**IUGS** 















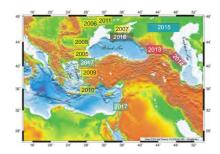






# **First Circular**

M.V. Lomonosov Moscow State University, Astrakhan State University, Astrakhan Museum-Reserve, Russia 22-30 September 2015



IGCP 610 "From the Caspian to Mediterranean: Environmental Change and Human Response during the Quaternary"

http://www.avalon-institute.org/IGCP610

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#### AIMS AND SCOPE

The main goal of the IGCP 610 Project is to provide cross-disciplinary and cross-regional correlation of geological, archaeological, environmental, and anthropological records in order to (a) explore interrelationships between environmental change and human adaptation during the Quaternary, (b) create a networking and capacity-building structure to develop new interdisciplinary research initiatives, and (c) provide guidance to heritage professionals, policy makers, and the wider public on the relevance of studying the Caspian-Black Sea-Mediterranean Corridor ["CORRIDOR"] for a deeper understanding of Eurasian history, environmental changes and their relevance, and likely future impacts on humans.

The "CORRIDOR" is perfectly suited for these purposes. (1) It encompasses the large chain of intercontinental basins—the Caspian, Black (together called Ponto-Caspian), Marmara, Aegean, and Eastern Mediterranean (Levantine) seas—with their connecting straits and coasts. Here, sealevel changes are clearly expressed due to geographical location and semi-isolation from the World Ocean, which makes the "CORRIDOR" a paleoenvironmental amplifier and a sensitive recorder of climatic events. Periodic connection/isolation of the basins during the Quaternary predetermined their specific environmental conditions and particular hydrologic regimes, and thus, the area, and especially the Black Sea, represents a "natural laboratory" to study the responses of semi-isolated basins to GCC. (2) It has rich sedimentary and geomorphologic archives that document past environmental changes. (3) It has a substantial archaeological, anthropological, and historical record. In particular, it contains evidence for the transition from *Homo erectus* to *Homo sapiens*. The first appearance of a *Homo* species in the "CORRIDOR" is dated to the Lower Paleolithic, ca. 1.8 million years ago, at Dmanisi in Georgia. After this species migrated into the Ponto-Caspian area, human colonization of the region continued, major cultural and technological inventions (tools, hearths, dwellings, clothes, decorations, etc., as well as the origin of art, ideology, and ritual practice) ensued, and subsistence strategies were elaborated, enabling us to investigate multiple physical, social, and cultural responses of humans to global environmental change. (4) It is easily accessible for study.

To achieve the main goal and objectives, the Project will incorporate six dimensions, each addressed by integrating existing data and testing of hypotheses: 1. The geological dimension will examine the sedimentary record of vertical sea-level fluctuations and lateral coastline change. 2. The paleoenvironmental dimension will integrate paleontological, palynological, and sedimentological records to reconstruct paleolandscapes. 3. The archaeological dimension will investigate cultural remains. 4. The paleoanthropological dimension will study responses of different *Homo* species to environmental change. 5. The mathematical dimension will provide GIS-aided mathematical modeling of climate and sea-level changes, and human dispersal linked to paleoenvironmental variation that can be meaningfully compared with current global changes. 6. The geoinformation dimension will grasp the "big picture" of geoarchaeological events over the duration of the Quaternary. Particular attention will be given to synthesizing the wealth of literature published in local languages, stored in archives, and largely unknown or ignored in the West.

Study sites will include the Caspian, Azov-Black Sea, Marmara, and Eastern Mediterranean. These sites are characterized by rich sedimentary, geomorphological, archaeological, paleoan-thropological, and historical records providing a superb opportunity to assess the influence of climate and sea-level change on human development. It is expected that the project will allow us to suggest a groundbreaking, comprehensive theory about the influence of paleoenvironmental

changes on human adaptive strategies during most of the Quaternary in the region of the Southern Eurasian seas.

There will be five or six Plenary Conferences and Field Trips in the following regions: 2013 – Georgia; 2014 – Azerbaijan; 2015 – Russia (Northern Caspian); 2016 – Crimea and Taman Peninsula (Russia); 2017 – Israel (Eastern Mediterranean) and Turkey (around the Sea of Marmara). They are scheduled for the third quarter of each year. Prior to each Conference and Field Trip, the Conference Proceedings and Field Trip Guide will be prepared. Each Plenary Conference will provide a forum for dialogue between multidisciplinary specialists in the Quaternary history of the "CORRIDOR" and other workers in related areas.

