

Contract

between

Institute of Water and Ecology Problems
Far Eastern Branch of
Russian Academy of Sciences

and

Research Institute for Humanity and Nature
Inter-University Research Institute Corporation
National Institutes for Humanities

on

The Research of Amur River
and Amur River basin for 2007

Contract

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The Research of Amur River and Amur River Basin for 2007

In accordance with discussions made during the International Symposium on Amur-Okhotsk Project (March 22-24, 2005), and in the framework of the Implementation Agreement on the Joint Research of Amur River, its Estuary and the Sea of Okhotsk between The Institute of Water and Ecology Problems, Far Eastern Branch of Russian Academy of Sciences (IWEP-FEBRAS) and The Research Institute for Humanity and Nature (RIHN) signed on April 19, 2005, and based on the Agreement on Cooperation between FEBRAS and RIHN signed on March 4, 2004, the Amur-Okhotsk Project of RIHN hereinafter to be called CUSTOMER in the person of Prof. Yoneo Ishii, Director, Inter-University Research Institute Corporation, National Institute for Humanities, on one side, and the IWEP-FEBRAS hereinafter to be called EXECUTOR in the person of Professor Alexei N. Makhinov, Deputy Director of IWEP, on the other side, concluded the two contracts (contract-1 and contract-2) as follows.

- Contract-1: The Research Cruise in Amur River for 2007
- Contract-2: The Amur Terrestrial Research Project (ATRP) in 2007

Contract-2

between

Institute for Water and Ecology Problems
Far Eastern Branch of Russian Academy of Sciences

and

Research Institute for Humanity and Nature
Inter-University Research Institute Corporation
National Institutes for Humanities

on

the Amur Terrestrial Research Project (ATRP) in 2007

1. Subject of the Contract.

- 1.1. The CUSTOMER is to be charged with and the EXECUTOR is to be taken the responsibility for completion of the Amur Terrestrial Research Project (ATRP) in 2007 (Supplement 1).
- 1.2. The research according to this Agreement is to be carried out on the basis of "Implementation Agreement on the Joint Research of the Amur River, its Estuary and the Sea of Okhotsk between IWEP FEB RAS and RIHN" signed by both parties on April 19, 2005.
- 1.3. The EXECUTOR is to be responsible for following works in 2007:
 - making the observations and sampling as noted in Activity Plan for the ATRP (Supplement 1);
 - reception of Japanese members in IWEP FEB RAS and arrangement of them and acquaintance with the experimental / test sites of the Amur basin to survey in July and in September 2007.
- 1.4. The CUSTOMER is to be responsible for following:
 - to deliver the required research equipment for autonomic hydrological and climate data logging noted in Activity Plan for the ATRP (Supplement 1);
 - to cover the expenses for the IWEP's works noted in item 1.3.

2. Technical conditions.

- 2.1. The first period of implementation is the middle of July 2007 and the second period of implementation is September 2007.
- 2.2. The EXECUTOR and the CUSTOMER are to make copies of observation records and results obtained within the framework of "the Amur Terrestrial Research Project (ATRP) in 2007"

and are to provide them to each other.

2.3 The CUSTOMER and EXECUTOR have equal rights on the results of work and are to use them for the joint investigations within framework of the Implementation Arrangement between IWEP-FEBRAS and RIHN.

3. Costs

3.1 The EXECUTOR is to provide Quotation to the CUSTOMER on expenses of EXECUTOR' works noted in the Item 1.3 prior to the conclusion of the Contract.

3.2 The CUSTOMER is to pay in US Dollars the total amount \$ 16,710 USD to the EXECUTOR for the work noted in item 1.3 in accordance with the calculations for individual stage of the works, given in Supplement 2.

3.3 Japanese members who will participate in the work noted in items 1.3 and 1.4, are to pay for the following expenses (these expenses are not involved in the amount above): air, train and ship fares between Japan and Khabarovsk.

