

**RESEARCH METHODS IN EARTH AND ENVIRONMENTAL SCIENCES – workshop
combined with a visit to Poznan Radiocarbon Laboratory <https://radiocarbon.pl/en/>**

Date and place of the workshop: 10.06.2024 (9:15 -16:30), Institute of Geology AMU and NanoBioMedical Centre AMU, Poznan Radiocarbon Laboratory, Poznań, Poland

Number of participants: 15

Language: English

Organizer, coordinator: Danuta Michalska dr hab. prof. UAM, Emerson Coy dr hab. prof. UAM, and Tomasz Goslar, prof. dr hab. inż.

This workshop will be held during the 4th Polish Geological Congress, which takes place on June 10-14, 2024 in Poznań. An important goal of the Congress is to review current research topics and integrate the community of Polish geologists. Research by Polish geologists is conducted all over the world and in cooperation with many scientific centers, therefore, bearing in mind both domestic and foreign students, we invite you to participate in scientific workshops on the first day of the Geological Congress (4PKG).

Lecturers: Danuta Michalska, Witold Szczuciński, Krzysztof Pleskot, Albert Światłowski (Institute of Geology AMU), Emerson Coy (NanoBioMedical Centre, AMU), and Tomasz Goslar (Poznan Radiocarbon Laboratory)

Danuta Michalska, dr hab. Prof UAM

Geologist at the Institute of Geology, Adam Mickiewicz University, specialist in geochronology, geochemistry, archaeometry. She specializes, among others, in sample preparation for ^{14}C measurements, sample characterization (petrography, SEM-EDS) and applications, possibilities and limitation of radiocarbon dating. Participates in polar research and geoarchaeological research.

Emerson Coy, dr hab. Prof UAM

Material scientist working at the NanoBioMedical Centre of Adam Mickiewicz University, Poznań, Poland. His research is focused on the advanced characterization of nanomaterials, hybrid thin films/coatings, photocatalysis, carbides, nanoindentation and hybrid composite materials for environmental remediation and energy harvesting. I have experience in electron microscopy, X-ray spectroscopy, and nanoindentation, among other methods.

Witold Szczuciński, prof. dr hab.

Specialist in sedimentology, geochemistry, geohazards, marine geology and polar research. He specializes, among others, in sediment dating methods using gamma spectrometry (^{210}Pb and ^{137}Cs methods).

Krzysztof Pleskot, dr

Paleolimnologist with a keen interest in past climate change and geohazards. In his research, he employs various techniques, including the use of a high-resolution XRF scanner.

Albert Światłowski

Chemist, analytical technician. Technical senior of the Geohazards laboratory, specialist in XRF scanning and sample preparation for geochemical analyses. Supervisor of gamma, XRF and X-ray diffraction laboratories.

Tomasz Goslar, prof. dr hab. inż.

Physicist at the Faculty of Geographic and Geological Sciences and head of the Poznań Radiocarbon Laboratory, winner of the 2014 Foundation for Polish Science Award in the field of life and Earth sciences for his key contribution to recent climate research in establishing the chronology of changes in the concentration of the carbon isotope ^{14}C in the atmosphere during the last ice age. In addition to radiocarbon dating, professor Tomasz Goslar conducts scientific research on various topics in the field of geochronology.

1. To whom is addressed

This Workshop is organized primarily for students and young researchers (PhD students) interested in different methods and their applications in various fields of natural sciences. **We cordially invite Polish and foreign students to participate in this workshop.**

2. Purpose of the workshops

The workshop will be focused on of different research methods in environmental sciences and their application. It will also lay emphasis on internationally recommended forms of presentation of results to improve understanding of their meaning among earth scientists, physicists, biologists and archaeologists. The workshop program comprises lectures and visits to several environmental research laboratories.

A visit to the **Poznan Radiocarbon Laboratory** (guided by prof. dr hab. inż. Tomasz Goslar, head of the Laboratory) will allow you to follow the path from sample registration, through preparation, to ^{14}C measurement. Participants will be able to learn about the possibilities and limitations resulting from the composition of samples. It will be possible to take a closer look at both the laboratory part (preliminary preparation) and the operation of the spectrometer itself, as well as get to know the specialized laboratory team that works every day with very diverse samples from all over the world.