The Field Trips will follow the Plenary Meetings (Fig. 1). They will be focused on observation of geological characteristics of Quaternary stratotypes as well as key archaeological and paleon-tological sites. All of them are easily accessible for study and will be sampled during the Field Trips for further investigation in various laboratories around the world.

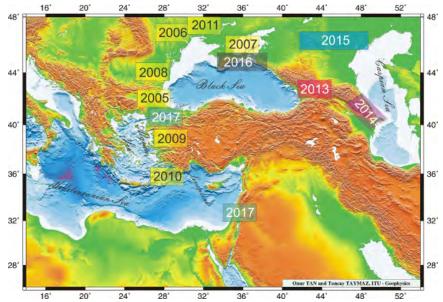


Figure 1. The Caspian-Black Sea-Mediterranean "CORRIDOR": in yellow are the locations of IGCP 521-INQUA 501 meeting and field trip sites (2005-2011); in other colors are sites to be studied by the present IGCP 601 Project: 2013 – Tbilisi, Georgia; 2014 – Baku, Azerbaijan; 2015 – Astrakhan (Lower Volga), Russia; 2016 – Sevastopol (Crimea) and the Taman Peninsula, Russia; 2017 – Haifa, Israel, and Istanbul, Turkey.

The Third Plenary Meeting and Field Trip will be held in the Northern Caspian region in the city of Astrakhan and the Astrakhan region. The city of Astrakhan, the oldest economic and cultural center of the Lower Volga and the Caspian Lowland, is located in the upper part of the Volga Delta on 11 islands (Fig. 2). The area of the city is 208.7 km². The population of the city is about 531,000 people. The city is multicultural and inhabited by representatives of more than 100 nationalities and 14 religious denominations. The Astrakhan region extends along both sides of the Volga-Akhtuba floodplain for 400 km, and it is bordered on the east by Kazakhstan, on the north and northwest by the Volgograd region, on the west by the Republic of Kalmykia, and on the south, it is bounded by the Caspian Sea. Thanks to its unique geographical location, the Astrakhan region is a land of considerable natural contrasts.













Figure 2. Astrakhan

Within the wide Volga-Akhtuba floodplain, which crosses a desert plain from northwest to southeast, desert landscapes alternate with meadows, riparian forests, and dense reed-beds. The Volga Delta is the largest river delta in Europe. It includes 500 sleeves (hoses), ducts, and small waterways, creating an abundance of rivers, lakes, islands and islets, winding water channels and bays, sand dunes, and the peculiar ridges known as Baer knolls, forming a diversity of rich of natural landscapes. Here are found the largest fields of lotus blossoms in the world, in which

some can cover up to  $7 \times 10$  km. The climate is moderate, sharply continental, with large annual and summer daily ranges in air temperature, low precipitation, and high evaporation rates. The typical winds are easternly, southeasterly and northeasterly, and summers often experience droughts.

Field trips will focus on the spectrum of Quaternary geological sequences exposed within sections of the Lower Volga area. This includes major exposures in the Volga valley between Astrakhan and Volgograd: Cherniy Yar – Nizhnee Zaimische, Kopanovka, Lenino, and Seroglazka. The conference participants will be able to see deposits of the Baku, Early Khazarian, Late Khazarian, Khvalynian, and Novocaspian transgressions, and the continental sediments separating them: Singilsky, Chernoiarsky, and Atel. They will be able to select samples for faunal, palynological, and other tests. They will also see the Baer knolls (named for Karl Baer, who described them for the first time in the 19th century), which are east-west elongated ridges in the Caspian Lowland, a unique natural formation that has no analogues in the world.

It is planned to visit the lotus fields in the Volga Delta, which are the largest flowering sites on the planet. Lotus flowers blossom beginning in mid-summer and lasting until mid-September. In these places, one can observe birds coming from Africa, Iran, and India: flocks of swans, geese, ducks, pelicans, herons, and cormorants form colonies comprising thousands of individuals. Exotic rare species also congregate: pink flamingos, osprey, spoonbill, Dalmatian and great white pelicans. The population density of white-tailed eagle in the Astrakhan region is the highest in the world.

