13th NECLIME workshop of the working group on palynology

Cracow, Poland, October 23-26, 2024

(organized by Elżbieta Worobiec and Grzegorz Worobiec)

W. Szafer Institute of Botany, Polish Academy of Sciences, Lubicz 46, Cracow, Poland

Figure 1 W. Szafer Institute of Botany PAS in Cracow

The W. Szafer Institute of Botany PAS is one of the most important disposers of scientific botanical collections – the National Biodiversity Collection of Recent and Fossil Organisms at W. Szafer Institute of Botany, Polish Academy of Sciences (KRAM), acc. to Polish Roadmap for Research Infrastructures, which contains nearly 1.6 million specimens. The palaeobotanical collection (KRAM P) is the most valuable and extensive collection of this type in Poland and one of the largest in Central Europe. It is created systematically since 1953 and currently comprises 105,315 items, including fossil floras and comparative collections of modern plants. The palynological collection, which is a kind of "pollen herbarium", is the largest and oldest reference collection of modern plant pollen and spores in Poland. It comprises ca. 17,200 microscope slides of pollen and spores from 2,686 species (source: https://www.botany.pl/index.php/pl/).

The *13th NECLIME workshop of the working group on palynology* was held in Cracow, at the W. Szafer Institute of Botany, on October 23-26, 2024. The workshop was attended by 16 scientists from seven countries (Bulgaria, Czech Republic, Germany, Poland, Slovakia, Ukraine, and Vietnam). After welcoming the participants and introducing information about the last activities of the working group on palynology (D. Ivanov and A.A. Bruch) the *Palaeobotanical collection of the W. Szafer Institute of Botany, PAS, Cracow* (E. Worobiec, J. Ziaja, K. Stachowicz, G. Worobiec, L. Śliwa) was presented. Contributions were focused on biodiversity reflected in palynological assemblages, pollen grains and non-pollen palynomorphs (NPP) as complementary environmental proxies, LM/SEM studies of fossil and modern palynomorphs and the nearest living relatives (NLR) of Neogene and Paleogene pollen

palynomorphs and fungi, which are valuable paleoclimate indicators. The workshop program included oral presentations, round table discussions and practical microscope works with the reference collection of the W. Szafer Institute of Botany, and discussions on fossil material (brought by the participants).

Figure 2 Working group meeting photo in front of the W. Szafer institute of Botany PAS

The following talks were presented: *LM/SEM studies of palynomorphs from Lower and Middle Miocene sediments, Central and Eastern Paratethys* (N. Doláková, M. Kováčová, J. Doboš), *Reconstruction of the plant communities and their succession in the two profiles of Middle Miocene deposits from southern Wielkopolska* (B. Słodkowska), *Middle Miocene vegetation of the northern shores of the Central Paratethys Sea from Poland* (G. Worobiec, E. Worobiec), *New data about Miocene floras from Nowy Sącz Basin* (G. Pacyna), *Pliocene stages of nature development in the Prydniprovska lowland (based on the results of palynological studies)* (O. Sirenko). The list of participants, detailed program and summaries of all papers are published on the NECLIME website https://www.neclime.de/workshops-retro.html. The participants visited the *History of the vegetation landscapes of Poland* exhibition in the W. Szafer Institute of Botany PAS and the Botanic Garden of the Jagiellonian University.

Next 14th NECLIME workshop of the working group on palynology will be organized in middle of November 2025 at the Complutense University in Madrid. More details about this workshop will be announced in March 2025.

Thanks to all participants for their contributions.

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