





# Kadir Has University, Istanbul, Turkey





**IUGS** 

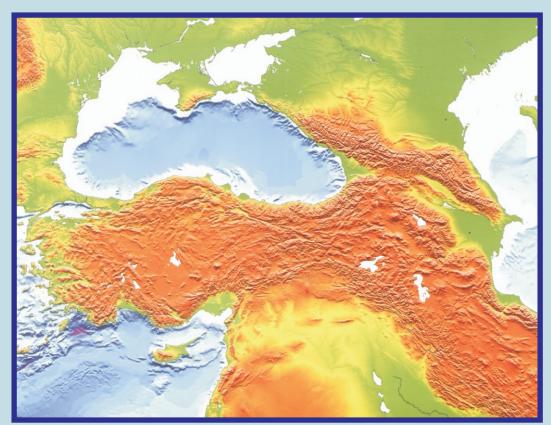
Dokuz Eylül University, Izmir, Turkey

Çanakkale Onsekiz Mart University, Çanakkale, Turkey



22-31 August 2009

# INTERNATIONAL GEOSCIENCE PROGRAMME



# **SECOND CIRCULAR**

IGCP 521 - INQUA 0501 Fifth Plenary Meeting and Field Trip

IGCP 521 "BLACK SEA-MEDITERRANEAN CORRIDOR DURING THE LAST 30 KY: SEA LEVEL CHANGE AND HUMAN ADAPTATION (2005 - 2009)

INQUA 0501 "CASPIAN-BLACK SEA-MEDITERRANEAN CORRIDOR DURING LAST 30 KY: SEA LEVEL CHANGE AND HUMAN ADAPTIVE STRATEGIES" (2008-2011)

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#### **WELCOME**

On behalf of the Organizing and Executive Committee of the UNESCO-IUGS-IGCP 521 – INQUA 501 Fifth Plenary Meeting and Field Trip, as well as Kadir Has University, İstanbul, Turkey; Dokuz Eylül University, İzmir, Turkey; and Çanakkale Onsekiz Mart University, Çanakkale, Turkey, we are delighted to welcome you to the IGCP 521 - INQUA 501 "Caspian-Black Sea-Mediterranean Corridor during the last 30 ky: Sea level change and human adaptation" Fifth Plenary Meeting and Field Trip being held on 22-31 August 2009.

The Black Sea-Mediterranean Corridor is an integrated oceanographic system defined here as the large geographical area covering the Manych-Kerch Gateway (Manych Valley, the Sea of Azov, and the Kerch Strait) that lies to the east of the Black Sea, the Black Sea, the Marmara Gateway (the Bosphorus Strait, the Sea of Marmara, and the Dardanelles), the Aegean Sea, the Eastern Mediterranean, and their coasts.

This conference is the fifth in a series of IGCP 521 – INQUA 501 Plenary Meetings and Field Trips. It is being held in the Eastern Aegean part of the Corridor, a key region for successful implementation of IGCP 521 – INQUA 501. The area possesses unique evidence of sea-level change, coastline migration, and human heritage. Over the course of the field trips, participants will visit unique archaeological monuments such as Ephesus; early building phases at Artemision (which was one of the Seven Wonders of Antiquity); the Ephesian gulf; Erie island (today Kurudağ); Akgöl; Gebekirse; Alaman lakes; Miletus; Troy; Alexandria Troas and its relation to nearby geothermal sites; and prehistoric settlements on the Gallipoli Peninsula that will illuminate details of the relationship between geomorphology and prehistoric settlement (raising questions about whether there are any criteria to determine the preferences for prehistoric settlements and raw material supplies on the part of prehistoric humans).

The meeting will discuss: (1) the actual status of our knowledge on a range of subjects, and (2) scientific approaches to integrating environmental, anthropological, ethnological, and archaeological data in order to trace the history of ancient humans in the region and to predict their future development in coastal zones under various sea-level scenarios. In addition, it will introduce young scientists, especially from the Eastern countries, to new analytical techniques and state-of-the-art interpretation of data; it will encourage east-west dialogue and integration of researchers from different countries into the international R&D community; and it will contribute to the preservation of cultural and religious heritage.

The Fifth Plenary Meeting and Field Trip has been organized by Dokuz Eylül University, İzmir, Turkey; and Çanakkale Onsekiz Mart University, Çanakkale, Turkey, and sponsored by Kadir Has University, Istanbul, Turkey; and the Avalon Institute of Applied Science, Winnipeg, Canada; with financial contributions from INQUA and UNESCO-IUGS-IGCP.