Archaeological tours will be held at the main ancient sites of the region. The first is the archaeological complex "Selitrennoe gorodishche" (Saltpeter Settlement), which is located 130 km north of Astrakhan. In the XIII to XIV centuries, it was the capital of the richest nomadic state in the Middle Ages, Sarai-Batu, seat of the Golden Horde founded by Genghis Khan's grandson, Batu Khan. A natural outcrop of the Caspian Pleistocene sediments is situated on the Akhtuba coastal cliff near the archaeological complex, so it will be also available for a visit.

Another archaeological site of the region—Gorodishche Samosdelka (the Ancient Itil Settlement)— is located 45 km below Astrakhan on the right bank of the Old Volga river. The main part of the settlement is situated on an island, surrounded by dried up canals. Cultural layers of this medieval city, with a total depth of about 3–3.5 m, contain the artifacts of the Khazar Khaganate Culture, the golden age of the city Saksin (XI to XIII centuries) which predated Sarai Batu. There also is located the famous Museum of Russian Watermelon. September is the best time for this delicious fruit.

Plans have been made to visit other archaeological and historical places in Astrakhan: the Astrakhan Kremlin, that was built between 580 and 1620, and the Regional Natural History Museum, which covers the history of the natural environment of the region and displays many of the pale-ontological finds from the Pleistocene deposits of the Volga valley, together with historical and archaeological objects.

#### **SCHEDULE**

- **22, September:** Arrival and Registration. Welcome Party.
- 23, 24, September: Plenary Session. Excursion to the Astrakhan Kremlin.
- **25, September:** Field Trip 1. Archaeological complex "Selitrennoe." Exposure of the Quaternary Caspian sediments.

- **26, September:** Field Trip 2. Section at Cherniy Yar-Nizhnee Zaimische. Exposure of the Bakinian, Khazarian, and Khvalynian deposits of the Caspian Pleistocene.
- **27, September:** Field Trip 3. Sections at Kopanovka, Lenino, and Seroglazka. Exposure of the lower- and late Khazarian, lower- and late Khazarian marine deposits, Atelian regressive sediments. An outcrop of the Baer Knolls.
- **28, September:** Field Trip 4. Volga delta. Lotus fields.
- **29**, **September:** Field Trip 5. Archaeological site "Samosdelka (Itil')." Museum of the Russian Watermelon.
- **30, September:** Round Table. Conference closing. Museum of Natural History (Astrakhan).

30 September – 1 October: Departure from Astrakhan.

#### **TECHNICAL SESSIONS**

The final number of plenary sessions will depend upon the number of participants and accepted presentations. To be accepted, each presentation must deal with results obtained from the study of environmental change and human response during the Quaternary in the Caspian-Black Sea-Mediterranean Corridor. It can also have a more general scope, for example, GIS-based modeling of the water exchange between adjacent basins: Application to the Manych-Kerch Outlet, Bosphorus Strait, and Dardanelles; Geoinformation Systems: An overview with regard to the Caspian-Black Sea-Mediterranean region. Presentations that go beyond data description to address interpretation and present a broader understanding of the chosen topic are especially encouraged.

#### **EXEMPLARY SUBJECTS**

Recent ecosystems

Paleontology and stratigraphy

Vegetation, soils, and landscapes

Geophysics and sequence stratigraphy

Climate change

Active tectonics

Archaeology and ethnography

Paleoanthropology

Paleogeography and paleoenvironment

Sea-level change and human response

Modeling of climate change

Modeling of sea-level change

GIS-aided interactive web-database

Rapid sea-level changes and environmental response

GIS-aided interactive web-database

# **FIELD TRIPS**

**Field trip 1** (25 September). Archaeological complex "Selitrennoe Gorodische" (ancient settlement). Exposure of the Quaternary Caspian sediments (Fig. 3, No. 1).



Figure 3. Map of the Lower Volga region with geological and archaeological sites to be visited during the Field Trips on September 25 (1), 26 (2), 27 (3), 28 (4), 29 (5) 2015.

