

List of Papers Presented at the Symposium

Key-note Address

Benthic organisms and environmental variability:
responses to seasonal, decadal and long-term change
A. Clarke (UK)

General presentations

Some ecological and physiological features of the
Antarctic clam, *Laternula elliptica* in an Antarctic
nearshore habitat
I.-Y. Ahn, H. Chung, and K.-S. Choi (Korea)

The reproductive cycle of the Antarctic clam, *Laternula
elliptica* collected from Marian Cove, King George
Island
*K.-S. Choi, D.-H. Kang, I.-Y. Ahn, and H. Chung
(Korea)*

High latitude Antarctic benthos: A “coevolution” of
nature conservation and ecosystem research?
J. Gutt (Germany)

Annual particle flux and carbon mass balance at a
subtidal benthic layer of the Marian Cove, King George
Island, Antarctica
J. Shim, Y.-C. Kang, M.W. Han, and D. Kim (Korea)

Antarctic marine microorganisms and climate change:
Impacts and feedbacks
H.J. Marchant (Australia)

UV effect on the embryogenesis and gene expression of
the Antarctic sea urchin, *Sterechinus neumayeri*
A. Kim, Y.-H. Lee, S. Lee, and S.-H. Kang (Korea)

Effect of solar UV-B radiation on three species of
Antarctic rhodophytes

*T. Han, Y.-S. Han, M. Lee, S.-H. Kang, H. Chung, and
S. Lee (Korea)*

Oligocene marinae ecosystem of King George Island,
West Antarctica
A. Gazdzicki (Poland)

A possible explanation for the dominance of chlorophyll
in pico- and nano-size fractions in the waters around the
South Shetland Islands

*S. Kawaguchi, A. Shiimoto, K. Imai, Y. Tsuruga, H.
Yamaguchi, Y. Noiri, and N. Iguchi (Japan)*

Seasonal variation of microalgae and environmental
factors in Marian Cove, King George Island,
Antarctica, 1996

*J.-S. Kang, S.-H. Kang, Y.N. Shin, E.J. Kim, and J.H.
Lee (Korea)*

Carbon fluxes from winter to summer in Nella Fjord,
Larsemann Hills, Antarctica: Relation to the processes of
coastal sea ice

C. Bo and J. He (China)

Particle flux in the Bransfield Strait, Antarctica

*D. Kim, D.-Y. Kim, J. Shim, S.-H. Kang, and Y.-C.
Kang (Korea)*

Carbonate system across the Antarctic Polar Front in the
Drake Passage

*Y.-C. Kang, J. Shim, D. Kim, D. Pierrot¹, and F.J.
Millero¹ (Korea and USA¹)*

Recent development in multinational marine ecosystem

researches along the Antarctic Peninsula

S. Kim (Korea)

Modeling studies of the growth, development and transport of krill (*Euphausia superba*)

E.E. Hofmann (USA)

Hydrography and acoustic biomass estimates of Antarctic krill (*Euphausia superba*) near the South Shetland Islands, Antarctica, during January 2000

D. Kang, Y.-H. Lee, H.-C. Shin, W. Lee, and S. Kim (Korea)*

JARE marine biology program - Its achievement and near future program

M. Fukuchi, T. Odate, S. Kudoh, and T. Hirawake (Japan)

Nesting habitat selection by Grey-headed (*Thalassarche chrysostoma*) and Black-browed (*T. melanophrys*) Albatrosses at Gonzalo Island, Diego Ramirez (Chile)

J. Valencia, G. Robertson¹, and J. Arata (Chile and Australia¹)

Digestive gland as a monitor organ of feeding activity in Antarctic krill: Preliminary results from a field survey

H.-C. Shin, J.-S. Kang, Y.-H. Lee, and S.-H. Kang (Korea)*

The United States National Science Foundation's UV Monitoring Network for polar regions: An overview and recent results