3.4 Expenses of the surface transportation in the local research area are to be involved in the amount above and are to be paid by the EXECUTOR.

3.5 The payment is to be made as follows:

- The first payment of 13,368 USD (80 %) being just after the conclusion of the Contract;
- The second (final) payment of 3,342 USD (20%) being just after the receipt of Final Report.

3.6 All payments to the EXECUTOR are transferred through the bank on the account of the EXECUTOR (see item 6) according to Supplement 3.

3.7 The EXECUTOR is to submit Final Report including all results of works before March 1, 2008.

3.8 On termination of the work at March 1, 2008, the EXECUTOR is to submit the Document about the accomplishment of the work to the CUSTOMER in two copies. The Contract is considered to be over after signing of the Document is done by both sides.

3.9 If the CUSTOMER has well based motives to reject the accomplishment of the work it has to prepare and send to the EXECUTOR list of necessary improvements, dates and conditions of their implementation.

4. Other conditions.

4.1. The both sides bear responsibility for safety measures of their representatives taking part in the field expedition works.

4.2. In case of destroying of habitable premises, devices and equipment due to natural disaster (fire, earthquake, lightning, rainstorm etc.) the schedule of the work and calculations are to be corrected taking into an occurred damage.

4.3. The equipment, tools and other properties obtained for the implementation of the

Agreement are to be belonged to the side, which purchased them.

- 4.4. The CUSTOMER shall not be liable for any losses occurring to the vehicle and/or equipment belonging to EXECUTOR or for any loss, cost, injury or damages to any third party during the field expedition and activity.
- 4.5. The EXECUTOR shall not be liable for any losses occurring to the vehicle and/or equipment belonging to CUSTOMER or for any loss, cost, injury or damages to any third party during the field expedition and activity.

5. Effective period of the Contract.

- 5.1. The Contract is to be effective after the signing by both sides, and is to terminate at the time of signing of Document by both sides.

6. Legal Address and Signs of sides

CUSTOMER

Research Institute for Humanity and Nature (RIHN)
Inter-University Research Institute Corporation
National Institutes for the Humanities
457-4 Motoyama Kamigamo, Kita-ku, Kyoto 603-8047, JAPAN
Phone: +81-75-707-2320; Fax: +81-75-707-2507

EXECUTOR

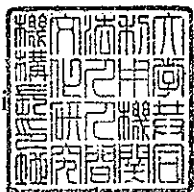
Institute of Water and Ecology Problems (IWEP)
Far Eastern Branch of Russian Academy of Sciences (FEBRAS)
65 Kim Yu Chen St., Khabarovsk 680000 Russia
Phone: +7-4212-227573; Fax: +7-4212-325755

Bank requisites:

INN2721000890/KPP272101001
Beneficiary's bank: Bank of Foreign Trade (Vneshtorgbank) Khabarovsk Branch
Khabarovsk, Moskovskaya str., 7, tel. 7-4212-326-965 S.W.I.F.T. VTBRRUM2RHA
transit foreign currency account No.40503840102001005834.
INN 7702070139 KPP 272102001 OGRN 1027739609391
OKPO 09805165 OKVED 65.12
BIK 040813727 account 30101810400000000727 in GRKts Khabarovsk

CUSTOMER

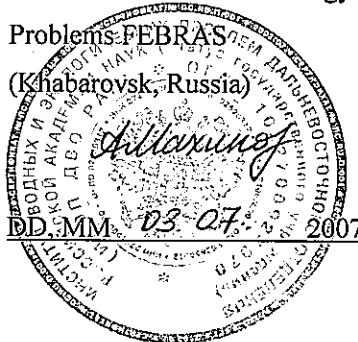
Prof. Yoneo Ishii
Director
Inter-University Research
Institute Corporation, National
Institute for Humanities
(Tokyo, Japan)



DD, MM, 19, 07, 2007

EXECUTOR

Prof. Alexei N. Makhinov
Deputy Director
Institute of Water and Ecology
Problems FEBRAS
(Khabarovsk, Russia)



DD, MM, 03, 07, 2007

The Contract is made in two copies in English

Preliminary Activity Plan
for the Amur Terrestrial Research Project (ATRP)
in snow-free period 2007

Part 1. The research conducted by Dr. Shibata (Anyuy basin and other areas).

