

First International Conference

**Aral: Past, Present and Future - Two Centuries of the Aral Sea Investigations**

12-16 October 2009

**Saint Petersburg Scientific Centre of Russian Academy of Science**

**Saint Petersburg, Russia**

**The Aral '09 Conference is devoted to:**

- 160 years since the expedition of A.I. Butakov,
- the 100th anniversary of publication of the book "Aral Sea" by Leo S. Berg,
- the 70th anniversary of organization of Barsakelmes State Nature Reserve
- 45 years since the Aral Sea Expedition of Russian State Pedagogical University,
- 20 years since organization of Brackish Water Laboratory of Zoological Institute, St. Petersburg
- 15 years since setting up the International Fund for Saving the Aral Sea (IFAS)

The **Aral '09 International Conference** will bring together an exceptional array of speakers and participants to highlight the achievements in the Aral Basin investigations today and to discuss strategies for their future.

This conference presents a unique opportunity for a wide range of professionals, researchers, and students to come together to help plan the future of the field.

The **objectives** of the **Conference** are:

- To present and discuss scientific results of recent research in the Aral Sea Basin and adjacent territories
- To present general results of recent research in the Aral Sea Basin to a wider audience, and to discuss them in the light of other regional research and educational and political activities

- To link up with scientists in the region, in Europe and in other parts of the world, reviewing the status of the Aral Basin research in a global context
- To identify opportunities and priorities for future research, management and education
- To identify opportunities and priorities in transferring scientific research results to applied fields, such as renewable resources management and conservation

### **Organizing Committee:**

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#### **Co-Chairmans:**

A.F. Alimov (RAS Academician, Professor, Russia)  
 O.N. Pugachev (RAS Corresponding member, Russia)  
 S.R. Ibatullin (EC Chairman, IFAS, Kazakhstan)

#### **Committee Members:**

- N.V. Aladin, Zoological Institute
- N.B. Ananieva, Zoological Institute
- N.G. Bogutskaya, Zoological Institute (**General Secretary**)
- D.O. Eliseyev, Russian State Pedagogical University
- T.M. Florinskaya, SPb Research Center RAS
- V.V. Khlebovich, Zoological Institute
- L.A. Kuznetsov, Leningrad Province Institute for Development of Education
- A.M. Naseka, Zoological Institute
- M.I. Orlova, Zoological Institute (**Scientific Secretary**)

### **Honorary International Scientific Committee:**

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- N. Boroffka, Germany
- Z. Alimbetova, Kazakhstan
- U. Buranov, Uzbekistan
- J.-F. Cretaux, France
- M. Glantz, USA
- U. Gattenlöhner, Germany
- R.V. Jashenko, Kazakhstan
- B. Karimov, Uzbekistan
- F.V. Karmazinov, Russia
- D. Keyser, Germany
- R. Letolle, France
- Ph. Micklin, USA
- M. Nakamura, Japan

- A. Nurushev, Kazakhstan
- I.S. Zonn, Russia
- S. Rahimov, Tajikistan

#### **Technical support group:**

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- O.G. Manylov (Russia)
- T.N. Platonova (Russia)
- G.F. Plotnikova (Russia)
- A.V. Shoshin (Russia)
- L.I. Zhakova (Russia)

#### **Contacts:**

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Please visit our website for updates:  
<http://www.zin.ru/conferences/Aral2009/index.html>

#### **Meeting Venue**

The conference will be hosted by the St. Petersburg Scientific Centre of Russian Academy of Sciences and the Zoological Institute of the Russian Academy of Sciences located very close to each other at the corner of the Birzhevaya Square and Universitetskaya Embankment of the Neva River.

#### **Addresses:**

St. Petersburg Scientific Centre of Russian Academy of Sciences,  
Universitetskaya Embankment, 5

Zoological Institute of the Russian Academy of Sciences,  
Universitetskaya Embankment, 1

#### **Travel and Accommodation Information**

Let us know please as soon as you book your flight about the date and flight number, we will pick up you from the airport or railway station.

Please discuss all individual details of your travel with the Organizing Committee at [aral2009spb@rambler.ru](mailto:aral2009spb@rambler.ru)

The hotel we reserved – Krestovskiy Ostrov, see at <http://www.hotelkrestov.ru/> - is not expensive but rather good and located in a nice place. Transportation to and from the conference site will be organized by the conference.

