

CURRICULUM VITAE

Name: Hiroaki Saito

Occupation: Professor
Center for International Collaboration,
Atmosphere and Ocean Research Institute,
The University of Tokyo

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Education:

1986 B. Agr., Tohoku University

1996 Ph.D. (Agriculture), Tohoku University

Research and professional experience:

2019- Advisor to the Director, AORI, the University of Tokyo

2016- Professor, AORI, the University of Tokyo

2014-2016 Associate Professor, Section of Marine Planktology, AORI, the
University of Tokyo

2011- Head, Ecosystem Dynamics Group, Tohoku National Fisheries
Research Institute, Fisheries Research Agency

- 2010-2011 Lecturer, Nagasaki University
- 2007-2008 Guest associate Professor, The University of Tokyo
- 2001-2011 Chief of Biological Oceanography Section, Tohoku National Fisheries Research Institute, Fisheries Research Agency
- 2004 Lecturer, Shizuoka University
- 1997 - 2001 Senior Scientist of Biological Oceanography Section, Hokkaido National Fisheries Research Institute
- 1998 - 1999 Guest Scientist, Danish Institute for Fisheries Research
- 1994 - 2000 Cooperated Scientist of Sea Ice Research Laboratory, The Institute of Low Temperature Science, Hokkaido University
- 1992 -2001 Cooperated Scientist of National Institute of Polar Research
- 1990 - 1997 Researcher, Biological Oceanography Section, Fisheries Oceanography Division, Hokkaido National Fisheries Research Institute
- 1987 - 1990 Researcher, Fisheries Resources Division, Hokkaido National Fisheries -Research Institute, Fisheries Agency

Awards:

- 2020 Wooster Award, North Pacific Marine Science Organization
- 2007 The Hidaka Prize of the Oceanographic Society of Japan (co-author)
- 2003 The Best Paper Award from the Plankton Society of Japan (co-author)
- 1999 The Uda Prize of the Japanese Society of Fisheries Oceanography (co-author)
- 1998 The Okada Prize of the Oceanographic Society of Japan

Research Interest:

My scientific interest is the role of organisms in marine ecosystem dynamics and biogeochemical cycles. I have been studied biology and ecology of copepod, beautiful creature in marine ecosystem, and also various marine organisms from virus to whales. The essential aim of my studies is to understand the processes and mechanisms of marine ecosystem response to natural and anthropogenic perturbations. Recent research topics are:

- The role of zooplankton on biological pump

- The role of iron on marine food-web dynamics and biogeochemical cycles
- Developing new ocean provinces respect to the distribution of biogenic elements and biogeography
- Solving "*Kuroshio Paradox*" by studying the structure and dynamics of the Kuroshio ecosystem
- Sustainable use of marine ecosystem services

I also keen to contribute to solve social issues by preparing scientific knowledge. I am contributing some national/international projects related to UN Decade of Ocean Science for Sustainable Development (2021-2030) and UN SDGs, especially SDG14 "Life under water".

Committees:

- 2022- Member, Study Group for External Review of PICES
- 2021- Member, International Steering Group on the Second Cooperative Study of Kuroshio and its Adjacent Regions (CSK-2), WESTPAC, IOC/UNESCO
- 2020- Member, Study Group of ICES–PICES Ocean Decade
- 2018-2023, 2007-2008 Special Associate member, Science Council of Japan
- 2018- Chair, IMBeR-Japan National Committee, Science Council of Japan
- 2017- Member, NPOCE SSC, CLIVAR Pacific Panel
- 2016- Japanese delegation at the IOC Assembly/IOC Executive Council
- 2016-2019 Chair, PICES Science Board
- 2015- Japanese delegation at the IOC/WESTPAC Intergovernmental Session
- 2015-2016 Cochairman, PICES FUTURE SSC
- 2013-2016 Vice Chairman, PICES Science Board
- 2013- Fellow of the board of Oceanographic Society of Japan
- 2011-2013, 2014-2017, 2019-2021 Member of the Paper Awards Selection Committee of the Oceanographic Society of Japan
- 2010-2012 Member, ICES/PICES Joint Study Group on "Developing a Framework for Scientific Cooperation in Northern Hemisphere

Marine Science"

