



# NECLIME NEWSLETTER 2024

Dear colleagues and members of NECLIME,

Again we have experienced a fruitful year full of successful meetings and activities. The 2024 calendars were full of big international conferences and NECLIME events. Maybe there will be a bit less traveling in 2025, but we still look forward to our forthcoming meetings and discussions. Also, the initiative of a new special issue is a great step forward that will keep us busy during next year.

This newsletter briefly summarizes the main activities and achievements of NECLIME for your information. Unfortunately, all of this was overshadowed by the unexpected loss of our dear friend and colleague Dima Gromyko who was an active NECLIME member for the past 25 years.

And as always we would like to note that if you are aware of any events, open positions or funding opportunities which you feel relevant for the NECLIME community, please let us know and we will be happy to distribute it via our mailing list.

We wish you all a happy, peaceful and successful 2025!

The NECLIME coordination team

Manu, Marianna, Martina, Dana, Torsten, and Angela

December, 2024

## PUBLICATIONS

### *PUBLICATION OF THE PALAEOFLORA DATABASE*

It's done! The key tables of the Palaeoflora Database providing essential information about fossil taxa, nearest living relatives (NLRs), and climatic requirements for a total of seven variables have been published in the open repository Zenodo at <https://zenodo.org/records/10881069>.

The Palaeoflora Database provides information on Cenozoic plant taxa (macro and micro), corresponding Nearest Living Relatives (NLRs) to fossil taxa, and their climatic requirements. The climate data collected in Palaeoflora are based on plant distribution in the global context and records of meteorological stations suitable to reconstruct past regional climates from any paleobotanical record having known NLRs. The publication includes tables (2024 update) and a detailed documentation. It is planned to update the published Palaeoflora tables on a regular basis. Thus, your input is highly welcome. Please contact the corresponding author if you encounter any data needing revision.



### *NEW NECLIME SPECIAL ISSUE*

The initiative for a new special issue to summarize some of our current research is taking shape. On the last annual conference we agreed to prepare a proposal to the new Elsevier journal 'Earth History and Biodiversity' (HISBIO) (<https://www.sciencedirect.com/journal/earth-history-and-biodiversity>) and announced it with great success. So far, 13 contributions have been proposed including one perspective piece, two review papers, and ten research papers which will be bundled in:

### *NECLIME CONTRIBUTIONS TO CENOZOIC PLANT DIVERSITY IN EURASIA*

Guest Editors: Manu Casas Gallego, Marianna Kováčová, Martina Stebich, and Torsten Utescher

The proposed special issue shall bundle NECLIME research results on plant diversity and its dependence on climate and strengthen the impact of paleobotanical research on the general scientific discussion on global threats on biodiversity due to climate change. Contributions to this NECLIME Special Issue may include temporal and spatial patterns, approaches to quantify past plant diversity, the impact of climate on past plant diversity, physiological aspects and more. The landing page on the journal's homepage will open early 2025.

Earth History and Biodiversity (HISBIO) is a new full Open Access journal initiated by Tao Su who became Editor-in-chief (Associate Editors José Carrion and Angela Bruch). The aims and scope of the journal widely overlap with the NECLIME scientific topics, which makes it a perfect place to publish NECLIME related content. During the initial phase the journal will be sponsored by Elsevier and **all successful submissions before end of 2025 will be published free of charge**. If you are interested in submitting a manuscript and have not done so, please contact Manu Casas.

We encourage the NECLIME community to consider submission of their respective research to HISBIO, also beyond this special issue.

### *IBERIAN PALAEOFLORA AND PALEOVEGETATION*

Pepe Carrión and colleagues published a comprehensive overview on the Iberian Paleofloras. This impressive and beautiful book is open access and available at <https://www.paleofloraiberica.org/>.

## NECLIME ANNUAL CONFERENCES

### *ANNUAL CONFERENCE 2024, ALMATY (KAZAKHSTAN)*

The 2024 NECLIME annual conference took place in Almaty, Kazakhstan, September 8-14, at the Institute of Geological Science, kindly organized by Saida Nigmatova, Aizhan Zhamangara and Svetlana Popova. 30 participants from nine countries presented their work with 23 oral talks and two posters. Very much appreciated was the keynote lecture of Oksana Marynirch on the modern vegetation of Kazakhstan. The location of our venue in the middle of Central Asia naturally created an (over)regional focus with many presentations dealing with the paleoclimate, paleovegetation and paleoenvironment of Central and East Asia.