G. Bernhard, C.R. Booth, and J.C. Ebrahimian (USA)

Comparative sensitivity of Antarctic brown algae *Himantothallus grandifolius* and *Lessonia flavicans* to solar UV-B radiation

T. Han, Y.-S. Han, M. Lee, S.-H. Kang, H. Chung, and S. Lee (Korea)

Autumnal ice algal bloom at the first-year ice developed near Syowa Station, Antarctica - Studies on the growth environments and photosynthesis

S. Kudoh, Y. Tsuchiya, K. Sato, and M. Fukuchi (Japan)

JCADM activity at Center for Antarctic Environment Monitoring, NIPR as National Antarctic Data Center for JCADM

M. Fukuchi (Japan)

Mesozoic and Cenozoic flora from South Shetland Island, Antarctica

T. Torres, G. Galleguillos, G. Barale¹, H. Méon¹, and M. Philippe¹ (Chile and France¹)

Seasonal change in condition factors and gonosomatic index of the Antarctic limpet *Nacella concinna*

D. Kim (Korea)

Temporal and spatial patterns in phytoplankton abundance distributions in the North Water Polynya, Arctic Ocean

T. Odate, T. Hirawake, S. Kudoh, and M. Fukuchi (Japan)

Studies on the reproductive status of the Antarctic clam, *Laternula elliptica* using stereological methods

K.-S. Choi, D.-H. Kang, I.-Y. Ahn, H. Chung, and K.-I. Park (Korea)

Japanese contribution for the International North Water Polynya program in 1997-99

M. Fukuchi, T. Odate, S. Kudoh, S. Ushio, and L. Fortier (Japan)

Observations of terrestrial nightglow by OH using a ground-based optical instrument at King Sejong Station, Antarctica

Y.-I. Won and Y.-M. Cho (Korea)

An immunohistochemical and ultrastructural study on the heavy metals accumulated kidney of *Laternula elliptica*

Y.-S. Lee, I.-Y. Ahn, W.-J. Kim, and K.-H. Jeong (Korea)

List of Participants

Korea

Prof. Suam Kim

Pukyung National University
Busan, Korea
Tel)+82-51-620-6268
E-mail: suamkim@pknu.ac.kr

Prof. Taejun Han

Department of Biology, University of Incheon
177 Dowha-dong, Nam-gu, Incheon, KOREA
Tel)+82-32-770-8245
Fax)+82-32-770-8245
E-mail: hanalgae@lion.inchon.ac.kr

Prof. Kwang-Sik Choi

Cheju National University
Faculty of Applied Marine Science
1 Ara 1 Dong, Jeju 690-756, KOREA
Tel)+82-64-754-3422
Fax)+82-64-756-3493
E-mail: skchoi@cheju.cheju.ac.kr

Dr. In-Young Ahn

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6421
Fax)+82-31-408-5825
E-mail: iahn@kordi.re.kr

Dr. Young-Chul Kang

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6446
Fax)+82-31-408-5825
E-mail: yckang@kordi.re.kr

Dr. Youn-Ho Lee

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6428
Fax)+82-31-408-5825
E-mail: ylee@kordi.re.kr

Dr. Dongseon Kim

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6446
Fax)+82-31-408-5825
E-mail: dkim@kordi.re.kr

Dr. JeongHee Shim

Polar Sciences laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6433
Fax)+82-31-408-5825
E-mail: jhshim@kordi.re.kr

Dr. Jae-Shin Kang

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6429
Fax)+82-31-408-5825
E-mail: jskang@kordi.re.kr

Dr. Hyoung-Chul Shin

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6427
Fax)+82-31-408-5825
E-mail: hcshin@kordi.re.kr

Dr. Dohong Kim

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6448
Fax)+82-31-408-5825
E-mail: dhkim@kordi.re.kr

Dr. Hosung Chung

Polar Sciences Laboratory, KORDI
Ansan P.O. Box 29, Seoul 425-600, KOREA
Tel)+82-31-400-6424
Fax)+82-31-408-5825
E-mail: hchung@kordi.re.kr