- 2009-2019 Member, PICES Science Board
- 2009-2016 Chair of FUTURE Advisory Panel on Climate, Oceanographic Variability and Ecosystems, PICES
- 2008 - 2010 Co-chair, Future Implementation Plan Writing Team, PICES
- 2007 - 2008 Member, FISP Writing Team, PICES
- 2007 - 2011 Member, WG22 (Iron supply and its impact on biogeochemistry and ecosystems in the North Pacific Ocean), PICES
- 2007 - 2013 Member, International Journal Committee, The Japanese Society of Fisheries Oceanography
- 2005 - 2009 Member, Study Group on Future Integrative Scientific Programs, PICES
- 2004 - 2007 Member, IFEP Advisory Panel, PICES
- 2004 - 2008 Chair, IMBER-Japan National Committee, Science Council of Japan
- 2004 - 2005 Member, Japan-GLOBEC National Committee, The Science Council of Japan
- 2004 - 2008 Science Steering Committee, IGBP/SCOR IMBER
- 2003 - 2005 Member, Committee of Global Environmental Research, The Science Council of Japan
- 2002 - 2004 Member, IGBP/SCOR Ocean Biogeochemistry and Ecosystems Transition Team
- 2001 - 2004 Member of MODEL Task Team, PICES

Editorial boards of academic journals:

- 2022- Guest Editor, Deep-Sea Research Part II: Topical Studies in Oceanography, Special Issue: IMBeR West Pacific Symposium: Changing West Pacific Ocean: Science and Sustainability.
- 2021- Associate Editor for Marine Biogeochemistry (Frontiers in Marine Science, Frontiers in Earth Science and Frontiers in Chemistry)
- 2020- Guest Associate Editor in Coastal Ocean Processes, Frontier in Marine Science (Topic Section: Oceanographic Processes Linking Nearshore, Continental Shelf, and Shelf Break)

- 2019 Editor, Kuroshio Current: Physical, Biogeochemical, and Ecosystem Dynamics (Geophysical Monograph Series, AGU-Wiley)
- 2019 Guest Editor, Philippine Journal of Natural Sciences
- 2016 Guest editor of the Special Issue "Study of change in ecosystem and material cycle caused by climate change and its feedback in the western North Pacific", Journal of Oceanography
- 2014 - Review Editor, Frontiers in Marine Science
- 2011 -2019 Editorial board, Journal of Oceanography
- 2007- 2013 Editorial board, Fisheries Oceanography
- 2005- 2011 Editor, Plankton and Benthos Research (Plankton Biology and Ecology until 2005)
- 2003- 2010 Associate editor, Progress in Oceanography.

Membership of academic societies:

The Oceanographic Society of Japan

Plankton Society of Japan

Japanese Society of Fisheries Oceanography

Japan Geoscience Union

The Association for the Sciences of Limnology and Oceanography

The American Geophysical Union

Projects

- 2020-2023 CREPSUM (Collaborative Research and Education Project in Southeast Asia for Sustainable Use of Marine Ecosystems): Project Coordinator (PI), funded by JSPS Core-to-core program. <https://jpscrepsum.wixsite.com/mysite>
- 2017-2019 RENSEA (Research and education network on coastal ecosystems in Southeast Asia. Project Coordinator (PI), funded by JSPS Core-to-core program.
- 2011-2016 New Ocean Paradigm on its Biogeochemistry, Ecosystem and Sustainable Use (funded by MEXT). <http://ocean.fs.a.u-tokyo.ac.jp/>