We will visit the Archaeological complex "Selitrennoe Gorodische" (Figs. 4–5). In the XIII–XIV centuries, it was the capital of the richest nomadic state in the Middle Ages, the Golden Horde's city of Sarai-Batu. Scientific study of the settlement began in the XVIII century and continues today. Artifacts from "Selitrennoe" is stored in the United Historical-Architectural Astrakhan State Museum, the State Historical Museum, and the Hermitage Museum.





Figures 4–5. Archaeological complex of "Selitrennoe Gorodische."

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Deposits of saltpeter (Selitrennoe) were developed from the time of Peter I's rule. The origin of the deposits is linked to nomadic horse herds, which grazed around the capital of the Golden Horde at Sarai-Batu. Dung left by the animals became the basis of organic nutrition, which has evolved in a few centuries into the richest deposits of saltpeter.

Pleistocene Caspian sediments are exhibited near the archaeological site on the left side of the Akhtuba river valley (Figs. 6–7).





Figures 6–7. Selitrennoe section.

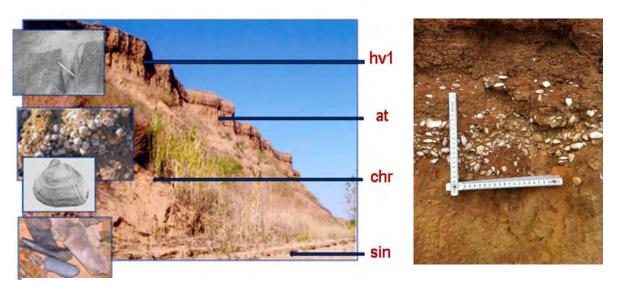
In the outcrop, under Upper Khvalynian sandy loam and sands, lies a section of Lower Khvalynian "chocolate" clays and sands with clay interlayers containing mollusk shells of *Didacna protracta protracta*, *D. zhukovi*, *D. ebersini*, and *Dreissena rostriformis distincta*. The thick section of Khazar deposits (different genesis: from offshore to estuary) with shells of *Didacna paleotrigonoides*, *D. subpyramidata*, *D. cristata*, and *D. pontocaspia tanaitica* was deposited below the Khvalynian layers.

**Field trip 2** (26 September). Section of the Pleistocene deposits at Cherniy Yar-Nizhnee Zaimische. The Cherniy Yar and Nizhnee Zaimische sections are characterized by a variety of facies of the Middle Pleistocene-Upper Pleistocene. In the bottom part are found the marine deposits of the Bakinian transgression of the Caspian Sea (MIS 16–15) that contain the early Bakinian mollusk complex (*Didacna catillus volgensis - D. parvula*). Singilian water-surface deposits overlay these sediments higher in the section and contain freshwater mollusk shells and vegetation debris that correspond to the regression interval of the Caspian Sea in the early part of the Late Pleistocene (MIS 11). The Chernoyarian alluvion with its sharp cut-off rests upon these deposits with a buried soil on the top of it (Mikulian, MIS 5). Chernoyarian sands contain a Khazarian faunistic mammal complex and contain numerous freshwater mollusk shells and derived shells of the early Khazarian malacofauna of the Caspian Sea.

Paleontological finds from this section are well-known all over the world and are kept in the Astrakhan (excursion is scheduled) and the Moscow paleontological museums. Atelian terrestrial deposits of different genesis penetrate by wedge permafrost into the underlying layer. Three layers of buried soils in the middle and upper part of the Atelian section give evidence of repeated warm periods. Atelian deposits correspond to the transgression of the Caspian Sea in first half of the Valdai (Weichselian) glacial epoch (MIS 4–3). These layers contain a number of mammal bones of the Late Pleistocene complex. This section is overlain by Khvalynian marine deposits

that are represented by sands and chocolate clays; they contain mollusk shells *Didacna protracta* and *D. ebersini*. They correspond to the second stage of the Valdai (Weichselian) glacial epoch.

Cherny-Yar is also interesting from a historic point of view. The Peter and Paul church (1647) is the oldest in the Astrakhan region and is famous for its fresco paintings (Fig. 11).