The conference was complemented by an amazing conference dinner and continued with a one-day excursion to the Medeu Valley and Chimbulak Mountain seeing the vegetation succession for the plain up to 3200 m altitude, and a visit to the Botanical Garden in Almaty in the evening including a dinner invitation by the director of the Botanical Garden, Gulnara Sitpaeva.

The next day, a 3-day excursion led us through amazing sub-desert landscapes to the Charyn Canyon and the Aktau Mountains of Altyn-Emel National Park with visits of Paleogene and Neogene outcrops, the grandiose Singing Dune, and a 700-years-old willow tree. On the way, cultural highlights as the Iron-Age Besshatyr Kurgans, the mosque of Zharkent, and the Tambalytas Buddhist petroglyphs gave insights into the diverse cultural heritage of the country.

We cordially thank the hosts, especially Saida and her team, for the hard work of organizing this event and for their warm welcoming attitude!

The full report of the conference, program and abstracts are available on the website at <https://www.neclime.de/conferences-retro.html>

#### ***ANNUAL CONFERENCE 2025, ZAGREB, CROATIA***

The next NECLIME annual conference will be held in Zagreb, Croatia, at the Croatian Geological Survey, September 22-30, 2025, organized by Koraljka Bakrač, Marianna Kováčová, and colleagues. More details are coming soon... have a regularly look at <https://www.neclime.de/conferences.html>

#### ***ANNUAL CONFERENCE 2026, XISHUANGBANNA, CHINA***

In 2026 the NECLIME annual conference will be held at the Xishuangbanna Tropical Botanical Garden in Yunnan. Details will be available end of 2025.

## NECLIME WORKSHOPS

#### ***2024 NECLIME MEETING OF THE WORKING GROUP ON PALYNOLOGY, CRACOW, POLAND***

The 13th workshop of the NECLIME working group on palynology was held in Cracow, on October 23-26, 2024, hosted by Elżbieta Worobiec and Grzegorz Worobiec at the W. Szafer Institute of Botany. The workshop was attended by 16 scientists from seven countries (Bulgaria, Czech Republic, Germany, Poland, Slovakia, Ukraine, and Vietnam). 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).

The full report, program and abstracts are available on our website at <https://www.neclime.de/workshops-retro.html>



### *2025 NECLIME MEETING OF THE WORKING GROUP ON PALYNOLOGY, MADRID, SPAIN*

Next year the working group will meet mid of November at Complutense University in Madrid. More details about this workshop will be announced in March 2025.

### *2025 NECLIME ONLINE WORKSHOP ON PALEOBIODIVERSITY, 20/21 FEB 2025*

We would like to invite you to a small workshop and discussion round focusing on 'Quantification of past plant diversity'. The aim of this meeting is to discuss current developments in quantifying the history of biodiversity, e.g. based on taxonomic and/or pft richness, other diversity indices, or new approaches, and to discuss potential strategies to take advantage of our broad spectrum of data available in the NECLIME community to study long-term large-scale paleodiversity patterns. Please contact Angela Bruch for more details and see the announcement here <https://www.neclime.de/workshops.html>

## RELATED EVENTS

### *IPC/IOPC PRAGUE, CZECH REPUBLIC, 23-31 MAY, 2024*

The joint International Palynological Congress (IPC) and International Organisation of Palaeobotany Conference (IOPC) was held in Prague in May this year. As usual, it was an impressive event with more than 400 participants and attended by many of our NECLIME members. We took this occasion to meet one evening for a NECLIME social gathering with about 20 colleagues to chat and exchange news and ideas.

Please note that the abstract volume is not available online but we will be happy to share it on request.

### *FORTHCOMING RELATED EVENTS*

If there are any events which you feel relevant for the NECLIME community, please let us know and we will spread the information. So far we are aware of

- 2025** RCMNS Interim Colloquium 'Advances in understanding the Neogene Mediterranean-Paratethyan System', Vienna; Austria, May 2 to 5
- 2025** RCMNS Workshop on the Neogene terrestrial ecosystems, Porrentruy, Switzerland, Sept. 5 to 7
- 2025** RCMNS Interim Colloquium 'Towards a process based understanding of the Mediterranean Neogene', Catania, Italy, September 29 to October 4
- 2026** 12th European Palaeobotany and Palynology Conference, Münster, Germany



## PERSONALIA

### *MANU CASAS GALLEGO JOINED THE COORDINATION TEAM*

Earlier this year Manu Casas Gallego (Madrid) joined us as a new member of our coordination team. Many of you may know him already as an active member of our community. We are grateful for his willingness to support our team with his experience, energy and fresh ideas!