## PRELIMINARY AGENDA

13 October

**Opening ceremony.**

**Opening Address by Oleg N. Pugachev, Director, Zoological Institute Russian Academy of Sciences.**

**Ibatullin S.** The Aral Basin: the time of trial and activity.

**Dukhovniy V.** Modern problems of the Aral Sea Basin and forecasts for the future.

**Van Stappen G.** Economic and ecological benefits from sustainable use of the Aral Sea Artemia resources: results and experiences from a field sampling campaign conducted in the Uzbek part of the Aral Sea (2005-2007).

**Krivosnogov S., Kuznim Ya., Burr G., Gusskov S., Khazin L., Zhakov E., Nurgizarinov A., Kurmanbaev R., Kenshinbay T.** New data on the Aral Sea level changes in the Holocene and Pre-Holocene times.

**Aldyakova O.** Geoinformational mapping and landscape-ecological monitoring support in the southern Aral Sea region.

**Shabanova L.V., Dzhusupov A.E.** Saving of biodiversity, surface system of Kazakhstani part of the Aral Sea.

**Sokolov S.** Aral: the blue unknown sea

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**Micklin Ph.** The future Aral Sea: is the glass half full or half empty?

**Kubota J.** Historical interaction between human and the environment in arid regions of Central Eurasia – a multi-disciplinary research project.

## Session 1

**Navratil P.** Multi-sensoral remote sensing of land cover and wetland habitats on the desiccated Aral Sea bed in southern Priaralye.

**Babaev A.G., Razakov R.M., Tashmuhamedov B.A., Umarov N.M., Toderich K., Safarov K., Rahmonov B.A., Kosnazarov K.A., Savitsky A.G., Veselov V.V.** Rehabilitation of degraded ecosystems using innovative technologies for sustainable economic development and stabilization of ecological situation in Priaralye.

**Orlova M.I., Smurov A.O., Zhakova L.V., Rusakova O.M.** Life in coastal temporary environments: from the sea to the desert (Bolshoi Sary-Chaganack Gulf, The Northern Aral Sea, spring 1994).

**Rysbekov Yu. Kh.** To the question on an opportunity of western Aral Sea's restoration and sustainable management of ecosystems of the Amudarya delta.

## Session 2

**Alimbetova Z.** Peculiarities of biodiversity monitoring in Nature Reserve Barsakelmes in conditions of ecological crisis.

**Dimeyeva L.** Biodiversity and dynamics of ecosystems during plant colonization in the new seashore of the Aral Sea.

**Eliseyev D.** Research of vertebrates in the Barsakelmes Nature Reserve by the expedition of the Russian State pedagogical University.

**Kazenas V., Jashenko R., Mityaev I.** Insects in the North Aral Sea area.

14 October

**Aladin N.V.** The Aral Sea: already dead, dying, or alive?

**Boroffka N., Gregor O.** Archaeology and its relevance to the history of climate and hydrology.

## Session 1

**Gophen M.** Water level lowering in lakes: the difference between disaster and welfare - global perspectives.

**Shabanova L.V., Akshalova A.A.** GIS of cadastres of forestry and especially saving territories, objects of animal world and fish cadastre.

**Karlsson I., Björklund G.** Sustainable Cotton – An achievable goal in the Aral Sea Area?

**Karlikhanov T., Seytzhanova Sh.** Collector-drainage waters in the Aral Sea basin and possibilities of their repeated use.

**Ismailov Kh.** Development of a program complex for calculation of possible zones of infection of water pools at ecological accidents.

Session 2

**Kuznetsov L.** Lessons and outlooks (about the Program of Studies in the Barsakelmes Reserve).

**Zhakova L.V.** Water flora composition and distribution of macrophytes in the Aral Lake: comparison for the present and the past.

**Ibrahimov Sh.** The forecast of parasitological situation in the Aral Sea in compliance with possible options of future environmental condition of this water body.

**Pankratova I.** Changes of energetic expenditures during transpiration in psammophylous phytocenoses.

**Kozlova E., Baibulov A.** Experience of the use of remote sensing for subject mapping of the Kazakhstan part of the dried Aral Sea and selecting of sites perspective for phytomelioration.

