



KOREA-RUSSIA SCIENCE CONFERENCE
dedicated to 20th anniversary of diplomatic relations
between Russia and Korea

PROGRAM



KORUSTEC
Korea Russia Science & Technology Cooperation Center



Listvyanka, Lake Baikal
Irkutsk region, Russia

August 23-26, 2010

РОССИЙСКО-КОРЕЙСКАЯ НАУЧНАЯ КОНФЕРЕНЦИЯ

посвященная 20-летию юбилею
дипломатических отношений
между Россией и Кореей

ПРОГРАММА

20 ANNIVERSARY
KOREA - RUSSIA
SCIENCE CONFERENCE



БАЙКАЛ · 2010

Россия, Иркутская область
Озеро Байкал, п.Листвянка

23-26 августа 2010

ORGANIZERS & SPONSORS



Association of Korean Science &
Technology Societies of CIS (AKSTS CIS)



Korea-Russia Science & Technology
Cooperation Center (KORUSTEC)



National Research Foundation
(Republic of Korea)



Ministry of Education, Science &
Technology (Republic of Korea)



Baikal National University
of Economics & Law (Russia)

БАЙКАЛЬСКИЙ
ГОСУДАРСТВЕННЫЙ
УНИВЕРСИТЕТ
ЭКОНОМИКИ И ПРАВА

- Ассоциация Научно-Технических Обществ Корейцев СНГ www.ksearus.org
- Российско-Корейский Центр по Науке и Технологии www.korustec.or.kr
- Национальный Исследовательский Фонд Кореи www.nrf.go.kr
- Министерство Науки и Технологии Республики Корея www.mest.go.kr
- Байкальский Государственный Университет Экономики и Права www.isea.ru

INVITED SPEAKERS

- Professor **Tsoy Alexey Danilovich**, President of AKSTS CIS
«*International cooperation of ANTOK: achievements and experience*»
- Doctor of science **Lim Sang Hyun**, Director of KORUSTEC
«*The introduction of Korea-Russia Science & Technology Cooperation Center*»
- Academician **Grachev Mikhail Aleksandrovich**, Director of LI RAS, Member of RAS
«*Modern state of the ecological system of Baikal lake*»
- Academician **Son Edouard Evgenevich**, Vice-director of JIHT RAS, Member of RAS
«*Application of nano-technologies in energy*»
- Professor **Kim Yoo**, Chungnam National University, Member of AES RF
«*First step of the development of LPRE in South Korea*»
- Professor **Vinokurov Mikhail Alekseevich**, Rector of BNUEL
«*Economic regional characteristics of the Irkutsk region*»
- Professor **Choi Sang Won**, Chonnam National University, Republic of Korea
«*The development of recycling technologies on organic and inorganic industrial wastes*»

ORGANIZATION PARTICIPANTS

- Baikal National University of Economics and Law, Irkutsk
- Irkutsk State Technical University, Irkutsk
- Limnological Institute SB RAS, Irkutsk

- Pacific National University, Khabarovsk
- Far East State University of Communication Means, Khabarovsk
- Far Eastern Branch of Civil Defense and Emergencies Institute, Khabarovsk
- Kirensky Institute of Physics, Khabarovsk

- Siberian Federal University, Krasnoyarsk
- Krasnoyarsk State Pedagogical University, Krasnoyarsk
- Sukachev Institute of Forest, Krasnoyarsk

- Lomonosov Moscow State University, Moscow
- National University of Science & Technology «MISIS», Moscow
- National Research University «Moscow Institute of Physics & Technology», Moscow
- Joint High Temperature Institute of RAS
- Moscow State Aviation Institute, Moscow
- Moscow Power Engineering Institute, Moscow
- Bauman Moscow State Technical University, Moscow
- Russian State Technological University- «MATI», Moscow
- Moscow State Institute of Radio Engineering, Electronics & Automation, Moscow

- Novosibirsk State Technical University, Novosibirsk
- Siberian State University of Telecommunications & Informatics, Novosibirsk
- Novosibirsk State Medical University, Novosibirsk
- Kutateladze Institute of Thermophysics, Novosibirsk
- Lavrentyev Institute of Hydrodynamics, Novosibirsk
- Institute of Mining, Novosibirsk
- Sibirenergo-Billing, Novosibirsk

- Dostoevsky Omsk State University, Omsk

- Kamchatka State Technical University, Petropavlovsk-Kamchatsky

- Institute of Cell Biophysics, Pushino
- State Institution Prioksko-Terrasny Nature Biosphere Reserve, Pushino

- Chonnam National University, Republic of Korea
- Chungnam National University, Republic of Korea
- Yeungnam University, Republic of Korea
- GMT Korea, Republic of Korea

- Tomsk State University, Tomsk
- Tomsk State University of Control Systems & Radioelectronics, Tomsk
- Local Engineering Systems, Tomsk

