## The NECLIME Conference

Sofia, October 1<sup>st</sup> - 4<sup>th</sup>, 2012

## Climate and vegetation evolution in the Paratethys, Eastern Mediterranean and Black Sea area

## Scientific Program

### **Monday October 1**st

Registration: 16:00 – 19:00 Conference Hall, Institute of Biodiversity and Ecosystem Research,

23, Acad. G. Bonchev Str.

Welcome dinner: 20:00 Restorant "Pri Yafata", 40, Rayko Aleksiev Str., Sofia

**Tuesday October 2**nd

#### **Conference Hall**

Institute of Biodiversity and Ecosystem Research 23, Acad. G. Bonchev Str.

#### Opening ceremony: 9:30

9:30 – 9:50	Welcome address
9:50 – 10:10	Torsten Utescher and Angela A. Bruch: Introduction and NECLIME news
10:10 – 10:30	Mehmet Serkan Akkiraz, Nazire Özgen Erdem and Özgen Kanga: Palynoflora and palaeoclimate of gypsiferous formations of the Oligo-Miocene Sivas Basin, Central Turkey

10:30 – 10:50	Vladimir Bozukov, Dimiter Ivanov and Torsten Utescher: <i>Ficus</i> sp. in Early Oligocene flora of Ustren (South Bulgaria)
Coffee break:	10:50 – 11:30
11:30 – 11:50	Dimiter Ivanov, Elżbieta Worobiec and Nadezhda Djorgova: <b>Trends in Badenian (Middle Miocene) vegetation and climate dynamics in Poland and Bulgaria based on pollen data</b>
11:50 – 12:10	Ilaria Mazzini, Natália Hudáčková, Peter Joniak, Marianna Kováčová, Tamás Mikes, Andreas Mulch, Bora Rojay, Stella Lucifora, Daniela Esu and Ingeborg Soulié-Märsche Palaeoenvironmental and Chronological Constraints on the Tuğlu Formation (Çankiri Basin, Central Anatolia, Turkey)
12:10 – 12:30	Saida Nigmatova: Evolution of climate, landscape and vegetation of the continental regions of Central Asia during the Neogene and Quaternary
Lunch break:	12:30 – 14:00
14:00 – 14:20	Vladimir Bozukov: A revision of species <i>Pleiomeris formosa</i> (Heer) Palamarev et Petkova in Bulgarian palaeoflora
14:20 – 14:40	Andrea K. Kern, Jan-Peter Friedrich, Franziska Göhringer, Johanna Kovar-Eder, James H. Nebelsick, Michael W. Rasser, Anita Roth-Nebelsick and Reinhard Ziegler: First small-scale insight from varved maar sediments in the environmental and climatic situation during the Middle Miocene Climatic Optimum
14:40 – 15:00	Svetlana Popova, Torsten Utescher, Elena Herzog, Dmitry Gromyko and Volker Mosbrugger: Cenozoic palaeovegetation patterns for Western Siberia and the Northeast of Russia reconstructed from plant functional type diversity
15:00 – 15: 20	Mircea Ţicleanu, Radu Nicolescu, Adriana Ion, Viorel Ilinca: <b>The climate of the Carpathian Miocene reflected by the saliferous facieses</b>
Coffee break:	15:20 – 16:00
16:00 – 16:20	Dimiter Ivanov, Marianna Kováčová and Nela Doláková: Early Late Miocene vegetation and climate dynamics in Slovakia and Bulgaria
16:20 – 16:40	Nadja Ognjanova-Rumenova, Marlena Yaneva and Gabriel Nikolov: Diatombased correlation of Neogene lacustrine sediments from Gotse Delchev Basin, Southwestern Bulgaria
16:40 – 17:00	Elżbieta Worobiec: New palynological studies of the Pliocene freshwater deposits from the Mizerna locality, West Carpathians, Poland
17:00 – 18:00	Poster Session* and Discussion
*Posters will be exp	Andrea K. Kern, Mathias Harzhauser, Ali Soliman, Werner E. Piller: <b>The potential of non-laminated Miocene sedimentary records for multi-proxy-environmental analysis on a decadal- to centennial-scale</b> posed on October 2 <sup>nd</sup> and 3 <sup>rd</sup> at the Conference Room.