We are happy to welcome to Turkey distinguished specialists and students in the Humanities, Earth, and Life Sciences from Australia, Bulgaria, Canada, Dagestan, France, Georgia, Germany, Greece, Iran, Moldova, Romania, Russia, Turkey, the United Kingdom, and the United States.

We wish you a very pleasant stay in Turkey.

Sincerely,

Organizing and Executive Committee of IGCP 521- INQUA 501 Fifth Plenary Meeting and Field Trip

#### AIMS AND SCOPE

The main goal of the IGCP 521 – INQUA 501 project is to provide cross-disciplinary and cross-regional correlation of geological, geochemical, geophysical, palaeontological, archaeological, and historical records for the entire Black Sea-Mediterranean Corridor in order to evaluate the influence of sea-level change and coastline migration on human adaptation during the last 30 ky. IGCP 521 – INQUA 501 investigates the evolution of the coastal zone, where a rich sedimentary and archaeological archive

provides a superb opportunity to study spatial and temporal interactions between human adaptation and environmental change.

The Fifth Plenary Meeting and Field Trip is focused on the progress of IGCP 521 – INQUA 501 with special attention to (1) Linear and non-linear geological processes and concepts through correlative studies of a wide range of sites through the "Corridor" that is needed to achieve a better understanding of the influence of global climate change and/or active tectonics on regional sea-level fluctuations, coastline evolution, transformation from lacustrine to marine environment, eco- and sedimentary system (including deposition of sapropels), as well as prehistory and history of the adaptation of Anatomically Modern Humans; (2) Correlation of sea-level changes in the "Corridor" with those in the Caspian Sea; (3) Improvement of standards of research methods and techniques (e.g., quantitative modeling of environmental crises with detailed identification of the factors involved and their behavior); (4) Delineation of the main areas of natural risk (e.g., erosion, flooding) required for proper environmental management; and (4) Further elaboration of a complete database on bibliography, radiocarbon assays, archaeological sites, and artifacts linked to the sea-level changes.

The meeting brings together multidisciplinary scientists from all over the world and enhances the West-East scientific dialogue by providing a supportive background for collaboration with regard to the correlation and integration of their discoveries on the influence of climatically/tectonically induced sealevel changes and coastline migration on humanity. This is an area of strategic importance not only for all coastal countries but also for at least 17 other countries sharing the drainage basin that is one-third the size of the European continent.

The meeting will take place nine days. Three days (23-25 August) will be spent on the technical sessions, and five days (26-30 August) will be dedicated to the field trips.

#### **SCHEDULE**

- **22 August**: Arrival and Registration: Conference Hall of The Main Library Congress Center, Dokuz Eylül University, Tinaztepe Campus 35160, Buca, Izmir
- **22 August**: Ice-Breaking Party at the Social Centre, Second Floor, Dokuz Eylül University, Tinaztepe Campus 35160, Buca, Izmir
- **23-25 August**: Opening Ceremony and Technical Sessions, Conference Hall of The Main Library Congress Center, Dokuz Eylül University, Tinaztepe Campus 35160, Buca, Izmir
- 24 August: Conference Dinner at BIRLIK HOTEL, Yeni Hall Yani Kaynaklar, Buca, Izmir
- **26-27 August**: Field Trips around Izmir -- Ephesus and Miletus.
- **28-30 August**: Field Trip around Troy; Alexandria Troas; Prehistoric settlements in the Gelibolu peninsula and coastal terrace deposits around Çanakkale Strait; Field Trip to Bozcaada eolianite and fossil root casts (rhizolith) and beachrocks.
- 30 August Closing Ceremony at IDA KALE Resort Hotel, Mola Caddesi Güzelyali, Canakkale
- **31 August:** Departure from Çanakkale to respective destinations. Buses will return to Izmir on the morning of August 31. Those participants who will depart from Izmir will be taken either to their hotels or directly to the airport.

#### **TECHNICAL SESSIONS**

The TECHNICAL SESSIONS will be organized into three panels, six ORAL and one POSTER sessions:

#### PANEL 1: Palaeogeographic and Palaeoceanographic Reconstructions.

Moderators: Allan Chivas (Australia) and Andrei Chepalyga (Russia)

# Session 1. Geology, Paleoceanography and Paleogeography of the Caspian-Black Sea-Mediterranean Corridor

Moderator: Gilles Lericolais (France) and İlhan KAYAN (Turkey)

This session will focus on geological, geophysical, sedimentological, geochemical, mineralogical and paleoceanographic proxies for, and radiocarbon dating of, sea-level change and coastline migration in order to reconstruct the palaeogeography and palaeoceanology, namely palaeotemperature, palaeosalinities, palaeoproductivity, circulation patterns, and efficiency of gateways for given time intervals; tracing the evolution of water masses in space and time and identification of their possible sources; reconstruction of climate dynamics and the changes from wet to arid periods; and determination of palaeodepths and cooperation in the construction of sea-level curves.