- 2011-2021 SKED: Project leader (2011-2014), member (2014-2021). The Study of Kuroshio Ecosystem Dynamics for Sustainable Fisheries (funded by MEXT)
<http://tnfri.fra.affrc.go.jp/kaiyo/sked/english/index.html>
- 2007-2012 POMAL: Project leader, Population outbreak of Marine Life (funded by the Ministry of Agriculture, Forestry and Fisheries)
<http://tnfri.fra.affrc.go.jp/kaiyo/POMALweb/e-pomal.html>
- 2007 BLOSSOM: Project leader, Blooming Plankton Succession Study in the Oyashio Marine Ecosystem
- 2005-2008 PI. The role of heterotrophic dinoflagellates on the vertical transport of biogenic elements, funded by JSPS.
- 2003 SPINUP: Project leader, Study for Plankton and Iron Dynamics in the western Subarctic Pacific.
- 2002-2006 DEEP: Project leader, Deep-Sea Ecosystem and Exploitation Project, funded from Ministry of Agriculture, Forests and Fisheries of Japan.
- 2001-2004 SEEDS: Member. Japan-SOLAS project Subarctic ocean iron Enrichment and Ecosystem Dynamics Study, funded from Ministry of Environments of Japan.
- 1998-2000 PROVES: Member, EU funded project under the MUST III programme, Processes of Vertical Exchange in Shelf Sea.
- 1998-2002 VENFISH: Member, Japan-GLOBEC related project, Comprehensive study of the Variation of the oceanic ENvironment and FISH populations in the North-western Pacific
- 1997-2002 SAGE: Member. Japan-JGOFS related project. Subarctic Gyre Experiment, funded from Science and Technology Agency of Japan
- 1990-2010 *A-line* Monitoring: Japan-JGOFS related project. Monitoring program of biological processes in the Oyashio region, western subarctic Pacific.
- 1992-1993 SARES: Member. A joint Canada-Japan project conducted on the first-year ice of Saroma-ko Lagoon and Resolute Passage,

- Ministry of Education, Culture and Sports of Japan
- 1990-1998 Global Environmental Research Fund project, Effects of Enhanced UV-B radiation on terrestrial and marine ecosystem, funded from Ministry of Environment.
- 1990-1998 BIOCOSMOS: Member, Comprehensive Program of Research for Agro-Ecological System and Optimum Control. Ministry of Agriculture, Forests and Fisheries of Japan.

Refereed Publications:

1. Jiang, S., Hashihama, F., Masumoto, Y., Liu, H., Ogawa, H., Saito, H. Phytoplankton dynamics as a response to physical events in the oligotrophic Eastern Indian Ocean. *Progress in Oceanography* 203, 102784 (2022) <https://doi.org/10.1016/j.pocean.2022.102784>
2. Liu, A. C. H., Chang, F. H., Yang, J. W. Saito, H., Umezawa, Y., Chen, C. C., Jan, S., Hsieh, C. H. Free-living marine bacterioplankton composition and diversity along the Kuroshio region. *Deep-Sea. Research I.* 183. 103741 (2022). <https://doi.org/10.1016/j.dsr.2022.103741>
3. Isaji, Y., Yoshikawa, C., Ogawa, N., O., Matsumoto, K., Makabe, A., Toyoda, S., Ishikawa, N. F., Ogawa, H., Saito, H., Honda, M. C., Ohkouchi, N. Nitrogen sources for phytoplankton in the eastern Indian Ocean determined from $\delta^{15}\text{N}$ of chlorophyll a and divinylchlorophyll a. *Geochemistry, Geophysics, Geosystems*, 23, e2021GC010057 (2022). <https://doi.org/10.1029/2021GC010057>
4. Hashihama, F., Yasuda, I., Kumabe, A. Sato, M., Sasaoka, H., Iida, Y., Shiozaki, T., Saito, H., Kanda, J., Furuya, K., Boyd, P., Ishii, M. Nanomolar phosphate supply and its recycling drive net community production in the subtropical North Pacific. *Nat. Commun.* 12, 3462 (2021). <https://doi.org/10.1038/s41467-021-23837-y>
5. Hashihama, F., Saito, H., Kodama, T., Yasui-Tamura, S., Kanda, J., Tanita, I., Ogawa, H., Woodward, E. M. S., Boyd, P. W., and Furuya, K. (2021) Cross-basin differences in the nutrient assimilation characteristics of induced phytoplankton blooms in the subtropical Pacific waters, *Biogeosciences* 18, 897–915, <https://doi.org/10.5194/bg-18-897-2021>

