



12th workshop of the working group on palynology 2nd circular

Dear friends,

After some pandemic years, when we had limited opportunities for personal scientific meetings, we are ready to organize and hold the **12**th **workshop of the working group on palynology** at the Akdeniz University, Department of Geological Engineering, Antalya, Turkey.

Date: October 17, 2023 – Arrival Day

October 18 and 19, 2023 – Workshop – presentations, microscopy and excursion

October 20, 2023 – Departure Day

The venue

The 12th NECLIME workshop will be held at the Akdeniz University, Department of Geological Engineering, Antalya, Turkey. The geology department is part of the engineering faculty. It is located on the main campus of the university.

The Antalya region, offering all the mysticism of the past and of our days, is now called the "Turkish Riviera", due to its archaeological and natural beauties. Antalya is the place where sea, sun, history and nature constitute a perfect harmony and which also comprises the most beautiful and clearest coast along the Mediterranean. Antalya was awarded the "Golden City with Five Flowers" award in the Blooming Cities competition held in Kamloops, Canada.

We look forward to welcoming you to Antalya and hope that you will enjoy your stay in our city.



Main entrance of the Akdeniz University

Place:

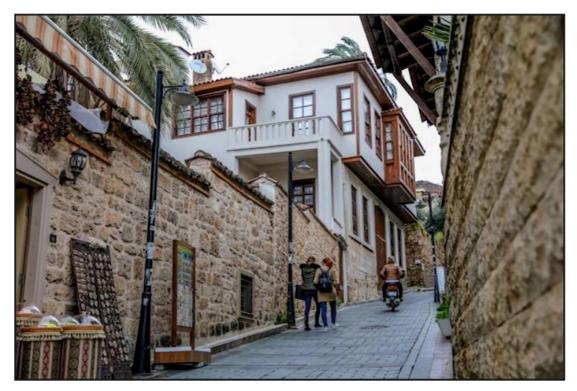
Faculty of Engineering, Department of Geological Engineering, Akdeniz University in Antalya Dumlupinar Avenue – Campus 07058 Konyaalti Antalya TURKEY



Lower Düden Waterfall in Antalya



Upper Düden Waterfall in Antalya



An avenue of the Inner Castle (Kaleiçi)

Scientific program and topics

The program will traditionally be based on presentations, as well as the microscopy of slides you will bring with you, which we will discuss together.

Main scientific topics:

- Plant diversity reflected in pollen assemblages
- Pollen and NPPs as complementary environmental proxies
- The role of modern soil surface samples for vegetation reconstructions
- SEM studies and/or modern comparative materials as a tool to improve taxonomic resolution
- NLRs of Neogene (and Paleogene) pollen types
- Palynology of the Eastern Mediterranean and adjacent areas
 - The role of palynomorphs in regional biostratigraphy
 - History of plant diversity in the Eastern Paratethys
 - The Balkans as a refuge area and migration route (Floristic exchange between Europe and Asia)
- Aridification trends and large-scale changes of palaeovegetation patterns evidence from pollen record.
- Optional: Open discussion on important topics.

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Unfortunately, we do not have at our Faculty any reference pollen collection. Please, bring with you slides you would like to discuss with all. There is no strict time limit for your presentations because we would like to have a fruitful working atmosphere without stress during our meeting.

Conference fee

The conference fee of 150 EUR includes lunches, coffee breaks, abstract volume, excursion to the *Inner Castle of Antalya*, and other workshop facilities, and is payable on site.

Workshop excursion

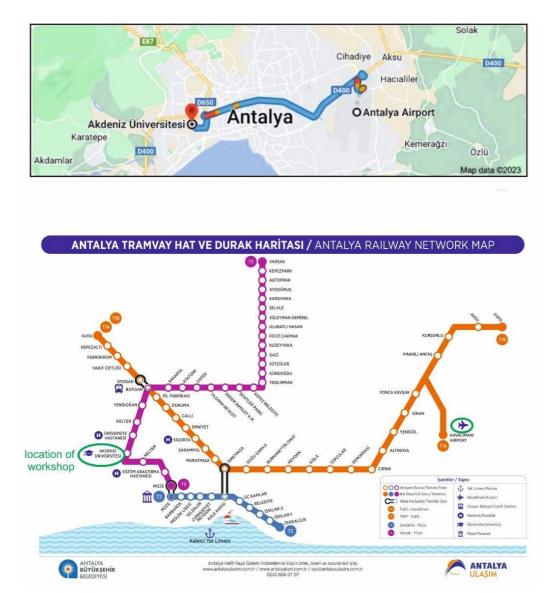
- Inner Castle of Antalya
- Lower Düden Waterfalls

Travel and accommodation

There are several reasonably priced hotels within short walking distance of the department of geology, offering a good service and familiar atmosphere.