#### **Session 3: Active Tectonics**

Moderators: Yücel YILMAZ, Hayrettin KORAL, and Erdinç YIĞITBAŞ (Turkey)

This session will consider the influence of active tectonics on coastal morphodynamics in order to understand their contribution to climatically-induced coastline migration. Cases suggesting the influence of tectonics on palaeoceanographic, palaeogeographic or archeological features/data/sites in the BSMC are welcome in this session. General principles for elucidating tectonic effects from climatic influences will be focussed.

#### Session 4: Palaeontology and Biostratigraphy

Moderator: Andrei Chepalyga and Tamara Yanina (Russian Federation)

This session will focus on mollusks, foraminifera, ostracoda, diatoms, and dinoflagellate cysts in order to develop a regional, high-resolution, chronostratigraphical framework for the entire region, elaborating data on absolute age, bio- and ecostratigraphy.

#### **Session 5: Palynology**

Moderator: Petra Mudie (Canada) and Natalia Gerasimenko (Ukraine)

This session will focus on the reconstruction of vegetation and the history of climate dynamics based on GIS-linked maps and models of changing vegetation using available pollen diagrams and surface samples from both marine and lake sites.

#### PANEL 2: Archaeology, History, and Ethnology

Moderator: Pavel Dolukhanov (UK), Olena Smyntyna (Ukraine), Onur Özbek (Turkey), and Meral Akurgal (Turkey)

# Session 2. Archaeology, History, and Ethnology of the Caspian-Black Sea-Mediterranean Corridor.

This session will focus on the assessment and correlation of available information on human adaptation to environmental change; the elaboration of databases of archaeological artifacts thus far obtained from the region; and the determination of prospective areas in the search for new archaeological sites (on land and underwater).

#### PANEL III: Degassing of the Black Sea.

Moderator: Evgeny Shbyukov (Ukraine) and Valentina Yanko-Hombach (Canada, Ukraine)

#### **Session 6. Hot Spot Ecosystems**

This session will focus on the influence of stressful environments on benthic communities. Study sites will extend from the Caspian Sea to the Western Mediterranean and include open slopes, where landslides and deep-ocean circulation affect ecosystem development, and biodiversity hotspots, such as cold seeps, cold-water coral mounds, canyons and anoxic environments, where the geosphere and hydrosphere influence the biosphere through escape of fluids, presence of gas hydrates and deep-water currents. Past changes for the last 30 ka will be assessed using sediment archives. As so, this session will contribute to HERMES (Hotspot Ecosystem Research on the Margins of European Seas) project by assembling scientists from the HERMES community to coordinate their research and compare their results in order to provide a cross-disciplinary examination of the influence of stressful environments on biota.

#### **VENUE**

The conference will be held under the auspices of:

- 1. Kadir Has Üniversitesi, İstanbul, Kadir Has Caddesi, TR-34083, Cibali, İstanbul, Turkey, Tel: +90(212) 533 57 65
- 2. Dokuz Eylül Üniversitesi, Cumhuriyet Bulvari, No:144, TR-35210, Alsancak, İzmir, Turkey, Tel:+90(232) 412 1212
- 3. Çanakkale Üniversitesi, Çanakkale Onsekiz Mart Üniversitesi, Çanakkale, Turkey, Tel: +90(286) 218 0018

#### **ACCOMMODATIONS**

In Izmir (22-27 August) and Çanakkale (27-31 August) we have reserved a number of rooms in several hotels listed in the Hotel Reservation Form (available at http://www.avalon-institute.org/IGCP/meetings.html).

#### **REGISTRATION FEE**

The registration fee covers conference kit, refreshments during coffee breaks, lunches during field trips, museum entrance fees, and bus transportation during the field trip. It does not cover hotel accommodation, conference cinner as well as dinners during the conference and field tips.

#### **CONFERENCE LANGUAGE**

The official conference language is English.

#### **ORAL AND POSTER PRESENTATION**

Each speaker will have 20 minutes for presentation including question. Poster format is 100x180 cm.

