

# GREENPEG SUMMER SCHOOL

19-30 June 2023 Tysfjord, Norway

## A Theoretical & Practical Introduction into Advanced Non-destructive Exploration Techniques



**Master & PhD students** studying in geosciences for instance, geochemistry, geophysics, ore & economic geology as well as felsic magmatic systems



Students studying in **EU, UK, Norway & Switzerland** are eligible to apply.

Application deadline is on **31st of January 2023.**



Relevant research fields including battery high-tech metal exploration, green-tech raw materials, geophysics, geochemistry & geology



# PROGRAMME

## AIM

The summer school aims at a dual education with a strong practical insight into the pegmatite exploration as one of the most popular exploration targets in the upcoming years in Europe.

It will help students to familiarise with the latest ground and airborne exploration technologies that meet the highest social and technical standards. Students will understand the economic aspects of mine development with a focus on exploration and the investors' approach in financing mining projects.

## CULTURAL & SOCIAL EXPERIENCE

Besides the lectures and practical sessions, an open day with the local community, a day of outdoor social excursion and a barbecue evening will take place during the weekend.

## OVERVIEW



The programme language is English. In general, students will have indoor lectures in the mornings and practical sessions in the field during the afternoon.

The programme covers topics including geochemical mapping of pegmatite fields, geophysical exploration methods, drone-borne hyper-spectral data acquisition, remote sensing exploration, satellite data interpretation, life cycle assessment for exploration and mining and Critical Raw Materials and circular economy.

Speakers from industry are invited to talk about the global exploration and markets with a focus on sourcing Critical Raw Materials from pegmatite. Furthermore, a whole day visit to the [Quartz Corp](#) will be arranged.

## LECTURERS

Geological Survey of Norway,  
Universidad del País Vasco,  
University College Dublin, University  
of Exeter, University of Oslo &  
University of Porto

## INDUSTRIAL PARTNERSHIPS

Geokompetenzzentrum Freiberg e.V.,  
IFU GmbH Privates Institut für  
Umweltanalysen & Terratec  
Geophysical Services GmbH & Co KG



## NO PARTICIPATION FEE

There is **no participation fee** for attending the GREENPEG Summer School. The accommodation and traveling costs are also covered by GREENPEG. For more details, please see the application package.

## GREENPEG

Many of the raw materials for green energy production can be sourced from lithium-caesium-tantalum (LCT) and niobium-yttrium-fluorine (NYF) pegmatites.

GREENPEG is a European Union funded project that aims at reducing exploration costs and impact on environment by developing two innovative and complementary toolsets, including:

- three new instrumental techniques and devices (piezoelectric sensor, helicopter-complementary nose stinger magnetometer, drone-borne hyperspectral imaging system)
- two new datasets and workflows for prospect scale (<50 square km) and district scale (50-500 square km) exploration.

Validation will be ensured from industry-led trials in Norway, Austria, Portugal, Ireland, and Spain testing different landscape, vegetation and climate environments, and geological settings.



FELMICA Minerals Industriais, S.A.

