This short course will address geological, technical, and societal challenges associated with “energy metals” that are needed for low CO₂ footprint clean energy systems.

The global demand for electricity is expected to grow from about 27 TWh in 2019 to about 41 TWh in 2040. Coupled with the low-carbon energy transition this creates new opportunities for the mining industry. The renewable energy sectors require huge amounts of metals for energy production, transmission, and storage. “Energy metals” are also key to manufacturing the advanced materials needed for communication products, electric mobility, and lightweight design. As a major energy consumer, the mining sector itself is a significant player in the energy transition. The mining industry must provide the raw materials for the energy transition, and it must do so in a sustainable and socially acceptable way.

In Namibia, mining accounts for 25% of the country’s revenue. Namibia hosts world-class, high-grade polymetallic deposits and stratabound copper-silver-cobalt deposits, world-class base metal and uranium deposits (world’s 4th uranium oxide producer), and unique lithium, vanadium, germanium, gold, REE and diamond deposits. Namibia is also processing zinc from zinc-oxide ores.

Internationally recognized experts will give lectures, lead workshops and field trips to bring together people from academia, industry and government.

TOPICS

- The role of the minerals sector in the transition to low-carbon energy and meeting the Sustainable Development Goals
- Introduction to the geology of Namibia
- Metallogeny of Namibia
- Exploration Potential of Energy Metals in Namibia
- Uranium
- Vanadium
- Zinc
- Copper
- Lithium
- Rare-Earth Elements
- Quantifying the demand for energy metals
- Navigating the social issues related to exploration and mining for energy metals

Workshops will study drill cores from Namibian energy metal deposits and methods for in-field geochemical analysis.

A 2-day field trip

LANGUAGE: English

VENUE

The five-day short course will be held Windhoek or in Swakopmund (depending on the number of participants) from 29th November to 3rd of December 2021. The short course is composed of 3 days of lectures and workshops/panel discussions and 2 days of field trips. Details will be given later.
NUMBER OF PARTICIPANTS

For the field trip, information will be sent later according to the sanitary requirements of the mining companies. For mine visits, 24 people can participate.

There will be ample time for participants from industry meet and talk with academic colleagues (researchers, lecturers and students)

Proof of full Covid 19 vaccination must be sent prior to attendance

SOCIAL EVENTS: ice-breaker party, gala dinner

CONTACT & REGISTRATION:

beate.orberger@universite-paris-saclay  
Ismahen Chaouche: chasane@gmail.com

REGISTRATION

<table>
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<tr>
<th>Fees</th>
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<td>Lectures and workshops (3 days)</td>
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<td>Industry: 900 €</td>
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<tr>
<td>Government/academia: 500 €</td>
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<tr>
<td>Students: 200 €</td>
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| Field Trip (2 days)                       |
| Industry: 700 €                           |
| Government/academia: 300 €                |
| Students: 200 €                           |

Students, young researchers and lecturers may apply for a grant. The grant application form is available on the website.

The registration fees include:

Airport pick-up and drop-off,
Ice breaker party, gala dinner, coffee breaks, lunches.
Fieldtrip: all transport; lunch, dinner, and accommodation (3/12); breakfast, lunch (2/12).

Registration deadline:

Friday, 15th October 2021

VISA

An invitation letter will be sent for registered delegates.
Please note: for delegates from many countries with transit in Johannesburg, a transit visa is necessary!
For help please contact: Ismahen Chaouche  
chasane@gmail.com

ACCOMMODATION

There is enough accommodation available in Windhoek and Swakopmund.

Based on the number of participants the venue place will be decided Mid October. Transport will be organized.

ORGANIZING COMMITTEE

Beate Orberger (SGA Council member, Université Paris Saclay, Catura Geoprojects, Paris, France)
Mary Barton (Independent Consultant, Namibia)
Maeve Boland (University College Dublin and Geological Survey Ireland)
Ismahene Chaouche (Université Alger (USTHB), Algeria)
Filadelphia Mbingeneeko (Geological Survey Namibia)
Kombada Mhopjeni (Geological Survey Namibia)
Anna Nguno (Geological Survey Namibia)
Edmund Nickless (IUGS, Chair, Resourcing Future Generations Initiative, UK)
Gabi Schneider (Namibian Uranium Association, Swakopmund)
Ghislain Tourigny (Vice president SGA, Subsaharian Africat)
Ester Shalimba (University of Namibia, Keetmanshoop)

Proof of full Covid 19 vaccination must be sent prior to attendance.