Projection Equipment: Screens, LCD (PowerPoint presentation) projectors and overhead projectors are available.

#### **PUBLICATION**

Accepted abstracts will be published in the Volume of Extended Abstracts. The full papers will be published in an IGCP 521 Fourth Special Volume of the journal *Quaternary International*. For preparation of the manuscript, refer to Instructions for Contributors.

#### **VISA**

Visitors from other countries must carry a valid passport and, in certain cases, visas to be able to enter Turkey. For more information on visas and other required travel documents, please contact the Turkish Consulate in your area before your departure.

#### **CLIMATE**

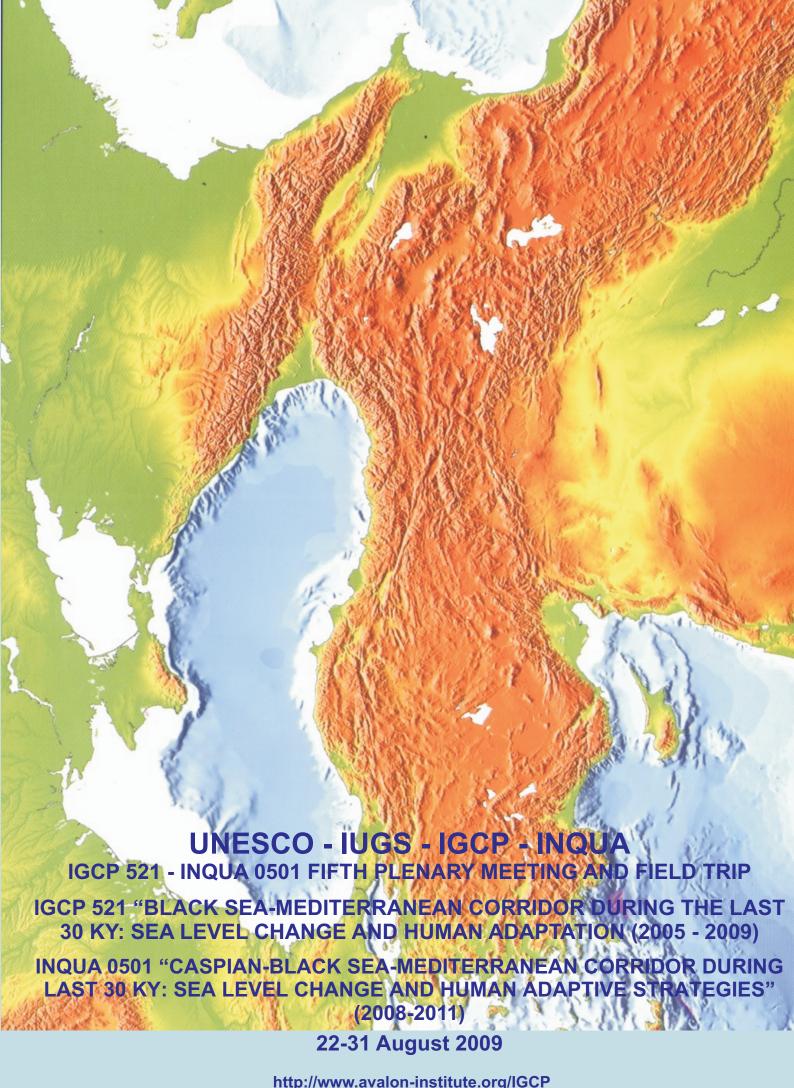
End of August is rather favorable time of the year for field trips although it may be hot. Daily temperature is about 27°C, and at night, it is about 24°C.

#### **TRAVEL**

Izmir is easily accessible by plain and ground transportation. No pick up in the Izmir Airport will be provided.

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March 1, 2009	First Circular on IGCP 521-INQUA 0501 website (www.avalon-institute.org/IGCP)
March 1, 2009	Abstract submission and registration opens
June 30, 2009	Abstract submission closes
July 15, 2009	Notification of abstract acceptance
March 1, 2009	Submission of application for financial support opens
April 30, 2009	Submission of application for financial support closes
June 30, 2009	Deadline for early registration
July 31, 2009	Second Circular on IGCP 521-INQUA 0501 website (www.avalon-institute.org/IGCP)
August 1, 2009	Program of the conference available
March 1, 2009	Paper for submission to Quaternary International journal opens
December 31, 2009	Paper submission to Quaternary International journal closes



http://www.avalon-institute.org/IGCP http://www.http://www.deucbs.com/igcp2009