Japanese member:

Dr. Hideaki Shibata

Russian members:

Dr. Vlad Shamov, Dr. Svetlana Levshina, Dr. Alexandra Novorotskaya, Dr. Lira Matyushkina, Dr. Vlad Kim, Dmitry Ryzhov, a doctoral student, and Yulia Forina, a doctoral student.

(1-1) Water sampling and discharge measurement of main and tributaries in Anyuy Basin

Sites: Basically similar to that in 2006 (Zavalny, Burnt-2, Zabyty, Burnt-1, Large Ertookooly, Koopturkoo, Manoma, Elman, lower main Anyuy).

1.1.1. Sampling of stream water for chemical analysis: once (most desirable period is September)

in total $1 \times 9 = 9$ samples.

1.1.2. Measurement of water discharge (water level height and stream velocity in cross section of river)

in total $1 \times 9 = 9$ measurements (values).

1.1.3. Analysis of dissolved total iron and solutes concentration

The detail analysis for major ions ($K^+ + Na^+$, Ca^{2+} , Mg^{2+} , SO_4^{2-} , Cl^-), DOC (dissolved organic carbon), total Fe, total Si and total Mn in lab in Khabarovsk.

In total 9 samples x 9 analyses = 81 analyses in lab.

(1-2) Preliminary survey for another forest areas

Site: some area(s) with burned and unburned forest other than Anyuy Basin to collaborate the situation with the forest fires (5 couples of watersheds: Malaya Ady – Yauchi-Khayasi, Levaya Gorelaya – Myataya, Malaya Kadinskaya – Yudinka, Ookhta – Bol'shaya Toochka, Mel'nitsa – Vovayevskiy).

1.2.1. Sampling of stream water for chemical analysis: once (most desirable period is August or September)

in total $1 \times 10 = 10$ samples.

1.2.2. Measurement of water discharge (water level height and stream velocity in cross section of river)

in total $1 \times 10 = 10$ measurements (values).

1.2.3. Analysis of dissolved total iron and solutes concentration

The detail analysis for major ions ($K^+ + Na^+$, Ca^{2+} , Mg^{2+} , SO_4^{2-} , Cl^-), DOC (dissolved organic carbon), total Fe, total Si and total Mn in lab in Khabarovsk.

In total 10 samples $\times 9$ analyses = 90 analyses in lab.

Part 2. The research in Lake Gassi watershed.

Japanese members:

Dr. Muneoki Yoh (Tokyo Univ. Agriculture and Technology)

Shigeiko Haruyama (University of Tokyo, Graduate School of Frontier Science)

Kotaro Yamagata (Joetsu University of Education, Division of Social Studies)

Russian members:

Dr. Vladimir Shamov, Dr. Svetlana Levshina, Dr. Alexandra Novorotskaya, Dr. Lira Matyushkina.

The aim of the survey

The purpose of the survey is to know the mechanisms of iron dissolution from soils with focusing on the soil depth where iron dissolution occurs. The sampling of river water will be conducted in the Gassi basin and other locations. The study of lake water and sediment will be also made in Lake Gassi to know iron dynamics of this lake (i.e., (biogeo-)chemical change of Fe with emphasis on its precipitation), and to get geomorphological and geological information. Hopefully, it is to make a preliminary geomorphological and geological research at several sites in this watershed to reconstruct the environmental change and forming process of wetland, and ground truthful observation around the research area for GIS and remote-sensing analyses.