# Wednesday October 3<sup>rd</sup>

### Conference Hall

9:30 – 9:50	Felix T. Portmann: Modern gridded climate data - Effect of resolution on differences of CRU and WorldClim data sets
9:50 – 10:10	Adele Bertini and Angela A. Bruch: Plio-Pleistocene vegetation response on orbitally forced climatic cycles in Southern Europe
10:10 - 10:30	Louis François, Torsten Utescher, Noémie Hamon, Boglárka Erdei, Marie Dury, Alexandra Henrot and Eric Favre: Testing palaeoclimate and palaeovegetation model reconstructions with the NECLIME palaeovegetation database: application to the Paratethys and Eastern Mediterranean region in the Middle Miocene
10:30 – 10:50	Boglárka Erdei, Torsten Utescher, Lilla Hably and Volker Mosbrugger: Late Miocene Vegetation of the Pannonian Basin as reflected by plant functional types
Coffee break:	10:50 – 11:30
11:30 – 11:50	Felix T. Portmann and Torsten Utescher: Climate response to variations of the Gulf Stream intensity - Comparisons of model results with palaeovegetation records for the Late Miocene
11:50 – 12:10	Torsten Utescher, Dimiter Ivanov, Andreas Dreist and Volker Mosbrugger: Assessing aridity in palynomorph records – tests with a novel technique of signal enhancement and employment of aridity indices
12:10 – 12:30	Angela A. Bruch: Quantifying openness of palaeovegetation with modern LAI data – an attempt towards a new approach
Lunch break:	12:30 – 14:00
14:00 – 14:20	Edoardo Martinetto, Elena Vassio and Giovanni Monegato: East-European affinity of a fruit and seed flora from NE Italy
14:20 – 14:40	Angela A. Bruch, Ivan Gabrielyan, Steffen Scharrer, Klaudia Kuiper and Uwe Kirscher: Early Pleistocene Vegetation and Climate in Southern Caucasus
14:40 – 15:00	Viktoria Hristova and Dimiter Ivanov: Late Miocene vegetation change in Karlovo Basin, Central Bulgaria
15:00 – 15: 20	Boris Tsenov and Dimiter Ivanov: Comparative analysis of climate reconstructions results from Gotse Delchev Basin (SW Bulgaria)

**Coffee break**: 15:20 – 16:00

16:00 – 16:20 Ivan Gabrielyan: **New species of the fossil macroflora from Early Pleistocene** 

lake sediments of Sisian Formation, Southern Armenia

16:20 – 16:40 Grzegorz Worobiec and Elżbieta Worobiec: Preliminary results of

investigations on fungal remains from Pliocene deposits of Mizerna

(southern Poland)

16:40 – 18:00 Final discussion and synthesis, outlook to future NECLIME research: Climate

and vegetation evolution in the Paratethys, Eastern Mediterranean, and Black Sea area; NECLIME annual meeting 2013, St. Petersburg: presentation of the

venue.

Moderators: A. Bruch and T. Utescher

**Goodbye**: 18:00

## The NECLIME Workshop

### **Thursday October 4**th

9:30 – 13:00 Joint Workshop of the NECLIME Working Groups on Taxonomy of the

Macrobotanical and Palynomorph Record.

Moderators: T. Utescher, B. Erdei, E. Worobiec and D. Ivanov

Torsten Utescher: Report on recent activities of the NECLIME working groups on Taxonomy of

Neogene palaeobotannical record

Dimiter Ivanov: Objectives and progress of the NECLIME working group on taxonomy of

**Neogene palynomorphs** 

Elżbieta Worobiec: Some new ideas from the "Atlas of pollen and spores of the Polish Neogene

Angiosperms (2)"

Adele Bertini and Edoardo Martinetto: Palaeofloristic, vegetational and climatic

reconstructions: a comparative analysis from micro- (pollen) and

macropalaeobotanical (leaves, fruits and seeds) data

Boglárka Erdei and Torsten Utescher: Introduction to the single points to be discussed and opening of the discussion:

integration of diverse plant records - the prospects of joint studies

- taxon complexes in the Cenozoic plant record and novelties in the taxonomy of Cenozoic plants
- NECLIME database updating the taxonomy of fossil plant taxa and their NLRs, identification of synonyms; recent critique concerning CA methodology and Palaeoflora climate data
- potential exchange of palaeobotanical/botanical data from China
- possibilities to develop/improve available data (e.g revisions, reinvestigation of localities) prospects of cooperation with Chinese colleagues
- Plant Functional Types recent advances in pft classifications
- forthcoming NECLIME workshops
- additional suggestions, ideas on topics to be discussed in the scope of the workshop are highly welcome.

**Lunch break:** 13:00 – 14:00

14:00 – 17:00 Optional:

Work with reference and palaeobotanical collections

Organizers: V. Hristova and B. Tsenov

Sightseeing tour of Sofia

Organizers: V. Bozukov and D. Ivanov

# The NECLIME Field trip

Organizers: D. Ivanov, V. Bozukov, T. Utescher, D. Ivanova

Friday October 5<sup>th</sup>

08:00 – Departure from Sofia

Saturday October 6<sup>th</sup>

19:00 – Return to Sofia, Accommodation in the hotel

Sunday October 7<sup>th</sup>

Departure of participants