6. Jiang, S., Hashihama, F., Saito, H. (2021) Phytoplankton growth and grazing mortality through the oligotrophic subtropical North Pacific. *Journal of Oceanography* 77, 505-521 <https://doi.org/10.1007/s10872-020-00580-4>
7. Hashihama, F., Saito, H., Shiozaki, T., Ehama, M., Suwa, S., Sugiyama, T., et al. (2020). Biogeochemical controls of particulate phosphorus distribution across the oligotrophic subtropical Pacific Ocean. *Global Biogeochemical Cycles*, 34, e2020GB006669. <https://doi.org/10.1029/2020GB006669>
8. Arifin, Z., and Saito, H. (2019). Bridging coastal research program between Indonesia and Japan. *Marine Research in Indonesia*, 44, 34-41. <https://doi.org/10.14203/mri.v44i1.551>
9. Hashihama, F., Suwa, S., Kanda, J., Ehama, M., Sakuraba, R., Kinouchi, S., Sato, M., Yamaguchi, T., Saito, H., Ogura, Y., Hayashi, T., Mori, H., Kurokawa, K., Suzuki, S., Hamasaki, K. (2019) Arsenate and microbial dynamics in different phosphorus regimes of the subtropical Pacific Ocean. *Progress in Oceanography* 176, 102-115. <https://doi.org/10.1016/j.pocean.2019.05.007>
10. Takagi, H., Kimoto, K., Fujiki, T., Saito, H., Schmidt, C., Kucera, M., Moriya, M. (2019) Characterizing photosymbiosis in modern planktonic foraminifera. *Biogeosciences*, 16, 3377-3396, <https://doi.org/10.5194/bg-16-3377-2019>
11. Michida, Y., et al. (2019). Guidelines for harmonizing ocean surface microplastic monitoring methods. Ministry of the Environment Japan, 71 pp. https://www.env.go.jp/en/water/marine_litter/guidelines/guidelines.pdf
12. Bograd, S. J., Kang, S., Di Lorenzo, E., Horii, T., Katugin, O. N., King, J. R., Lobanov, V. B., Makino, M., Na, G., Perry, R. I., Qiao, F., Rykaczewski, R. R., Saito, H., Therriault, T. W., Yoo, S., Batchelder, H. (2019). Developing a Social–Ecological–Environmental System Framework to Address Climate Change Impacts in the North Pacific. *Front. Mar. Sci.* 6:333. <https://doi.org/10.3389/fmars.2019.00333>
13. Sogawa, S., Hidaka, K., Kamimura, Y., Takahashi, M., Saito, H., Okazaki, Y., Shimizu, Y., Setou, T. (2019) Environmental characteristics of spawning and nursery grounds of Japanese sardine and mackerels in the Kuroshio and Kuroshio Extension area. *Fish Oceanogr.* 2019; 28: 454– 467. <https://doi.org/10.1111/fog.12423>
14. Saito, H. (2019) The Kuroshio: its recognition, scientific activities and emerging issues. In *Kuroshio Current* (eds T. Nagai, H. Saito, K. Suzuki and M. Takahashi) AGU-

Wiley Geophysical Monograph 243, pp3-11, AGU and John Wiley and Sons, Hobokern, USA. <https://doi.org/10.1002/9781119428428.ch1>

15. Okazaki, Y., Miyaoto, H., Suzuki, K., Saito, H., Hidaka, K., and Ichikawa, T. (2019), Diverse trophic pathways from zooplankton to larval and juvenile fishes in the Kuroshio ecosystem. In Kuroshio Current (eds T. Nagai, H. Saito, K. Suzuki and M. Takahashi) AGU-Wiley Geophysical Monograph 243, pp257-272, AGU and John Wiley and Sons, Hobokern, USA. <https://doi.org/10.1002/9781119428428.ch15>

16. Miyamoto, H., Vijai, D., Okazaki, Y., Saito, H. (2019) Feeding ecology of chaetognath *Flaccisagitta enflata* in Kuroshio region, western North Pacific. In Kuroshio Current (eds T. Nagai, H. Saito, K. Suzuki and M. Takahashi) AGU-Wiley Geophysical Monograph 243, pp245-256, AGU and John Wiley and Sons, Hobokern, USA. <https://doi.org/10.1002/9781119428428.ch16>

17. Isada, T, Hattori-Saito, A., Saito, H., Kondo, Y., Nishioka, J., Kuma, K., Hattori, H., McKay, R.M.L., Suzuki, K. (2019) Responses of phytoplankton assemblages to iron availability and mixing water masses during the spring bloom in the Oyashio region, NW Pacific. *Limnology and Oceanography*, 64, 194-216
<https://doi.org/10.1002/lno.11031>