Figures 8–9. Section of the Pleistocene deposits at Nizhnee Zaimische

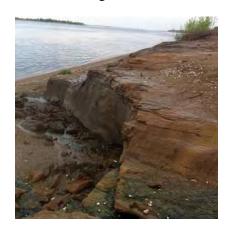


Fig. 10. Bakinian deposits



Fig. 11. Church of Saints Peter and Pavel

**Field trip 3** (27 September). Sections at Kopanovka, Lenino, Seroglazka (Figs. 12–15).

The Kopanovka section is located in the Baer knoll. It consists of the thick complex structure of the Khvalynian period (MIS 2), that contains rich malacofauna. This layer is underlain by the Atelian (MIS 4–3) water-surface sands. Lower down lie the Khazarian deposits: deltaic-marine Upper-Khazarian (MIS 5) deposits with rich amounts of freshwater shells and Caspian mollusks, and two layers of Lower Khazarian marine deposits, that also contain rich malacofauna.

The Lenino section is located in the Baer knolls. There is sand lying under the aeolian deposits and the full thickness of the knolls with rich quantities of Khvalynian shells *Didacna parallella borealis*, *D. ebersini*, *D. protracta*, *D. delenda*, *Monodacna caspia*, *Adacna vitrea*, and *Dreissena* 

rostriformis distincta. In its lower part, this sand also contains interlayers of the chocolate clays with small numbers of mollusk shells Adacna vitrea minima and Hypanis plicatus. Separated by alluvial sand lies a layer of marine deposits with sands, silts, and clays, that contains Khazarian mollusk shells Didacna pallasi, D. trigonoides chazarica, and Monodacna caspia. The Seroglazka outcrop stretches for two kilometers exposing a multilayer polyfacies section of marine deposits that are characterized by mollusk shells.

This Pleistocene section is overlain by Holocene aeolian deposits with a thickness of 7 m. There are four cultural layers that contain remains of charcoal, pieces of ceramic, and other traces of human activity. Radiocar-bon data reveal that the age of these charcoal remains is up to the VII–VIIIth centuries. The upper part of the Pleistocene section contains a double-layered Khvalynian deposit with specific Early and Late Khvalynian mollusk shells. It is underlain by Atelian (MIS 2) terrestrial deposits. The Upper Khazarian level reveals a complex structure reflecting three stages of accumulation. The Lower Khazarian marine deposits have a double structure (MIS 8–6) that reflects the stadial de-velopment of the transgression.



Fig. 12. Section at Kopanovka



Fig. 14. Section at Seroglazka



Fig. 13. Khvalynian marine terrace



Fig. 15. Baer Knoll exposure

Deposits of the New Caspian transgression are well developed in the south part of the Volga Delta, where the New Caspian Sea overflowed through swale features.

# Field Trip 4 (28 September). Volga Delta. Lotus fields (Figs. 16–19).

The Volga Delta is the largest river delta in Europe. It begins at the point of furcation, where the Buzan Creek separates from the main Volga (46 km north of Astrakhan) and then ramifies into some 500 branches, ducts, and small rivers. The main distributary system of the Volga contains Buzan, Bakhtemir, Kamyzyak, Old Volga, Bolda, Akhtuba (the only navigable waterway), and Kigach creeks. They form the basis of the channel network with smaller water courses (up to a width of 30–40 m and flow rates less than 50 m³/s). As a result, the delta area changes its size because of fluctuations in the level of the Caspian Sea. Unique flora and fauna of the delta (sturgeon, lotus, flamingo, pelicans, and others) are under state protection as the Astrakhan Reserve Area.



Fig. 16. The lotus field in the Volga delta







Figures 17-19. Volga delta

**Field Trip 5** (29 September). Archaeological site, Gorodishche Samosdelka (Ancient Itil Settlement) and the Museum of Russian Watermelon (Figs. 20–23).