- Federal State Institution “Russian Agricultural Center”, Ussuriysk

- Zhirmunsky Institute of Marine Biology, Vladivostok

- Voronezh State Technical University, Voronezh

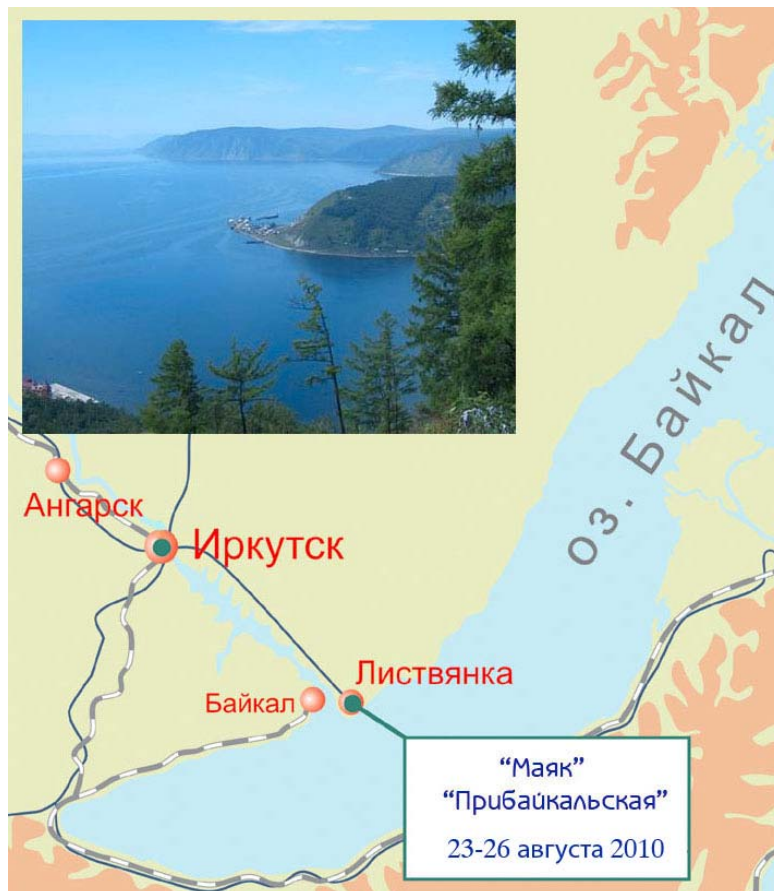
- Ural Federal University, Yekaterinburg
- Ural State Medical Academy, Yekaterinburg
- Institute of Mathematics & Mechanics, Yekaterinburg

GENERAL INFORMATION

Korea-Russia science conference dedicated to 20th anniversary of diplomatic relations between Russia and Korea is hosted by Association of Korean Science & Technology Societies of CIS and Korea-Russia Science & Technology Cooperation Center with support of National Research Foundation of the Republic of Korea and Ministry of Education, Science & Technology of the Republic of Korea. Baikal State University of Economics and Law is the local organizer of the conference.

Purpose of the conference is to review scientific and technological advances, new ways of development of Russian-Korean cooperation, improving the efficiency of interaction through the establishment of new contacts. The conference will be attended by representatives of the Korean embassies and consulates, the leaderships of Korea-Russia centers and associations, scientists and graduate students from research organizations of Russia and Republic of Korea.

The conference is held in a picturesque place in Listvyanka on shore of the Lake Baikal. The program involves conduct of scientific debate and opportunities for informal contacts and establish new contacts between Koreans scientific from Russia and Republic of Korea.



SCHEDULE

August 23, 2010 – Monday

- Arrival to Irkutsk
- Transfer to Listvyanka by buses
- Accommodation in Hotels «Mayak» & «Pribaikalskaya»
- Sightseeing, visit to Limnological museum
- Supper

August 24, 2010 - Tuesday

- 09:30-10:00 Registration of conference participants: Hotel «Pribaikalskaya»,
Conference hall
- Opening ceremony: Chief **Tsoy Alexey Danilovich**, President of AKSTS
1. Greeting from General Consul of the Republic of Korea in Irkutsk
Choi Suk In.
2. Greeting from **Grachev Mikhail Aleksandrovich**, Member of the
RAS, Director of Limnological Institute SB RAS
- 10:00-10:40 3. Greeting from Ministry of Education, Science and Technology,
Republic of Korea: **Shin Moonkyoo**, Attaché of science &
education of the Korean embassy
4. Greeting from National Research Foundation of Korea:
Lim Sang Hyun, Ph.D., Director of KORUSTEC
5. Greeting from **Vinokurov Mikhail Alekseevich**, Dr.S., Professor,
Rector of BNUEL
- 10:40-10:50 «International cooperation of ANTOK CIS»
Professor **Tsoy Alexey Danilovich**, President of AKSTS CIS
- 10:50-11:10 «The introduction of Korea-Russia Science & Technology Cooperation
Center», Doctor **Lim Sang Hyun**, PhD, Director of KORUSTEC
- 11:10-11:30 «Modern state of the ecological system of Baikal lake»
Academician **Grachev Mikhail Aleksandrovich**
Member of the RAS, Director of LI RAS
- 11:30-11:50 Coffee break
- 11:50-12:10 «Applications of nano-technologies in energy»
Academician **Son Edouard Evgenevich**
Member of the RAS, Vice-director of science of JIHT RAS
- 12:10-12:30 «First step of the development of LPRE in South Korea»
Professor **Kim Yoo**, Chungnam National University, Member of AES RF