18. Shiozaki, T., Bombar, D., Riemann, L., Sato, M., Hashihama, F., Kodama, T., Tanita, I., Takeda, S., Saito, H., Hamasaki, K., Furuya, K. (2018). Linkage between dinitrogen fixation and primary production in the oligotrophic South Pacific Ocean, *Global Biogeochemical Cycles* 32, <https://doi.org/10.1029/2017GB005869>

19. Yamashita, Y., Hashihama, F., Saito, H., Fukuda, H., Ogawa, H. (2017) Factors controlling the geographical distribution of fluorescent dissolved organic matter in the surface waters of the Pacific Ocean. *Limnology and Oceanography* 62, 2360-2374.
<https://doi.org/10.1002/lno.10570>

20. Cheung, S., K. Suzuki, H. Saito, Y. Umezawa, X. Xia, and H. Liu (2017) Highly heterogeneous diazotroph communities in the Kuroshio Current and the Tokara Strait, Japan. *PLOS ONE*, 12, e0186875, <https://doi.org/10.1371/journal.pone.0186875>

21. Nishibe, Y., Takahashi, K., Sato, M., Kodama, T., Kakehi, S., Saito, H., Furuya, K. (2017) Phytoplankton community structure, as derived from pigment signatures, in the Kuroshio Extension and adjacent regions in winter and spring. *Journal of Oceanography*. <https://doi.org/10.1007/s10872-017-0415-3>

22. Saito, H. (2016) Plankton Net. In: Guideline of Ocean Observations Volume 6, Plankton and Benthos, The Oceanographic Society of Japan, ISBN 978-4-908553-27-1, G601EN:001-009. <https://kaiyo-gakkai.jp/jos/en/guide/download>
23. Ehama, M., Hashihama, F., Kinouchi, S., Kanda, J., Saito, H. (2016) Sensitive determination of total particulate phosphorus and particulate inorganic phosphorus in seawater using liquid waveguide spectrophotometry. *Talanta* 153, 66-70.
doi:10.1016/j.talanta.2016.02.058
24. Sogawa, S., Sugisaki, H., Saito, H., Okazaki, Y., Ono, T., Shimode, S., Kikuchi, T. (2016) Seasonal and regional change in vertical distribution and diel vertical migration of four euphausiid species (*Euphausia pacifica*, *Thysanoessa inspinata*, *T. longipes*, and *Tessarabrachion oculatum*) in the northwestern Pacific. *Deep Sea Research Part I: Oceanographic Research Papers* 109, 1-9.
25. Blasiak, R., Pacheco, E., Furuya, K., Golden, C. D., Jauharee, A. R., Natori, Y., Saito, H., Sinan, H., Tanaka, T., Yagi, N., Yiu, E. (2016). Local and regional experiences with assessing and fostering ocean health. *Marine Policy* 71, 54-59.
26. Nishibe, Y., Takahashi, K., Shiozaki, T., Kakehi, S., Saito, H., Furuya, K. (2015) Size-fractionated primary production in the Kuroshio Extension and adjacent regions in spring. *Journal of Oceanography* 71, 27-40. DOI 10.1007/s10872-014-0258-0. 2014.12.09.
27. Yamashita, Y., Lu, C.-J., Ogawa, H., Nishioka, J., Obata, H., Saito, H. (2015) Application of in situ fluorometer for determining vertical distribution of fluorescent organic matter in the open ocean. *Marine Chemistry* 177, 295-305.
28. Itoh, S., Yasuda, I., Saito, H., Tsuda, A., Komatsu, K. (2015) Mixed layer depth and chlorophyll a: profiling float observations in the Kuroshio-Oyashio Extension region. *Journal of Marine Systems* 151, 1-14.
29. Tsuda, A., Saito, H., Kasai, H., Nishioka, J., Nakatsuka, T. (2015) Vertical segregation and population structure of ontogenetically migrating copepods *Neocalanus cristatus*, *N. flemingeri*, *N. plumchrus* and *Eucalanus bungii* during ice-free season in the Sea of Okhotsk. *Journal of Oceanography* 71, 271-285.
30. Hashihama, F., Kanda, J., Tauchi, A., Kodama, T., Saito, H., Furuya, K. (2015) Liquid waveguide spectrophotometric measurement of nanomolar

ammonium in seawater based on the indorphenol reaction with *o*-phenylphenol (OPP). *Talanta*, 143 374-380. [doi:10.1016/j.talanta.2015.05.007](https://doi.org/10.1016/j.talanta.2015.05.007)

