

## 2016 Turkey activities related to IGCP Report provided by the Secretary of National Committee of Turkey of IUGS and IGCP

IGCP609: Climate-environmental deteriorations during greenhouse phases: Causes and consequences of short-term Cretaceous sea-level changes (2013-2017) <a href="http://www.univie.ac.at/iqcp609/">http://www.univie.ac.at/iqcp609/</a>

IGCP Theme: Global Change and the Evolution of Life: Evidence from the geological record

<u>Project Leader:</u> Prof. Dr. Michael Wagreich (University of Vienna, Austria), Prof. Dr. Xiumian Hu (Nanjing University, China), Prof. Dr. M. Julleh Jalalur Rahman (Jahangirnagar University, Bangladesh), Prof. Dr. Silke Voigt (Goethe-Universität, Germany), Prof. Dr.İsmail Ömer Yılmaz (Middle East Technical University, Turkey), Prof. Dr. Svetlana Zorina Kazan (Volga Region) Federal University, Russia)

<u>Aim of IGCP609 Project</u>: The Cretaceous (145–66 million years ago) is believed to have differed from our present world in multiple respects, such as climatic conditions ('greenhouse world' in general), climate change and patterns, palaeoceanographic conditions and high eustatic sea levels. This project will investigate Cretaceous sealevel cycles in detail in order to differentiate and quantify both short- and long-term records within the new high-resolution absolute time scale based on orbital cyclicity.

<u>Activities of IGCP609 in 2016:</u> EGU 2016 - SESSION SSP2.6 "Mesozoic palaeoenvironments and greenhouse sea-level changes (IGCP 609)"; 35th International Geological Congress (2016), Joint Session: "Cretaceous sea-level changes and Asia-Pacific Cretaceous Ecosystems (IGCP 609, IGCP 608, ICDP Songliao Basin)" (incl. "4th IGCP 609 Workshop") Under the core topic "Fundamental Geoscience", theme "Phanerozoic Earth History, Stratigraphy and the Geologic Time Scale",

"STRATI 2015 - 2nd International Congress on Stratigraphy" in Graz, Austria, July 19–23, 2015.

"International Workshop on Climate and Environmental Evolution in the Mesozoic Greenhouse World *And* 3rd IGCP 609 Workshop on Cretaceous Sea- Level Change" Nanjing, China, September 5-11, 2015.

The (2nd) IGCP 609 Workshop "Climate-environmental deteriorations during greenhouse phases: Causes and consequences of short-term Cretaceous sea-level change" in Bucharest, Romania, 23rd to 25th of August 2014. The workshop is followed by 2 fieldtrips (26–28 of August, 29–31 of August).

the 9th International Symposium on the Cretaceous System (ISC9), Ankara, Turkey, September 1-5, 2013.

<u>Participants from Turkey to meeting and field trip of these workshops:</u> İsmail Ömer Yılmaz (the one of Project Leaders, Middle East Technical University, Turkey) and other Turkish geologists.

## IGCP 610: From the Caspian to Mediterranean: Environmental Change and Human Response during the Quaternary (2013-2017) <a href="http://www.avalon-institute.org/IGCP610/index.php">http://www.avalon-institute.org/IGCP610/index.php</a>

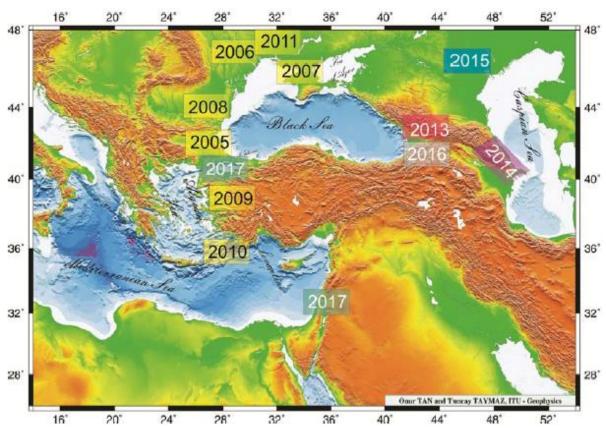
IGCP Theme: Global Change and the Evolution of Life: Evidence from the geological record

<u>Project Leaders:</u> Prof. Dr. Valentina Yanko-Hombach (Mechnikov National University, Ukraine), Prof. Dr. Nikolay Panin (General of the National Institute of R&D for Marine Geology and Geo-ecology, Romania), Prof. Dr. Olena Smyntyna (the Institute of International Education, Head of the Department of Archaeology and Ethnology, Ukranie), Prof. Dr. Mehmet Celal Özdoğan (Istanbul University, Turkey), Prof. Dr. Tamara Yanina (M.V.Lomonosov State University, Russia)