Site of field survey

The Gassi lake watershed and other locations including the watershed south of Khabarovsk.

Time of the survey (in 2007)

- Once; a tentative period is the mid of July (16 July to 23 July)

Main contents of survey made by Japanese side

1) Activities at field sites

sampling of:

lake waters in Gassi Lake and river waters in its watershed and others.

In total – **12** samples (river water samples **10** + lake water samples **2**)

2) Sample analyses

The chemical analyses are conducted by Russian members in IWEP for the following items: total dissolved Fe, acid-dissolved Fe, major ions (K^+ , Na^+ , Ca^{2+} , Mg^{2+} , SO_4^{2-} , Cl^-), DOC (dissolved organic carbon), total Si, total Mn: **11** kinds of analysis.

In total **12** samples x **11** analyses = **132** analyses in lab.

The analysis of Fe^{2+} is be made at sites by a Japanese members.

Supplement 2

Calculation of "The Amur Terrestrial Research Project (ATRP)"

The IWEP FEB RAS is to provide Quotation to the RIHN on the expenses of IWEP's works noted in the item 1.3 of the Agreement as well as in detailed Activity Plan for ATRP at the same time of conclusion of this Agreement.

The RIHN is to pay in US Dollars the total amount **16,710 USD** to the IWEP for the work noted in item 1.3 of Agreement in accordance with the calculations for individual item of the works, given beneath:

The Amur Terrestrial Research Project (ATRP) management costs according to work schedule noted in item 2.2 of the Agreement as well as in detailed Activity Plan for ATRP:

Management of total work	\$300 x 1 person x 3 months	US\$ 900
Coordination of joint work	\$75 x 1 person x 4 months	US\$ 300
Logistics	\$50 x 5 person x 2 months	US\$ 500
Salary of Russians specialists	\$250 x 3 Senior Researchers x 3 months	US\$ 2,250
along 3 joint expeditions	\$150 x 2 Doctoral Students x 3 times	US\$ 900
	\$150 x 1 Driver x 3 times	US\$ 450
Expedition meals expenses	\$10/d x 25 days x 7 persons	US\$ 1,750
Expedition material (reagents, batteries, rope, etc.)	\$300	US\$ 300
Fuel	\$350 x 2 inland expeditions	US\$ 700
	\$800 x 1 vessel expedition	US\$ 800
Water and solid samples analyses (by Russians)	\$20 x 303 analyses	US\$ 6,060
Translation services	\$100 /3 days x 1 person	US\$ 300
Chartage of microbus, vessel, labs; Slavyanka accomodations etc.	\$1500	US\$ 1,500
Total		US\$ 16,710

Document
on the cost of work
According to the Contract between IWEP-FEBRAS and RIHN for 2007

Project title: "The Amur Terrestrial Research Project (ATRP)"

We, undersigned Prof. Yoneo Ishii on behalf of the Inter-University Research Institute Corporation, National Institute for Humanities, hereinafter to be called CUSTOMER, on the one side, and Prof. Alexei N. Makhinov on behalf of the Institute of Water and Ecology Problems, Far Eastern Branch of Russian Academy of Sciences, hereinafter to be called EXECUTOR, on the other side, concluded the agreement about the cost on the above mentioned research in sum of 16,710 USD (Sixteen thousands seven hundreds ten US Dollars).

This Document is the basis for the calculations and payments between CUSTOMER and EXECUTOR.

CUSTOMER

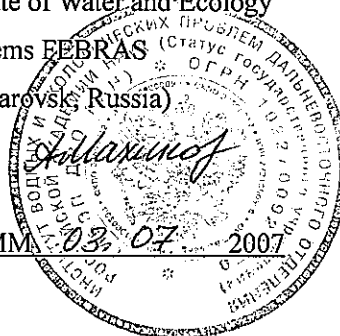
Prof. Yoneo Ishii
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DD, MM, 19, 07, 2007

EXECUTOR

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