

## Appendix 1

### List of Corresponding Authors

**ABROSIMOVA Anastasiya**

V.I. Il'ichev Pacific Oceanological Institute (POI)  
Far Eastern Branch, Russian Academy of Sciences  
43 Baltiyskaya St., Vladivostok  
Russia 690041  
E-mail: amber@poi.dvo.ru

**ANDREEV Andrey**

V.I. Il'ichev Pacific Oceanological Institute (POI)  
Far Eastern Branch, Russian Academy of Sciences  
43 Baltiyskaya Street., Vladivostok  
Russia 690041  
E-mail: andreev@poi.dvo.ru

**ASAMI Hiroki**

Hokkaido Wakkanai Fisheries Experiment Station  
Suehiro 4-5-15, Wakkanai  
Hokkaido, Japan 097-0001  
E-mail: asamih@fishexp.pref.hokkaido.jp

**BROVKO Peter**

Far East State University  
8 Sukhanova St., Vladivostok  
Russia 690600  
E-mail: brovko@meteo.dvgu.ru

**CHERNOOK Vladimir**

Research Institute "GIPRORYBFLOT"  
Malaya Morskaya, 18-20, St. Petersburg  
Russia 190000  
E-mail: chernook@grf.spb.ru

**EBUCHI Naoto**

Institute of Low Temperature Science  
Hokkaido University  
N-19 W-8, Kita-ku, Sapporo  
Japan 060-0819  
E-mail: ebuchi@lowtem.hokudai.ac.jp

**GLEBOVA Svetlana**

Pacific Research Institute of Fisheries and  
Oceanography (TINRO-Center)  
4 Shevchenko Alley, Vladivostok  
Russia 690950  
E-mail: glebova@tinro.ru

**HIWATARI Takehiko**

National Institute for Environmental Studies  
16-2 Onogawa, Tsukuba  
Ibaraki, Japan 305-8506  
E-mail: hiwatari.takehiko@nies.go.jp

**ISADA Tomonori**

Graduate School of Environmental Science  
Faculty of Environmental Earth Science  
Hokkaido University  
N10 W5, Kitaku, Sapporo  
Hokkaido, Japan 060-0810  
E-mail: t-isada@ees.hokudai.ac.jp

**KANAIWA Minoru**

Faculty of Bio-Industry  
Tokyo University of Agriculture  
196 Yasaka, Abashiri  
Japan 099-2493  
E-mail: m3kanaiw@bioindustry.nodai.ac.jp

**KANTAKOV Gennady**

Sakhalin Research Institute of Fisheries and  
Oceanography (SakhNIRO)  
196 Komsomol'skaya St., Yuzhno-Sakhalinsk  
Russian 693023  
E-mail: okhotsk@sakhniro.ru

**(present address)**

Far-Eastern Ecological Center Ltd.  
Office 404  
426 Mira Ave., Yuzhno-Sakhalinsk  
Russia 693004  
E-mail: deco@sakhalin.ru

**KASAI Hiromi**

Hokkaido National Fisheries Research Institute  
 Fisheries Research Agency  
 116 Katsurakoi, Kushiro-shi  
 Hokkaido, Japan 085-0802  
 E-mail: kasaih@fra.affrc.go.jp

**KASHIWAI Makoto**

Department of Aqua-Bioscience and Industry  
 Faculty of Bio-Industry  
 Tokyo University of Agriculture  
 196 Yasaka, Abashiri  
 Japan 099-2493  
 E-mail: m3kashiw@bioindustry.nodai.ad.jp

**KOBAYASHI Mari**

Laboratory of Aquatic Management  
 Department of Aqua-Bioscience and Industry  
 Faculty of Bioindustry  
 Tokyo University of Agriculture  
 196 Yasaka, Abashiri  
 Japan 099-2493  
 E-mail: m3kobaya@bioindustry.nodai.ac.jp

**KULIK Vladimir**

Pacific Research Institute of Fisheries and  
 Oceanography (TINRO-Center)  
 4 Shevchenko Alley, Vladivostok  
 Russia 690950  
 E-mail: vladicon82@gmail.com

**LABAY Vyacheslav**

Sakhalin Research Institute of Fisheries and  
 Oceanography (SakhNIRO)  
 196 Komsomolskaya St., Yuzhno-Sakhalinsk  
 Russia 693023  
 E-mail: labay@sakhniro.ru

**LOBANOV Vyacheslav**

V.I. Il'ichev Pacific Oceanological Institute (POI)  
 FEB RAS  
 43 Baltiyskaya Street, Vladivostok  
 Russia 690041  
 E-mail: lobanov@poi.dvo.ru

**MKRTCHYAN Ferdenant**

Institute of Radio Engineering and Electronics  
 Russian Academy of Sciences  
 1 Vvedensky Sq., Fryazino, Moscow  
 Russia 141190  
 E-mail: ferd47@mail.ru

**MOTOI Tatsuo**

Meteorological Research Institute, JMA  
 Nagamine-1-1, Tsukuba  
 Ibaragi Pref., Japan 305-0052  
 E-mail: tmotoi@mri-jma.go.jp

**MUKTEPAVEL Larisa**

Pacific Research Institute of Fisheries and  
 Oceanography (TINRO-Center)  
 4 Shevchenko Alley, Vladivostok  
 Russia 690950  
 E-mail: Larisamk@tinro.ru