The Samosdelka ancient settlement is located 45 km north of Astrakhan and 15 kilometers southwest of the village of Samosdelka in the Kamyzyaksk district, on the right bank of the river Old Volga. The main part of the settlement is situated on an island, which is surrounded by dry canals. Samosdelka extends along the river bank for a distance of 2 km; the width of the island is 500–700 meters. Cultural layers of this medieval city, with a total depth of deposit of about 3–3.5

m, contain artifacts of the Khazar Khaganate Culture, the golden age of the city of Saksin. We can see the remains of numerous residential and commercial buildings: brick houses with tandurs and kannes (devices for heating the house), sufas, tashnami (sinks) inside; mud huts with walls tiled by bricks, with melting pots for ancient metallurgy, houses built from turluka (reeds covered with clay), yurt-like dwellings with walls made of poles and reeds with clay coatings. The city was a center of transit trade, and objects recovered include imported pottery and jewelry (neck-laces, bracelets, buckles, buttons, and studs from Khorezm, Transcaucasia, Shirvan, Bulgaria, and Byzantium).





Figs. 20–21. Archaeological site "Samosdelka"

In 2005, the Astrakhan region was declared a center for Russian watermelon. A museum was opened by the Russian Research Institute of Vegetables and Irrigated Melon Cultivation. The exposition shows the main subject: watermelon, the pride of the Astrakhan region and one of its brands.





Figs. 22–23. Museum of the Russian Watermelon

Besides field excursions during the plenary sessions, some excursions will be organized to the historical and architectural complex of the Astrakhan Kremlin (Figs. 24–27) and the Regional Natural History Museum (Fig. 28).

The Astrakhan Kremlin was founded in 1558 on the lower Volga, on a high hill, surrounded by swamps and marshes. First, it was a wooden fortress with strong earthen walls, pales and towers. The location and configuration of the Astrakhan Kremlin was dictated by the landscape, so it has the shape of a right triangle, with the top elongated to the southwest. The wooden fortress was rebuilt in stone in the period of Ivan IV the Terrible and Boris Godunov (1582–1589). This building stage of the Astrakhan Kremlin was one of the first stone fortifications in Russia. It was among the most powerful defense facilities of the Moscow-centered State. For centuries, it was an impregnable stronghold in the southeastern border area of Russia. There are some notable events connected with the Kremlin: the Crimean Turkish intervention in the Lower Volga in the XVI century, the Time of Troubles in Russia and Stepan Razin uprising in the XVII century, Peter I reformations and the rebellion of musketeers 1705–1706, the Persian campaign of Peter I and founding of the Caspian Fleet in the XVIII century, the strengthening of the country's borders and annexation of the Caucasus and Central Asia to the Russian Empire.









Figures 24–27. The Astrakhan Kremlin

The Regional Natural History Museum has unique natural science collections: archaeological, ethnographic, paleontological, and many others, reflecting the rich history of the region.







Figs. 28-30. Astrakhan Natural History Museum

The conference will be held under the auspices of the Faculty of Geography, M.V. Lomonosov Moscow State University (www.geogr.msu.ru).

The scientific sessions will be held in the conference hall of the "Azimut" Hotel (Figs. 31–32). Most of the conferees will be lodged here as well.





Figs. 31–32. Astrakhan. The Hotel "Azimut"

#### **ACCOMMODATIONS**

There are numerous hotels in Astrakhan with different price categories. Participants can arrange their accommodations in Astrakhan by themselves (<a href="http://www.booking.com/">http://www.booking.com/</a>).

Table 1. List of hotels.

| Some hotels nearest to the Conference venue (Azimut hotel): |  |  |
|---|--|--|
| Azimut hotel 3*   | http://azimuthotels.com/russia/astrahan/azimut_hotel_astrakhan |  |
| Bonhotel 3* (1 km)  | http://www.booking.com/hotel/ru/bonotel-hotel.ru               |  |
| Peter I hotel 2* (0.3 km)                                   | http://www.hotelpetr.ru/                                       |  |
| Grand Hotel 5* (2.3 km)                                     | http://www.booking.com/hotel/ru/al-pash-grand.ru               |  |
| Lotus hotel 4* (0.5 km)                                     | http://astlotushotel.ru/                                       |  |
| Novomoskovskaya hotel 5*                                    | http://www.nvmsk.com/  |  |
| (1.2 km)  |  |  |
| Art Hotel 4* (2 km)   | http://arthotel30.ru/  |  |
| Victoria Palas hotel 4*(1.5 km)                             | http://www.vp-hotel.ru/  |  |

#### **VISA**

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

#### **CLIMATE**

The climate is continental and dry with limited rainfall and considerable annual and daily fluctuations in air temperature. In the Astrakhan region, the end of September is a good time for field trips. Daily temperature is about 20-22° C, and at night, it is about 13-16° C.