31. Kakehi, S., Ito, S., Kuwata, A., Saito, H., Tadokoro, K. (2015) Phytoplankton distribution during the winter convective season in Sendai Bay, Japan. *Continental Shelf Research* 97, 43-53.
<http://dx.doi.org/10.1016/j.csr.2015.02.005>
32. Nishibe, Y., Takahashi, K., Ichikawa, T., Hidaka, K., Kurogi, H., Segawa, K., Saito, H. (2015) Degradation of discarded appendicularian houses by oncaeid copepods. *Limnology and Oceanography* 60, 967-976. doi: 10.1002/lno.10061
33. Yoshimura, T., Nishioka, J., Ogawa, H., Kuma, K., Saito, H., Tsuda, A. (2014) Dissolved organic phosphorus production and decomposition during open ocean diatom blooms in the subarctic Pacific. *Marine Chemistry* 165: 46-54. DOI: 10.1016/j.marchem.2014.08.003
34. Tsuda, A., Saito, H., Kasai, H. (2014) Vertical distributions of large ontogenetically migrating copepods in the Oyashio region during their growing season. *Journal of Oceanography* 70, 123-132. DOI 10.1007/s10872-013-0214-4. 2014.02.12.
35. Nosaka, Y., Isada, T., Kudo, I., Saito, H., Hattori, H., Tsuda, A., Suzuki, K. (2014). Light utilization efficiency of phytoplankton in the Western Subarctic Gyre of the North Pacific during summer. *Journal of Oceanography* 70, 91-103. DOI 10.1007/s10872-013-0217-1 2014.01.18
36. Shiozaki, T., Ito, S., Takahashi, K., Saito, H., Nagata, T., Furuya, K. (2014) Regional variability of factors controlling the onset timing and magnitude of spring algal blooms in the northwestern North Pacific. *J. Geophys. Res., Oceans*. 119,1-13, doi:10.1002/2013JC009187
37. Yamashita, Y., Nosaka, Y., Suzuki, K., Ogawa, H., Takahashi, K., Saito, H. (2013) Photobleaching as a factor controlling spectral characteristics of chromophoric dissolved organic matter in open ocean. *Biogeosciences* 10, 7207-7217 doi:10.5194/bg-10-7207-2013.

38. Takahashi, K., Ichikawa, T., Saito, H., Kakehi, S., Sugimoto, Y., Hidaka, K., Hamasaki, K. (2013). Sapphirinid copepods as predators of doliolids: Their role in doliolid mortality and sinking flux. *Limnology and Oceanography* 58, 1972-1984.
39. Sogawa, S., Sugisaki, H., Saito, H., Okazaki, Y., Shimode, S., Kikuchi, T. 2013. Congruence between euphausiid community and water region in the northwestern Pacific. Particularly in the Oyashio-Kuroshio Mixed Water Region. *Journal of Oceanography* 69, 71-85 doi:10.1007/s10872-012-0158-0
40. Kondo, Y., Takeda, S., Nishioka, J., Sato, M., Saito, H., Suzuki, K., Furuya, K. (2013) Growth stimulation and inhibition of natural phytoplankton communities by model organic ligands in the western subarctic Pacific. *Journal of Oceanography* 69, 97-115 10.1007/s10872-012-0160-6
41. Yamada, N., Fukuda, H., Ogawa, H., Saito, H., Suzumura, M. (2012) Heterotrophic bacterial production and extracellular enzymatic activity in sinking particulate matter in the western North Pacific Ocean. *Frontiers in Microbiology* 3:379. doi:10.3389/fmicb.2012.00379 3 [\[PDF\]](#)
42. Suzuki, K., Kuwata, A., Yoshie, N., Shibata, A., Kawanobe, K., Saito, H. (2011) Population dynamics of phytoplankton, heterotrophic bacteria, and viruses during the spring bloom in the western subarctic Pacific. *Deep-Sea Research Part I*. 58, 575-589. [doi:10.1016/j.dsr.2011.03.003](https://doi.org/10.1016/j.dsr.2011.03.003)
43. Nishioka, J., Ono, T., Saito, H., Sakaoka, K., Yoshimura, T. (2011) Oceanic iron supply mechanisms which support the spring diatom bloom in the Oyashio region, western subarctic Pacific. *Journal of Geophysical Research, Oceans*. 116, C02021 doi:10.1029/2010J C006321 [\[PDF\]](#)
44. Ito, S., Yoshie, N., Okunishi, T., Ono, T., Okazaki, Y., Kuwata, A., Hashioka, T., Rose, K. A., Megrey, B. A., Kishi, M. J., Nakamachi, M., Shimizu, Y., Kakehi, S., Saito, H., Takahashi, K., Tadokoro, K., Kusaka, A., Kasai, H. (2010) Application of an automatic approach to calibrate the NEMURO nutrient-phytoplankton-zooplankton food web model in the Oyashio region. *Progress in Oceanography* 87, 186-200. [doi:10.1016/j.pocean.2010.08.004](https://doi.org/10.1016/j.pocean.2010.08.004)