For any questions, suggestions and news regarding NECLIME you are welcome to contact him through [mancasas@ucm.es](mailto:mancasas@ucm.es)

### *HONORARY MEMBERSHIP OF IOP FOR ZHE-KUN ZHOU*

We congratulate Prof. Zhe-kun Zhou for being awarded with the honorary membership of IOP during the IOP Conference in Prague!



### *JOB OPPORTUNITIES*

Xishuangbanna Tropical Botanical Garden (XTBG), Chinese Academy of Sciences, is looking for Postdoctoral Researchers in Paleobotany, Paleoclimate, and Vegetation Modeling as well as Visiting Scholars and Graduate Students (MS/PhD) in the fields of 'Cenozoic evolution of plant diversity, vegetation, and climate changes' and 'Numeric climate modeling, vegetation and plant diversity modeling'. See details at <https://www.neclime.de/news.html> or directly contact Prof. Shufeng Li at [lisf@xtbg.org.cn](mailto:lisf@xtbg.org.cn).

If you are aware of any other open positions or funding opportunities please share this information with us and we will be happy to distribute it via our mailing list.



***DMITRY GROMYKO***

(14.03.1957–15.11.2024)

We are sad to pass on the news of the death of Dmitry Gromyko on November 15, 2024.

Dmitry (Dima) Gromyko was one of the longest serving employees of the laboratory of Palaeobotany of the Komarov Botanical Institute RUS (BIN RAS), where he worked since 1980. He will be missed greatly by his family, friends and the wider palaeobotanical community for his humour, supportive nature and extensive knowledge of fossil woods, particularly those of the Cretaceous, Paleogene and Neogene.

Dima took part in numerous palaeobotanical expeditions to the Russian Far East, Abkhazia, Antarctica, Armenia, Kazakhstan, and Uzbekistan, and curated the collection of fossil woods in BIN RAS. His love of fossil wood inevitably meant he was a member of the International Association of Wood Anatomists (IAWA). Dima also was an active member of NECLIME since the very beginning 25 years ago.

As well as contributing directly to scientific research, Dima was also committed to supporting his colleagues through taking on administrative roles. From 2022, he worked as the head of the expert centre in BIN RAS, in 2023 he became the director of the foundation "Botanical Garden of the 21st Century".

Dmitry was an erudite, kind and sympathetic person, always ready to help everyone. He was fun to be with and generous with his time to other researchers. In BIN RAS, everyone liked and respected him, sentiments that extended worldwide among his fellow palaeobotanists. Our palaeobotanical community will miss Dmitry Gromyko, but he will be remembered fondly.

