral or poster) in your e-mail.

• Organising committee: Isabelle Abildtrup, Anne-Sylvie André-Mayer, Michel Cathelineau, Alexandre Chagnes, Lev Filippov, Lydéric France, Laure Giamberini, Yann Gunzburger, Elisabeth Meyer, Jean Marc Montel, Jean-Louis Morel, Agnès Samper, Marie-Odile Simonnot (GeoRessources, LIEC, CRPG, LSE laboratories from OSU OTELO, Vandoeuvre-les-Nancy, France)



# **ART NOUVEAU**





# Université de Lorraine

**Faculty of Science and Technologies** 

The Faculty of Science and Technologies (FST) is located in the southern suburbs of Nancy (France), in Villers-lès-Nancy and Vandoeuvre-lès-Nancy.

Together with the Training and Research Unit (UFR) SciFA and MIM in Metz, this UFR forms the Collegium of Science and Technologies of the Université de Lorraine.

Places to visit: École de Nancy Museum (art nouveau), Fine Arts Museum: Émile Gallé, Victor Prouvé, Jacques Gruber, Louis Majorelle, the Daum Brothers

# **Nancy delicacies**













The city of Nancy can be reached either by railway (1.5 hour away from Paris-Est by fast TGV train, 1 hour from Strasbourg) or by plane, Nancy-Metz airport (30 min from Nancy by car or bus) or Luxembourg airport then fast train (TGV)

The Université de Lorraine science campus is easy to reach from the Nancy city centre through public transport: tram no. 1, getting off at "Vélodrome" or "Reclus" stops, then it's a 300-metre walk.