Mr. Young-Seok Han

Department of Biology, University of Incheon,
Dohwa-Dong 177, Nam-gu, Incheon 403-749, KOREA
Tel)+82-32-770-8245
Fax)+82-32-770-8245
E-mail: g9711110@lion.inchon.ac.kr

Mr. Do-Hyung Kang

Cheju National University
Faculty of Applied Marine Sciences
1 Ara-1-Dong, Jeju 690-756, KOREA
Tel)+82-64-754-3422
Fax)+82-64-756-3493
E-mail: kkangdo@hanmail.net

Mr. Yong-Seok Lee

Department of Life Sciences
University of Soonchunhyang
646 Eupnae-ri, Shinchang-Myun
Asan 336-190, KOREA
Tel)+82-41-530-1249
Fax)+82-41-543-5979
E-mail: yslee@bio.sch.ac.kr

Overseas*Dr. Andrew Clarke*

British Antarctic Survey
High Cross, Madingley Road
Cambridge CB3 0ET, UK
Tel)+44-1223-221591

Fax)+44-1223-221259

E-mail: andrew.clarke@bas.ac.uk

Dr. Julian Gutt

Alfred Wegener Institute, Columbusstrasse
27568 Bremerhaven, GERMANY
Tel)+49-471-4831-1333
Fax)+49-471-4831-1149
E-mail: jgutt@awi-bremerhaven.de

Dr. Harvey J. Marchant

Australian Antarctic Division, Channel Highway
Kingston, Tasmania 7050, AUSTRALIA
Tel)+61-3-62-323-323
Fax)+61-3-62-323-351
E-mail: harvey_mar@antdiv.gov.au

Dr. Bo Chen

Polar Research Institute of China
451 Jinqiao Road, Shanghai 200129, CHINA
Tel)+86-21-5871-1026
Fax)+86-21-5871-1663
E-mail: pric@online.sh.cn

Mr. JianFeng He

Polar Research Institute of China
451 Jinqiao Road, Shanghai 200129, CHINA
Tel)+86-21-5871-1026
Fax)+86-21-5871-1663
E-mail: pric@online.sh.cn

Dr. Dong Zhaoqian

Polar Research Institute of China
451 Jinqiao Road, Shanghai 200129, CHINA

Dr. So Kawaguchi

National Research Institute of Far Seas Fisheries
5-7-1 Orido Shimizu 424-8633, JAPAN
Tel)+81-543-36-6069
Fax)+81-543-35-9642
E-mail: kawaso@enyo.affrc.go.jp

Dr. Mitsuo Fukuchi

National Institute of Polar Research
9-10 Kaga 1-chome, Itabashi-ku
Tokyo 173-8515, JAPAN
E-mail: fukuchi@nipr.ac.jp

Dr. Eileen E. Hofmann

Old Dominion University
Center for Coastal Physical Oceanography
Crittenton Hall, Norfolk VA 23529, USA
Tel)+1-757-683-5334
Fax)+1-757-683-5550
E-mail: hofmann@ccpo.odu.edu

Dr. Andrzej Gazdzick

Institute of Paleobiology, Twarda 51/55
00-818 Warszawa, POLAND
Tel)+48-22-697-8796
Fax)+48-22-620-6225
E-mail: gazdzick@twarda.pan.pl

Dr. José Valencia

Department of Ecological Sciences University of Chile
Casilla 653 Santiago, CHILE
Tel)+56-2-678-7263
Fax)+56-2-272-7363
E-mail: jvalenci@abello.dic.uchile.cl

Mrs. Torres Teresa

Ciencias Agro icas University of Chile
Casilla 1004, Americo Vespucio sur 919
depto 21 Las Condes, Santiago, CHILE
Tel)+56-2-678-5727
Fax)+56-2-678-5805
E-mail: ttorres@abello.dic.uchile.cl