# **TRAVEL**

Astrakhan is easily accessible by direct, regular, or charter flights from some airports of Russia (Moscow, Saint-Petersburg, Kazan, Rostov-on-Don) and from Istanbul, Bangkok, and Aktau. The International Airport is located in the southern suburb of Astrakhan. Regular buses and taxis connect the airport with the city. It is more convenient to foreign conferees to travel to Astrakhan through Moscow or St. Petersburg.

The railway station receives trains from Moscow, St. Petersburg, Odessa, Adler, Novorossiysk, and Volgograd.

#### **REGISTRATION FEE**

Table 2. Registration Fee (Please refer to the "Registration Form")

|                     | Registration before<br>July 30, 2015 | Registration after<br>July 30, 2015 |
|---------------------|--------------------------------------|-------------------------------------|
|                     | Euro                                 | Euro                                |
| Participant         | 350                                  | 400                                 |
| Accompanying person | 300                                  | 350                                 |
| Student             | 200                                  | 250                                 |

The registration fee covers conference kit, coffee breaks, conference dinner, lunches during field trips, museum entrance fees, and bus transportation during the field trip.

#### **REFUND POLICY**

Fifty percent refund before June 30, 2015. No refund is possible after June 30, 2015.

# **FINANCIAL SUPPORT**

IGCP 610 has very limited funds available to distribute and is not able to support the full cost of meeting attendance. Therefore, applicants should show evidence of seeking or having obtained funds from elsewhere before applying for assistance. Preference in funding allocations will be given to students and young researchers from the developing world who plan to present a high quality paper accepted by the Scientific Committee. An application for support may be e-mailed to the Organizing Committee requesting in your own words a funding amount with justification.

## **CONFERENCE LANGUAGE**

The official conference languages are English and Russian. All abstracts, presentations, and posters have to be executed in English.

#### **ABSTRACT**

Preference will be given to extended and informative abstracts containing new data and arguments. As a rule, your abstract(s) should be around 2 pages. But we will be quite flexible with the length of the abstract if it offers new ideas and information. The abstract language is English.

Short and uninformative abstracts or abstracts irrelevant to the themes of the meeting will not be considered.

The guidelines for abstract preparation and submission are outlined in the Abstract Template. You must specify the mode of your presentation: ORAL or POSTER. No abstracts will be accepted without registration of at least one of the authors. Every registered participant has the right to submit up to two extended abstracts as the first author.

Please type your abstract using the template (attached to the First Circular). Submit your abstract via e-mail to Prof. Valentina Yanko-Hombach: valyan@onu.edu.ua; valyan@avalon-institute.org

## **ORAL PRESENTATION**

Each speaker will have 20 minutes for his or her presentation, including questions. Projection equipment available: LCD (PowerPoint presentation) projector.

#### **PUBLICATION**

Accepted abstracts will be published in the Conference Proceedings. The full papers will be published in an IGCP 610 Third Special Volume of the journal *Quaternary International*. For preparation of the manuscript, refer to the journal's Instructions for Contributors.

#### **DEADLINES**

| 30 April 2015           | First Circular on IGCP 610 website (http://www.avalon-institute.org/IGCP610). |  |  |
|-------------------------|---|--|--|
| 30 April 2015           | Abstract submission and registration opens.                                   |  |  |
| 30 June 2015            | Abstract submission closes.   |  |  |
| 15 June 2015            | Submission of application for <b>limited financial support</b> opens.         |  |  |
| 15 July 2015            | Submission of application for <b>limited financial support</b> closes.        |  |  |
| 20 July 2015            | Notification of abstract acceptance.  |  |  |
| 30 July 2015            | Deadline for early registration.  |  |  |
| 25 August 2015          | Second Circular and the Conference Programme on IGCP 610 website              |  |  |
|                         | (http://www.avalon-institute.org/IGCP610).                                    |  |  |
| <b>31 December 2015</b> | Submission of full paper to IGCP 610 Special Volume of Quaternary             |  |  |
|                         | International closes.   |  |  |