- «Economic regional characteristics of the Irkutsk region»
 12:30-12:50 Professor **Vinokurov Mikhail Alekseevich**, Dr.S., Rector of Baikal National University of Economics and Law
- «The development of recycling technologies on organic and inorganic industrial wastes», Professor **Choi Sang Won**, Chonnam National University, Republic of Korea
- 12:50-13:10
- 13:10-13:20 Group photos
- 13:20-14:00 Lunch
- | | | | |
|-------------|--|--|--|
| 14:00-16:00 | Session A:
Bio, Nano & Medical Technology | | Session D-1:
Young Scientists |
| 16:00-16:15 | Coffee break | | |
| 16:15-18:15 | Session B:
Information & Mathematics | | Session D-2:
Young Scientists |
- 19:00-21:00 Banquet

August 25, 2010 – Wednesday

- | | | | |
|-------------|-------------------------------------|--|--|
| 10:00-12:00 | Session C:
New materials | | Session D-3:
Young Scientists |
|-------------|-------------------------------------|--|--|
- 12:15-12:45 Conference summary
- 13:00-14:00 Lunch
- 14:00-19:00 Cultural program

August 26, 2010 – Thursday

- 8:00 • Transfer to Irkutsk (by bus)
- 9:30 • Visit to Irkutsk State University of Railway Engineering
- Departure from Irkutsk

PROGRAM

August 24, 2010 - Tuesday

9:30-10:00 Registration

Plenary section

Session Chair: Alexey D. Tsoy

10:40-10:50	<i>Tsoy A.D.</i>	International cooperation of ANTOK CIS
10:50-11:10	<i>Lim S.H.</i>	The introduction of Korea-Russia Science & Technology Cooperation Center
11:10-11:30	<i>Grachev M.A.</i>	Modern state of the ecological system of Baikal lake
11:30-11:50		Coffee break
11:50-12:10	<i>Son E.E.</i>	Application of nano-technologies in energy
12:10-12:30	<i>Kim Yoo</i>	First step of the development of LPRE in South Korea
12:30-12:50	<i>Vinokurov M.A.</i>	Economic regional characteristics of the Irkutsk region
12:50-13:10	<i>Choi S.W.</i>	The development of recycling technologies on organic and inorganic industrial wastes
13:10-13:20		Group photos
13:20-14:00		Lunch

Session A: Bio, Nano & Medical Technology

Session Chair: Edouard E. Son

14:00-14:15	<i>Yugay K.N.</i>	Superconductivity of Nanoclusters
14:15-14:30	<i>Kim Yu.A.</i>	Regulation of the phase state of membranes with biologically active substances
14:30-14:45	<i>Polyakova N.E.</i>	A new species in Far Eastern Redfins of Tribolodon Genus
14:45-15:00	<i>Khan K.Y.</i>	Aggregate structure of soils: energetic conception, mechanisms of formation and the characteristic of functional steadiness
15:00-15:15	<i>Lee I.S.</i>	The ferment – cavitations technology of waste-water
15:15-15:30	<i>Kim A.V.</i>	System immunology research
15:30-15:45	<i>Kim N.O.</i>	Medicinal plants in Siberia and the Far East: promising sources of new medicines
15:45-16:00	<i>Yun S.G.</i>	Data Warehouse for the solution to the problem of the waterborne infectious diseases analysis in Russia
16:00-16:15		Coffee break

Session D-1: Young Scientists**Session Chair: Konstantin E. Son**

14:00-14:15	<i>Cho G.C.</i>	New approaches in power plant and substation auxiliaries design
14:15-14:30	<i>Khvan A.D.</i>	Increase in critical deformation of thin-walled tubes
14:30-14:45	<i>Kan S.M.</i>	Experimental study of rectification in the vortex separator
14:45-15:00	<i>Tsoy P.A.</i>	About the mechanical properties of the salt specimens in triaxial compression tests
15:00-15:15	<i>Lee Ki Eun</i>	Algebra $SO(2,1)$ of asymptotic impact parameter operator in the charge and magnetic monopole system
15:15-15:30	<i>Yun V.L.</i>	Usage efficiency of biological preparations for plant protection
15:30-15:45	<i>Khan P.V.</i>	Wording of Petrov-Galerkin method for aerostatic porous bearings
16:00-16:15		Coffee break

