



NECLIME Annual Conference 2023

Matsudo, Japan

August 30 –September 6

Report

This year's annual conference of the NECLIME (Network on Cenozoic Climate and Ecosystems) group was held in Matsudo, Japan, at the Graduate School of Horticulture, Chiba University. For the first time such a meeting was held in a hybrid format. This challenge was perfectly mastered by the local hosts and allowed the participation and presentations of colleagues from remote.

In total 60 colleagues from 18 countries joined the conference, out of which 30 attended in person. 32 oral contributions were presented. This might have been the largest number of oral presentations in the history of NECLIME events and certainly is due to the hybrid format.

Thanks to the dedication of our hosts the perfectly organized and enjoyable meeting was a great success. After two days of scientific sessions, a one-day and a 4-day excursion led us to the diverse warm- and cool- temperate forests of Mt. Takao (west Tokyo), Mt. Kasuga (Nara), and Mt. Odaigahara (south Nara), as well as to the fossil forest of Konan (Shiga), and the excellent Lake Biwa Museum of natural history.

The topics presented on the meeting showed a strong focus on **Paleogene paleobotany** discussing the **biogeography, climate, and evolution since the early Cenozoic**. This included taxonomic work on the biogeography and evolution of important elements such as *Craigia*, *Sequoia*, *Sideroxylon*, and *Cedrelospermum*.

The topic **Evolution of climate, vegetation, plant biogeography in Asia** (Kazakhstan, Thailand, Japan, China...) drew high attention. In this context, also the **Quaternary vegetation history in Asia** (India, Japan) and plant distribution (*Larix*) was discussed. And, a set of presentations gave a comprehensive overview on the **geological and vegetation history of the Tibetan Plateau**.

Further presentations covered topics on **Extreme environments** (fossil woods from Antarctica, pollen from the Siberian Sea, high CO₂ world of the Eocene climatic optimum) and **Marine – terrestrial**

connections, esp. the influence of oceanographic changes on the history of Japanese vegetation from Paleogene to Holocene. New insights in **Fossil fungi** as new proxies for ecological and climate reconstructions (case studies from Europe and India) and on **Fire ecology** expanded the methodologies represented in NECLIME. For more information please see the program and abstract volume available on the website.

In the final discussion the challenges and advantages of a hybrid meeting were acknowledged. It was agreed upon that this option should be taken into account also in the future as far as technically feasible.

Alexandra Müllner announced the symposium on *The origin and evolution of modern plant diversity: insights from multiple disciplines* organized by Su Tao, Alexandra Müllner-Riehl, Gaurav Srivastava, Agathe Toumoulin at the International Botanical Conference in Madrid next year, and a workshop dedicated to this topic to be held in advance end of this year. Please see the respective announcements on our website and consider your participation at the discussion of this interesting and highly relevant topic.

Options for venues of future NECLIME conference were discussed, and Zhekun Zhou kindly invited us to Xishuangbanna for one of the coming years. We are looking forward to this opportunity, probably in 2026. With the next annual conference in Kazakhstan, we appreciate any suggestions for a venue back in Europe for 2025.

Thanks again to all colleagues involved in organizing this conference before and during the event! And thanks to all participants for their contributions and lively discussion – online and offline!

Organizers:

Arata Momohara, Graduate School of Horticulture, Chiba University

Angela A. Bruch, ROCEEH Research Center, Heidelberg Academy of Sciences,
Senckenberg Research Institute

Torsten Utescher, Senckenberg Research Institute and Natural History Museum

Yoichi Watanabe, Graduate School of Horticulture, Chiba University

Chiyomi Yamakawa, Lake Biwa Museum, Shiga Prefecture

Ryoma Hayashi, Lake Biwa Museum, Shiga Prefecture

Takeshi Saito, Faculty of Science and Technology, Meijo University

Atsushi Yabe, National Museum of Nature and Science

Takuto Shitara, Tama Forest Science Garden, Forestry and Forest Products Research
Institute, Forest Research and Management Organization

Kaori Momohara, National Institute for Agro-Environmental Sciences

Co-sponsor: Graduate School of Horticulture, Chiba University