**NAGATA Yutaka**

Marine Information Research Center  
 Japan Hydrographic Association  
 Daiichi Sogo Bldg. 6F  
 1-6-6, Haneda-Kuko, Ota-ku  
 Tokyo, Japan 144-0041  
 E-mail: nagata@kud.biglobe.ne.jp

**NAKANOWATARI Takuya**

Institute of Low Temperature Science  
 Hokkaido University  
 N-19 W-8, Kita-ku, Sapporo  
 Japan 060-0819  
 E-mail: nakano@lowtem.hokudai.ac.jp

**NAKATSUKA Takeshi**

Institute of Low Temperature Science  
 Hokkaido University  
 N-19 W-8, Kita-ku, Sapporo  
 Japan 060-0819  
 E-mail: nakatuka@lowtem.hokudai.ac.jp

**(present address)**

Graduate School of Environmental Studies  
 Hydrospheric Atmospheric Research Center  
 Nagoya University  
 Furo-cho, Chikusa-ku, Nagoya, Japan 464-8601  
 E-mail: nakatsuka.takeshi@f.mbox.nagoya-u.ac.jp  
 (moved from Hokkaido University on Oct.1, 2008)

**NOMURA Daiki**

Institute of Low Temperature Science  
 Hokkaido University  
 N-19 W-8, Kita-ku, Sapporo  
 Japan 060-0819  
 E-mail: daiki@lowtem.hokudai.ac.jp (D. Nomura)

**OHSHIMA Kay-Ichiro**

Institute of Low Temperature Science  
 Hokkaido University  
 Kita-19, Nishi-8, Sapporo  
 Japan 060-0819  
 E-mail: ohshima@lowtem.hokudai.ac.jp

**OVSYANNIKOV Evgeny**

Pacific Research Institute of Fisheries and  
 Oceanography (TINRO-Centre)  
 4 Shevchenko Alley, Vladivostok  
 Russia 690950  
 E-mail: eovsyannikov@tinro.ru

**PEÑA Angelica**

Fisheries and Oceans Canada  
Institute of Ocean Sciences  
P.O. Box 6000, Sidney  
BC, Canada V8L 4B2  
E-mail: Angelica.Pena@dfo-mpo.gc.ca

**ROMANOV Alexander**

FSUE "RISDE"  
53 Aviamotomaya St., Moscow  
Russia 111024  
E-mail: romanov@rniikp.ru

**ROMANOV Alexey**

FSUE "RISDE"  
53, Aviamotomaya St., Moscow  
Russia 111024

**SAKURAI Yasunori**

Graduate School of Fisheries Sciences  
Hokkaido University  
3-1-1 Minato-cho, Hakodate  
Hokkaido, Japan 041-8611  
E-mail: sakurai@fish.hokudai.ac.jp

**SASAJIMA You-ichiro**

Center for Climate System Research  
University of Tokyo  
5-1-5, Kashiwanoha, Kashiwa-shi  
Chiba, Japan 277-8568  
E-mail: sasajima@ccsr.u-tokyo.ac.jp

**SAITOH Sei-Ichi**

Graduate School of Fisheries Sciences  
Hokkaido University  
3-1-1 Minato-cho, Hakodate  
Hokkaido, Japan 041-8611  
E-mail: sakurai@fish.hokudai.ac.jp

**SHEVCHENKO George**

Institute of Marine Geology and Geophysics  
FEB RAS  
1-B Nauki St., Yuzhno-Sakhalinsk  
Russia 693022  
E-mail: shevchenko@imgg.ru

**SHIMADA Hiroshi**

Hokkaido Central Fisheries Experiment Station  
Hamanaka-cho 238, Yoichi  
Hokkaido Japan 046-8555  
E-mail: shimadah@fishexp.pref.hokkaido.jp

**TACHIBANA Yoshihiro**

Faculty of Bio-resources  
Mie University  
1577 Kurima-machiya-cho, Tsu  
Mie, Japan 514-8507  
E-mail: tachi@bio.mie-u.ac.jp

**TAGUCHI Mioko**

Graduate School of Fisheries Sciences  
Hokkaido University  
3-1-1 Minato-cho, Hakodate  
Hokkaido, Japan 041-8611  
E-mail: taguchi@fish.hokudai.ac.jp

**TRUKHIN Alexey**

V.I. Il'ichev Pacific Oceanological Institute (POI)  
FEB RAS  
43 Baltiyskaya St., Vladivostok  
Russia 690041  
E-mail: trukhin@poi.dvo.ru

**UCHIMOTO Keisuke**

Institute of Low Temperature Science  
Hokkaido University  
Kita 19, Nishi 8, Sapporo  
Japan 060-0819  
E-mail: uchimoto@lowtem.hokudai.ac.jp

**VARKENTIN Alexander**

Kamchatka Research Institute of Fisheries and  
Oceanography (KamchatNIRO)  
18 Naberezhnaya St.,  
Petropavlovsk-Kamchatsky  
Russia, 683000  
E-mail: varkentin@kamniro.ru

**YAMAGUCHI Atsushi**

Graduate School of Fisheries Sciences  
Hokkaido University  
3-1-1 Minatomachi, Hakodate  
Hokkaido, Japan 041-8611  
E-mail: a-yama@fish.hokudai.ac.jp

**ZAITSEVA Julia**

Russian Federal Research Institute of Fisheries and  
Oceanography (VNIRO)  
17 V. Krasnoselskaya, Moscow  
Russia 107140  
E-mail: yuz@vniro.ru