Session B: Information & Mathematics**Session Chair: Dmitry P. Kim**

16:15-16:30	<i>Kim D.P.</i>	Algebraic method for automatic nonminimum-phase control system synthesis
16:30-16:45	<i>Pak N.I.</i>	Features of mathematical information perception in the conditions of IT
16:45-17:00	<i>Klishevich N.B.</i>	Taking management decisions on the basis of Value analysis
17:00-17:15	<i>Im S.T.</i>	Forest-tundra landcover changes in the development zone of Vankor oilfield based on satellite data
17:15-17:30	<i>Hegay L.B.</i>	Representation of the science text by means of hypertext technology
17:30-17:45	<i>Khan V.V.</i>	Diagnosis thermotechnical state heating networks and objects of heat
17:45-18:00	<i>Li V.N.</i>	Nondestructive check of current transfer objects at the electrified railways
18:00-18:15	<i>Tsoy O.M.</i>	Gravitation and global climate changes

Session D-2: Young Scientists**Session Chair: Gvan Chun Cho**

16:15-16:30	<i>Kim R.V.</i>	Estimation of state of ergatic system "vehicle-flyer" using the ellipsoidal model
16:30-16:45	<i>Son K.E.</i>	Magneto-plasma aerodynamics for space thruster
16:45-17:00	<i>Kim A.S.</i>	Application of interactive learning technologies in training of engineers in space-rocket techniques
17:00-17:15	<i>Min Da Hyin</i>	Success and failure of space launch vehicles currently in use in the world
17:15-17:30	<i>Ha Seong Up</i>	Low-frequency instability in the combustion chamber with jet-type injectors
17:30-17:45	<i>Woon Yeo Tae</i>	Development Anti Candid Camera Videofilming system and the method for measuring retro-reflection characteristics
17:45-18:00	<i>Ten S.F.</i>	Aviation sounding of the atmosphere for exploration of natural gas fields - as a promising technique of computer search of natural gas fields in the bottom layer

August 25, 2010 – Wednesday**Session C: New materials**
Session Chair: Edis B.Ten

10:00-10:15	<i>Ten E.B.</i>	Development of the effective technology for liquid Cast Iron treatment on the basis of regularities research of its refinement
10:15-10:30	<i>Yun Jung-Hoon</i>	Porous Nickel & Aluminum in GMT Korea
10:30-10:45	<i>Thai V.D.</i>	Production methods of protective coatings on metals
10:45-11:00	<i>Kim P.D.</i>	Long-range exchange interaction between ferromagnetic layers in spin-valve structures NiFe/Cu/NiFe/IrMn
11:00-11:15	<i>Khvan D.V.</i>	Plastic a deposit with torsion of ring preparations
11:15-11:30	<i>Kim V.A.</i>	The quantitative assessment of the construction steel grain pattern
11:30-11:45	<i>Ri Ho Sen</i>	Thermodynamic and technological grounds of synthesis of tungsten, molybdenum and their composites with boride and carbide phases from oxide compounds in ionic melts
11:45-12:00	<i>Ri E.H.</i>	Research and development of complex-alloyed cast-irons, taking into account the liquid state structure, to improve the operational properties
12:00-12:30		Conference summary

Session D-3: Young Scientists
Session Chair: Victor L. Yun

10:00-10:15	<i>Kim I.A.</i>	The invariant derivative of functions and functionals
10:15-10:30	<i>Yun S.M.</i>	Police of Russia in East Asia
10:30-10:45	<i>Kim V.A.</i>	Exact Lebesgue constants for interpolation L-splines of third order
10:45-11:00	<i>Badmazhapova I.B.</i>	Experience of students research practice in the Republic of Korea
11:00-11:15	<i>Son K.E.</i>	Experimental and theoretical studies of flow over bodies in supersonic flow with heating
11:15-11:30	<i>Kim M.Y.</i>	Provision of the necessary facilities for Koreans in the Karaganda coal basin at the end of the 1930s
11:30-11:45	<i>Klishevich M.A.</i>	Short-term Electricity Consumption Forecast
11:45-12:00	<i>Tsoy Y.A.</i>	Historical overview of telegraph network designing
12:00-12:15	<i>Kim N.O.</i>	Pharmacognostic study of orthilia secunda (L.) house and perspective of its use in medicine
12:15-12:30		Conference summary

August 26, 2010 – Thursday

10:00-12:00 Visit to Irkutsk State University of Railway Engineering