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**Cretaux J.-F.** Aral Sea level variability.

**Van Baalen M.** Adding insult to Injury: climate change exacerbates adverse effects of irrigation practices in the Aral Sea basin.

Session 1

**Oren A.** The dying Dead Sea: comparative community genomics of microbial communities in an increasingly extreme environment.

**Ibatullin S., Nurmaganbetov D.** Transboundary problems of the Aral Sea basin and possible ways of their solutions.

**Buranov U.** The Aral Sea yesterday and today, and appropriate measures for stabilization of the ecological situation in the region.

**Umirzakov S.** Utilization of wastewaters as the main direction of the rational use of the water resources in the Kazakhstan Priaralye.

Session 2

**Plotnikov I.** Dynamics of free-living invertebrate fauna of the Aral Sea.

**Ermakhanov Z.K.** Changes in the Aral Sea fish communities and fishery in the period of ecological crisis.

**Kashkarov R., Mitropolskiy O., Ten A., Matekova G., Atakhodjaev A.** Current status and problems of conservation of avifauna of Southern Priaralye.

**Kashkarov O.** Development of student initiatives and ecological education aimed at protection of avifauna in Karakalpakstan.

15 October

**Sokolov V.I.** How IWRM can change behaviour of people in the Aral Sea basin to save more water for future development and environment.

Session 1

**Kurochkina L.** Stability of forming ecosystems of the Aral Sea dry seabed.

**Ruziev I.** Modelling of the hydrological mode of Syrdarya River delta and its wetland.

**Kulmatov R.** The Aral Sea crisis and modern problems of protection of biodiversity and health of population in disaster zone.

**Novikova N.** Scientific and practical problems of the organization of landscape-ecological monitoring in Southern Priaralye.

**Nurmaganbetov D.** Risk assessment and uncertainty of ecosystem functioning.

Session 2

**Kuzmina Zh., Treshkin S.** Influence of change of climate and soils at artificial formation of halophytes vegetation in Aral Sea region.

**Nakhshiniev B.** Numerical simulation and health risk assessment of windblown dust emission from dried bottom of the Aral Sea

**Nasrulin A.** Experience of use of geographical information systems at studying of quality of waters for rivers of the Aral Sea basin.

**Ogai O.** Results of Socio-economic monitoring project "The Sudochie Lake Wetland Restoration".

**Sorokin A.** Modelling of the possible inflow to the Aral Sea.

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**Alimova N.** Water resources of Tajikistan and problems of their use.

**Stulina G.** The change in Priaralye landscape as studies from the field surveys 2005-2007.

**Karlikhanov T., Ospanov K.** Monitoring as the basis of ecological regulation of water quality.

POSTER SESSION

ROUND TABLE AND DISCUSSIONS

Posters:

**Abatzopoulos Th., Baxevanis A., Maniatsi S.** Genetic identification of Aral *Artemia* populations.

**Alikhanova Sh.** Aral Sea Crisis – natural and manmade factors

**Badjanov B., Satenbaev E., Kim V.** Formation of supervision system and water resources management in the zone of the Aral basin.

**Ismailova O., Usmanova N.** Prospective sustainable water management strategies for the Aral Sea region.

**Shah K.** Lake of Himalayan.

**Sherimbetov S.** Researching flora of the south dried bottom of the Aral Sea

**Smurov A., Fokin S., Aladin N.** The effect of oceanic and Aral Sea water salinity tolerance of *Paramecia* ssp. (Ciliata).

**Trofimova G.** Invariants of Plants Species Richness Structure (the Amu Darya delta, 1947-1989)



Water Problems Institute, Russian Academy of Sciences, Moscow

**Usmanova N. Ismailova O.** History of water management of the Aral Sea: environmental, economic and social consequences.

**Sakhaeva E.** Problems of integrative management of the transboundary Talas River water resources.

**Sakhaeva E.** Investigation of long-term changes of the water yield of rivers of snow-glacial feed by the example of rivers Alamedin, Naryn and Isfayramsay.

## **CLOSING CEREMONY**

**WE PLAN CULTURAL EVENTS FOR 15 OCTOBER (EVENING) and 16 OCTOBER**