45. Isada, T., Hattori-Saito, A., Saito, H., Ikeda, T., Suzuki, K. (2010) Primary productivity and its bio-optical modeling in the Oyashio region, NW Pacific during the spring bloom 2007. *Deep-Sea Research II* 57, 1653-1664. [doi:10.1016/j.dsr2.2010.03.009](https://doi.org/10.1016/j.dsr2.2010.03.009)
46. Tatebe, H., Yasuda, I., Saito, H., Shimizu, Y. (2010) Horizontal transport of the calanoid copepod *Neocalanus* in the North Pacific: The influences of the current system and the life history. *Deep-Sea Research I* 57, 409-419. [doi:10.1016/j.dsr.2009.11.009](https://doi.org/10.1016/j.dsr.2009.11.009)
47. Yoshie, N., Suzuki, K., Kuwata, A., Nishioka, J., Saito, H. (2010) Temporal and spatial variations in photosynthetic physiology of diatoms during the spring bloom in the western subarctic Pacific. *Marine Ecology Progress Series* 399, 39-52. [doi:10.3354/meps08329](https://doi.org/10.3354/meps08329)
48. Nagao, I., Hashimoto, S., Suzuki, K., Toda, S., Narita, Y., Tsuda, A., Saito, H., Kudo, I., Kato, S., Kajii, Y., Uematsu, M. (2009) Responses of DMS in the seawater and atmosphere to iron enrichment in the subarctic western North Pacific (SEEDS-II). *Deep-Sea Research II* 56, 2899-2917 [\[doi:10.1016/j.dsr2.2009.07.001\]](https://doi.org/10.1016/j.dsr2.2009.07.001)
49. Saito, H., Tsuda, A., Nojiri, Y., Aramaki, T., Ogawa, H., Yoshimura, T., Imai, K., Kudo, I., Nishioka, J., Ono, T., Suzuki, K., Takeda, S. (2009) Biogeochemical cycling of N and Si during the mesoscale iron-enrichment experiment in the western subarctic Pacific (SEEDS-II). *Deep-Sea Research II*, 56 2852-2862 [\[doi: 10.1016/j.dsr2.2009.06.010\]](https://doi.org/10.1016/j.dsr2.2009.06.010)
50. Tsuda, A. Saito, H., Machida, R., Shimode, S. (2009) Meso- and microzooplankton responses to an in situ iron fertilization experiment (SEEDS II) in the northwest subarctic Pacific. *Deep-Sea Research II* 56, 2767-2778 [\[doi:10.1016/j.dsr2.2009.06.004\]](https://doi.org/10.1016/j.dsr2.2009.06.004)
51. Suzuki, K., Saito, H., Isda, T., Hattori-Saito, A., Kiyosawa, H., Nishioka, J., McKay, R. M. L., Kuwata, A., Tsuda, A. (2009) Community structure and photosynthetic physiology of phytoplankton in the northwest subarctic Pacific during an in situ iron fertilization experiment (SEEDS-II). *Deep-Sea Research II* 56, 2733-2744 [\[doi:10.1016/j.dsr2.2009.06.001\]](https://doi.org/10.1016/j.dsr2.2009.06.001)
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