Antalya Airport is an international airport, situated approximately 12 kilometres northeast of the Antalya city centre. The workshop venue is close to the city centre. You may easily reach Antalya from most of countries.

You can use two tram lines to reach the workshop venue. One is the airport tram line, which starts from the airport and ends in Fatih (orange line). You should change the tram on the central bus station (otogar). Then, preferably change to another tram called Varsak - Gazi - Atatürk Tram line (burnt rose line), until reaching Akdeniz University.



Organizing committee

Mehmet Serkan Akkiraz, Erdal Koşun, Angela Bruch, Marianna Kováčová, Torsten Utescher and Dimiter Ivanov



NECLIME

PROGRAM of 12th NECLIME workshop

18OCTOBER, 2023 (Wednesday), Hall of Geological Engineering

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9.00-10.00	Registration of the participants					
10.00-10.10	Opening of the workshops					
10.10-10.30	Introductory lectures- Erdal Koşun, Angel	a A. Bruch, Dimiter Ivanov				
10.30-10.50	Angela A. Bruch, Selina Mahler, Irina Shat Neogene long-term trends in climate in We		n diversity			
10.50-11.10	Detelina Belkinova, Dimiter Ivanov Ecological Implication of Non-Pollen Palynomorphs	s – an Example from the Late Miocene Belibr	reg Coal Basin (Bulgaria)			
11.10-11.30	Sariye Duygu Durak, Mehmet Serkan Akki Eocene palaeoecology of the Mengen (Bolu) Basin,	_				
11.30-11.50	COFFEE BREAK					
11.50-12.10	Nurdan Yavuz Non-Pollen Palynomorphs as Potential Palo	aeoenvironmental Indicators in Quate	rnary sediments from Ana	tolia		
12.10-12.30	Lisa Schiersch, Angela A. Bruch First approach to quantifying the relationsl	hip between the regional vegetation a	and the pollen record of Ar	menia		
12.30-13.20	LUNCH					
13.20-13.40	Nikita Lavrenov, Ekaterina Ershova, Valer Late Holocene landscape dynamics and hui		(Western Russia)			
13.40-14.00	Narine Hayrapetyan, Elen Hakobyan, Eliso Middle to late Holocene Lake level changes		· -		-1 peat section	
14.00-14.20	Sarah Gonçalves Duarte, Francisko José da Paleoclimatic, paleoenvironmental and pa palynomorphs from upper Jurassic up to M	leoecological discussions based on th		e Anemiaceae fa	mily and other associated	
14.20-14.40	COFFEE BREAK					
14.40-18.00	Sightseeing of Inner Castle (kaleiçi)					
18.00-21.00	DINNER Inner Castle (kaleiçi)					
19OCTOBER, 2023 (Thursday), Hall of the Geological Engineering						
9.00-9.20	Eliso Kvavadze New opportunities for joint research of no activities of ancient human	n-pollen palynomorphs (NPP) and po	ollen for the reconstruction	of the environn	nent, living conditions and	
9.20-9.40	Sarah Gonçalves Duarte, Mitsuru Arai Sclereids and trichomes (new categories of	of palvnomorphs sensu lato): Compar	ative studies between the	fossils and of the	e extant/livina plants with	

1900	TOBER, 2023 (Thursday), Hall of the Geological Engineering
9.00-9.20	Eliso Kvavadze New opportunities for joint research of non-pollen palynomorphs (NPP) and pollen for the reconstruction of the environment, living conditions and activities of ancient human
9.20-9.40	Sarah Gonçalves Duarte, Mitsuru Arai Sclereids and trichomes (new categories of palynomorphs sensu lato): Comparative studies between the fossils and of the extant/living plants with their preliminary applicabilities.
9.40-10.00	Valerii Pimenov, Ekaterina Ershova Local vegetation of the Kamchatka river valley during The Holocene and Late Pleistocene: reconstruction based on palynological and tephrochronological data
10.00-10:40	COFFEE BREAK
10.40-12.00	Workshops at the microscope (the opportunity to observe the participants samples)- Department of Biology
12.00-13.00	LUNCH
13.00-15.00	Discussion, summary and plans for the future, closing of the workshops

15.00-18.00 Sightseeing of Lower Düden Waterfalls