<u>Aim of IGCP610 Project:</u> This Project will investigate the influence of environmental change on the development of humankind for the entire Caspian-Black Sea-Mediterranean Corridor that encompasses the Eurasian intercontinental basins of the Caspian, Black, Marmara, Aegean, and Eastern Mediterranean seas with their connecting straits and coasts (Fig. 1). This project has a triple focus: (1) geological history, (2) paleoenvironmental change (climate, sea level, coastline migration), and (3) human response (migration, subsistence strategy, physical and cultural adaptation, etc.) to environmental changes.

<u>Activities of IGCP610 in 2016:</u> IGCP610 Fourth Plenary Conference and Field Trip, Tbilisi, Georgia, 2-9 October 2016

<u>Participants from Turkey to meeting and field trip of this workshop:</u> Prof. Dr. Mehmet Celal Özdoğan (the one of Project Leaders, Istanbul University, Turkey), Mustafa Ergun (Dokuz Eylul University, izmir); Prof. Dr. Yesim Buyukmeric (Bulent Ecevit University, Zonguldak), Prof. Dr. Gulcin Kucukkaya (Yeditepe Universitesi, Istanbul).



**Fig. 1:** Connection of the Caspian, Black, Marmara, Aegean, and Eastern Mediterranean seas (after Tan & Taymaz 2005). In yellow labels are the locations of IGCP521-INQUA501 meeting and field trip sites (2005-2011); in other color labels are sites to be studied by the present IGCP610 Project: 2013—Tbilisi (western Georgia); 2014—Baku (Azerbaijan); 2015—Astrakhan (Volga Delta, Russia); 2016—Tbilisi (eastern Georgia); 2017—Haifa (Israel, and Istanbul (Turkey).

## IGCP649: Diamonds and Recycled Mantle (2015-2019) www.igcp649.com

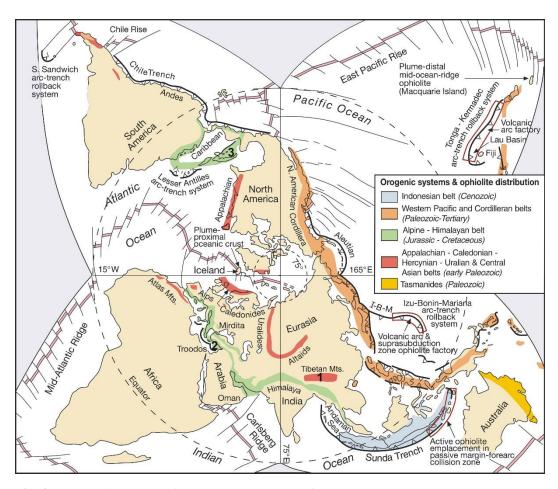
IGCP Theme: Geodynamic: Control our environment

<u>Project Leader:</u> Prof. Dr. Jingsui Yang (Chinese Academy of Geological Sciences, Chine), Prof. Dr. Yildirim Dilek (Miami University, USA), Prof. Dr. William L.Griffin (Macquarie University, Australia), Prof. Paul T. Robinson (Chinese Academy of Geological Sciences, Chine), Prof. Dr. Ibrahim Milushi (Tirana University, Albania), Prof. Dr. Mohamed Metwaly Abu Anbar (Tanta University, Egypt)

<u>Aim of IGCP649 Project:</u> The project will undertake systematic sampling of peridotites-chromitites in different ophiolites around the world with diverse ranges of ages and geochemical affinities to document the extent of diamond occurrence in the mantle (Fig.2).

<u>Activities of IGCP649 in 2016:</u> IGCP610 Probing the oceanic mantle: Troodos Ophiolite as a case study. Agros – Cyprus, 14 – 20 May 2016

<u>Participants from Turkey to meeting and field trip of this workshop:</u> Ender Sarifakioglu (the Leader of Turkish National Working Group of IGCP649)



**Fig. 2:** Global distribution of major orogenic belts (after Dilek & Furnes, 2011). The workshops of IGCP649 project: 1–ophiolites in the Qilian Mountain (China, 2015); 2–Troodos ophiolite (Cyprus, 2016); 3– Cuban Mayarí-Baracoa ophiolite in the Caribbean ocean basin (Cuba, 2017).