*Natasha Anosova, Svetlana Popova*





### Main publications of Dmitry Gromyko:

- Gromyko D.V.** 1982. Comparative anatomical study of the wood in the family Taxodiaceae. *Botan. Zh.* 67(7). 898-906.
- Gromyko D.V.**, 1990. A comparative and anatomical study of cross field pits in the wood of taxodiaceae species using scanning electron microscopy. *Botan. Zh.* 75(7): 973-978.
- Snigirevskaya N.S., **Gromyko D.V.**, Mogucheva N.K., 1999. Stem remains of *Septomedullocaulon putoranicum* gen. et sp. nov. (?Podocarpaceae S. L.) from volcanic deposits of Tunguska Basin (Middle Siberia, Lower Triassic). *Botan. Zh.* 84(11). 125-137.
- Snigirevskaya N.S., **Gromyko D.V.**, 2000. Scanning electron microscopy as a key to the recognition of the cross-field types in fossil coniferous woods from Arctic. *Acta Palaeobot.* 40(1). 39-42.
- Philippe M., **Gromyko D.**, 2007. The putative Jurassic Angiosperm wood *Suevioxylon zonatum* revisited. *IAWA Journal* 28(1). 95-100.
- Ablaev A.G., Wang Yu-Fei, Zhilin S.G., Li Cheng-Sen, **Gromyko D.V.**, 2007. Discovery of the new species of *Pteroceltis* (Ulmaceae) from the Early Paleogene Wuyun flora, north-east CHINA. *Botan. Zh.* 92(7). 1066-1070.
- Philippe M., Jiang H., Kim K., Oh C., **Gromyko D.**, Harland M., Paik I., Thevenard F., 2009. Structure and diversity of the Mesozoic wood genus *Xenoxylon* in Far East Asia: implications for terrestrial palaeoclimates. *Lethaia* 42. 393-406.
- Guo W.Y., Yang J., Li C.S., **Gromyko D.**, Ablaev A.G., Wang Q., 2010. First record of *Cercidiphylloxylon* (Cercidiphyllaceae) from the palaeocene of Fushun, NE China. *Journal of Systematics and Evolution.* 48(4). 302-308.
- Suvorova E.B., **Gromyko D.V.**, Stolbov N.M., Skvortsov E.G. 2010., New finds of cretaceous and jurassic woods on Franz-Josef Land Archipelago. Geological and geophysical characteristics of the lithosphere of the Arctic region. *Tr. VNIIOkeangeologiya.* 218(7). 118-121.
- Popova S., Utescher T., **Gromyko D.V.**, Bruch A.A., Mosbrugger V., 2012. Palaeoclimate Evolution in Siberia and the Russian Far East from the Oligocene to Pliocene. Evidence from Fruit and Seed Floras. *Turkish Journal of Earth Sciences* 21. 315–334.
- Popova S., Torsten U., **Gromyko D.**, Mosbrugger V., Herzog E., Francois L., 2013. Vegetation change in Siberia and the Northeast of Russia during the Cenozoic cooling: a study based on diversity of Plant Functional Types. *PALAIOS* 28. 418–432.
- Popova S., Utescher T., **Gromyko D.**, Bruch A. A., Mosbrugger V., 2017. Cenozoic vegetation gradients in the mid- and higher latitudes of Central Eurasia and climatic implications. *Palaeogeograph, Palaeoclimatology, Palaeoecology* 467. 69-82.
- Popova S., Utescher T., **Gromyko D.**, Mosbrugger V., François L., 2019. Dynamics and evolution of Turgay-type vegetation in Western Siberia throughout the early Oligocene to earliest Miocene



— a study based on diversity of plant functional types in the carpological record. *Journal of Systematics and Evolution* 99. 1–13.

Ryazanov K.P., Tsybul'skaya A.E., Afonin M.A., **Gromyko D.V.**, 2020. *Bulletin of the Komi Scientific Center of the Ural Branch of the Russian Academy of Sciences* 41(1). 35-42.

Afonin M., **Gromyko D.**, 2021. First record of *Ginkgoxylon* (Ginkgoales) fossil wood in the Lower Cretaceous of the Arctic region. *Cretaceous Res.* 125. 104868.

Afonin M., Philippe M., **Gromyko D.**, 2022. New data on the geographic and stratigraphic range of the Mesozoic fossil wood genera *Protocedroxylon* and *Xenoxylon* in the Arctic region. *Rev. Palaeobot. Palynol.* 302. 104667.

Afonin M., **Gromyko D.**, 2023. *Xenoxylon* (Coniferales) fossil woods from the Lower Cretaceous deposits of the Franz Josef Land Archipelago. *Bot. Zh.* 108(6). 588-596.

### Condolence letters from several colleagues of Prof. Dr. Dimitry Gromyko

It is a shock news indeed. We always remember that Dima was an excellent organizer and very kind paleobotanist. Please pass our sincerely condolence to Prof. Dr. Dima Gromyko's family and his colleagues of Paleobotanical Department from St Petersburg. *Yu-Fei Wang*

My deepest condolences to Prof. Dimitry Gromyko, who will be missed forever. *Bainian Sun*

I am deeply saddened to learn of Dimitry Gromyko's passing. I have attended the NECLIME conferences twice at Komarov Botanical Institute and received a lot of help. May he still have plants to accompany him in heaven with a peaceful journey. *Wei-Ming Wang*

I was deeply shocked by this tragic news and truly saddened by our loss. *Zhou Zhe-kun*

That is very sad news indeed. I have known him for many years. *Bob Spicer*

This is indeed very, very sad news! Dima was an excellent, committed scientist and a dear friend to me. We will miss him, but not forget him! We mourn with the family! *Volker Mosbrugger*

Very sad news, may god give peace to his departed soul! *Vandana Prasad*

Really sad and unexpected news but thanks for communicating. I remember the NECLIME meeting in St. Petersburg in 2019 with the wonderful excursion to the arctic botanical garden in Kirowsk during which we enjoyed the travelling with the slowly-moving Murmansk train. *Lutz Kunzmann*