### 9TH WORKSHOP ON NON-POLLEN PALYNOMORPHS

#### 25-28. SEPTEMBER 2022, POZNAŃ, POLAND

1st circular

Organizers: Monika Karpińska-Kołaczek, Piotr Kołaczek, Mariusz Lamentowicz, Katarzyna Marcisz & Beata Messyasz

from

Climate Change Ecology Research Unit, Adam Mickiewicz University, Poznań, Bogumiła Krygowskiego 10, 61-680 Poznań, Poland



and

Department of Hydrobiology, Adam Mickiewicz University, Poznań, Uniwersytetu Poznańskiego 6, 61-614 Poznań, Poland



with the support of

Polish Limnological Society, Lwowska 1 LOK. 247, 87-100 Toruń, Poland

and the patronage of

Deans of the Faculty of Geographical and Geological Sciences & Faculty of Biology AMU

Contact: <u>NPPworkshop22@gmail.com</u>

Register via: Registration form

\*If you have problems with the form, let us know, and we will send it to you in .doc format

#### Scope of workshop

Modern environmental reconstructions based on peat and lacustrine sediments require the simultaneous application of several biotic proxies. Pollen analysis is among the oldest and

most commonly used methods in palaeoecology. Thanks to pollen grains and some cryptogam spores, it enables the reconstruction of vegetation and human impact in the past. Non-pollen palynomorphs (NPPs) are organic structures such as fungi, algae, parts of invertebrates, and others, accompanying pollen on slides subjected to a microscope analysis. Many NPPs have recognised indicative value, for some of them, it is unknown, but still, many have their potential weakly investigated. However, thanks to NPPs, we may already, e.g. broaden our knowledge on herbivore pressure in ecosystems (sometimes



Fungus Tetraploa aristata (M. Karpińska-Kołaczek)

connected to increased pastoral activity), find traces of parasitic fungi attacks or detect fluctuations in the water table. New NPP types are introduced each year, so the joint effort of



Alga Pediastrum duplex (M. Karpińska-Kołaczek)

taxonomists, ecologists, palaeoecologists, paleobotanists, protistologists, and other specialists is needed to decipher and test their indicative value. The workshop will provide an excellent opportunity for meeting people who deal with NPPs, a chance to identify the mysterious NPP types found on your pollen slides and discuss them with specialists.

We feel the effects of global warming every day. The ecosystems, which we use as palaeoecological archives, also suffer from this phenomenon. Among them are peatlands that are unique carbon sinks when they are 'healthy'; however, drained or dried out, they become emitters of greenhouse gases. A trace of carbon dioxide release

from a peatland might be a greater abundance of fungi decomposing organic matter. On the other hand, the appearance of different algae or testate amoebae may tell us about peatland inundation and the rate of organic matter decomposition. These groups are at least partly detectable during classical pollen analysis as NPP types.

Hence, the critical part of the workshop will be the training in identifying cyanobacteria, algae and testate amoebae and learning their indicative potential. To present peatlands and global warming issues, we plan a day trip to the Rzecin mire (Greater Poland, Western Poland). This site is unique not only because of the exceptional peatland biodiversity but also because of the ongoing manipulative global warming experiment and eddy covariance carbon flux infrastructure.

Nevertheless, peatland studies represent only one



aspect of research where NPPs are helpful. So then, if Amoeba Heleopera rosea (M.Karpińska-Kołaczek) you have exciting NPPs, from various deposits, archaeological excavations, etc., and you need help identifying them or interpreting their presence, the workshop will provide such an opportunity. It would also be great if you would like to share your research or knowledge on various groups of NPPs with us. Everyone, who works with NPPs and would like to know more about them, is invited. However, remember that the number of participants is limited to 40. The order of submissions is decisive.

### **Preliminary plan**

#### 25.09 - Sunday

16:00-18:30 – On-site registration and distribution of conference materials at the Faculty of Geographical and Geological Sciences

19:00-22:00 – Icebreaker Party at Piwna Stopa Pub (Poznań City Center) – Grill and Beer 😊

26.09 – Monday (Faculty of Geographical and Geological Sciences AMU)

9:00-11:00 - Oral presentations 1

11:00-11:15 - Coffee break

11:15-13:15 - Oral presentations 2

13:15-14:00 - Lunch

14:00-16:00 - Oral presentations 3

16:00-16:15 - Coffee break

16:15-18:00 - Poster presentations

### 27.09 - Tuesday

8:00-16:00 – Trip to Rzecin peatland (lunch packet included)

18:00 – Dinner in the Brovaria Restaurant (Poznań City Centre)

Rzecin peatland (M. Lamentowicz)

**28.09 – Wednesday** (Faculty of Biology AMU)

9:00--11:00 – Microscope session 1 – Algae (Coordinator: Beata Messyasz)

11:00-11:15 - Coffee break

11:15-13:15 – Microscope session 2 – Testate amoebae (Coordinator: Mariusz Lamentowicz)

13:15-14:00 - Lunch

14:00-16:00 – Microscope session 3 – Non-pollen palynomorphs (Coordinator: Monika Karpińska-Kołaczek)

16:00 – End of workshop

### **Registration and fee**

- The workshop is limited to 40 participants.
- ✤ 30.07 a deadline for applications (see registration form)
- ✤ 15.08 a deadline for payment and abstract submission
- Please send the abstracts to <u>NPPworkshop22@gmail.com</u> (main body limited to 3000 characters with spaces, one figure is accepted)
- The regular fee is 200 €
- ♦ MSc and PhD students get a reduced fee of  $160 \in$
- The fee covers the cost of the Icebreaker party, trip, dinner in a restaurant, coffee breaks, lunches, and conference materials. The cost of your stay in Poznań is not included.

# **Presentation details**

Presentations are encouraged to be 15 minutes long (there will be extra 5 minutes for questions and discussion). The preferred poster format is size A0 (vertical position).

# Payment

NICOLAUS BANK SPÓŁDZIELCZY W TORUNIU

IBAN: PL 63 9511 0000 0000 0263 2000 0010

## SWIFT: GBWCPLPP

Address: Polskie Towarzystwo Limnologiczne, Lwowska 1 LOK. 247, 87-100 Toruń, Poland

In the transfer title, please include your surname and an add notation – NPPworkshop (e.g. Kołaczek NPPworkshop)

# Logistics:

**Venue**: Faculty of Geographical and Geological Sciences AMU, B. Krygowskiego 10, 61-680 Poznań

On Wednesday, we meet at the Faculty of Biology AMU, Uniwersytetu Poznańskiego 6, 61-614 Poznań

Icebreaker: Piwna Stopa Pub, Szewska 7, 61-760 Poznań (https://piwnastopa.pl/en/home/)

Dinner: Brovaria Restaurant, Stary Rynek 73-74, 61-772 Poznań (https://brovaria.pl/)

**Trip**: We start and end our trip at the Faculty of Geographical and Geological Sciences, B. Krygowskiego 10, 61-680 Poznań

**Map**: <u>https://www.google.com/maps/d/u/0/edit?mid=1VCKMMNWIqfwn-</u> 3ujR41nVNIEm\_2BLjA&usp=sharing