CURRICULUM VITAE

名前:　　齊藤宏明
所属：　　東京大学大気海洋研究所国際・地域連携研究センター
　　大学院農学生命科学研究科水圏生物科学専攻
　　大学院新領域創成科学研究科先端生命科学専攻
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研究テーマ

私は、海洋生態系の動態と生物地球化学循環に果たす海洋生物の役割をプランクトンを中心に研究しています。研究テーマの一つは、珪藻、渦鞭毛虫、カイアシ類、魚類稚仔の生物学と生態学および食物網構造であり、特に物理擾乱や環境変動に対する応答、分子生物学的手法を用いた生物地理や生態系機能に関する研究を行っています。もう一つのテーマは海洋生物の生物地球化学循環に果たす役割です。大規模な、または微小スケールの物理過程により供給された生元素が、生物によってどのように取り込まれ、また粒子化され、化学形態を変化させながら循環するかについて研究しています。

海洋生態系の変動機構を把握し、その将来を予測するためには、海洋物理学、生物地球化学、生物海洋学、水産科学等様々な学術分野で得られる知見の統合が必須です。このような学術分野統合研究を実現するため、国内外において大規模プロジェクトの立案と推進に携わっています。また、我々の社会の基盤である海洋生態系サービスの持続的利用のための道筋を示し、国連海洋科学の 10 年の目標や SDG s に貢献するため、国際プロジェクト IMBeR(海洋生物研統合研究)、政府間機関の PICES（北太平洋海洋科学機関）、国連の UNESCO/IOC(政府間海洋学委員会)等において、世界の科学者と連携してこれらの研究活動を推進しています。

学歴

1982 年 3 月　　福島県立福島高校卒業

1986 年 3 月　　東北大学農学部卒業
1987 年 3 月　　東北大学大学院農学研究科中退

学位

1986 年 3 月　　農学士、東北大学農学部
1996 年 2 月　　博士（農学）、東北大学

受賞歴

1998 年 4 月　　日本海洋学会岡田賞
1999 年 9 月　　水産海洋学会論文賞（共著者）
2003 年 3 月　　日本プランクトン学会論文賞（共著者）
2007 年 3 月　　日本海洋学会日高論文賞（共著者）
2009 年 4 月　　日本海洋学会日高論文賞（共著者）
2019 年 10 月　 Wooster Award, North Pacific Marine Science Organization（北太平洋科学機関）

職歴

2022-　　東京大学　大気海洋研究所　国際・地域連携研究センター　教授（組織改編による）
2019 -　　東京大学大気海洋研究所所長補佐
2016 - 2022　東京大学　大気海洋研究所　国際連携研究センター　教授
2014 - 2016　東京大学　大気海洋研究所　浮遊生物分野　准教授
2011 - 2014　独立行政法人水産総合研究センター・東北区水産研究所資源海洋部・生態系動態グループ長
2001 - 2011　独立行政法人水産総合研究センター・東北区水産研究所混合域海洋環境部・生物環境研究室長
1998 - 2001　北海道区水産研究所亜寒帯海洋環境部主任研究官
1998 - 1999　デンマーク水産研究所客員研究員
1997 - 1998　北海道区水産研究所海洋環境部主任研究官
1990 - 1997　北海道区水産研究所海洋環境部研究員
1987 - 1990　北海道区水産研究所資源部研究員

その他

2010 - 2011　長崎大学大学院非常勤講師
2007 - 2008　東京大学客員准教授（海洋研究所付属海洋科学国際共同研究センター）

2004　　国立大学法人静岡大学非常勤講師（理学部）
1994 - 2001　北海道大学低温研究所付属流氷研究施設共同研究員
1992 - 1998　国立極地研究所共同研究員

参加学会

日本海洋学会
水産海洋学会
日本プランクトン学会
日本地球惑星科学連合
先進陸水海洋学会
アメリカ地球物理学連合

学会活動等

2023-2029　第26期日本学術会議連携会員
2023-　　日本海洋学会幹事
2018-2023　第24期、25期日本学術会議連携会員（特任）
2018-2023　日本学術会議IMBeR小委員会委員長
2018-2020　日本学術会議IIOE-2小委員会委員
2015-2020　日本学術会議SIMSEA小委員会委員
2015-　　水産海洋学会評議員
2015- 2019　日本海洋学会幹事
2013-　　日本海洋学会評議員
2012-2014　日本海洋学会将来構想委員会委員
2011-2014　日本海洋学会沿岸事業部会委員
2011-2013, 2014-2017, 2019-2021 日本海洋学会論文賞受賞候補者選考委員会委員
2009-2017　日本学術会議IMBER小委員会委員
2007-2013　日本水産海洋学会国際誌委員会委員
2007-2008　第20期日本学術会議連携会員（特任、環境学委員会・地球惑星科学委員会合同IGBP・WCRP合同分科会）
2004-2008　日本学術会議IMBER小委員会委員長
2003-2005　日本学術会議地球環境研究連絡委員会委員、IGBP専門委員会委員

学術雑誌編集活動

2023-　　Editor-in-chief, Journal of Oceanography (Springer-Nature)
2022-2023　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)
2020-2022	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) ISBN-13: 978-1119428343
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	Editor, Journal of Oceanography
2009	Guest Editors. Deep-Sea Research Part II. SEEDS II: The Second Subarctic Pacific Iron Experiment for Ecosystem Dynamics Study.
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.

国際活動

2023-	Advisory Board, UN Ocean Decade, IOC/UNESCO
2023-2024	International Steering Committee (ISC) of the 2nd UN Ocean Decade Regional Conference & 11th WESTPAC International Marine Science Conference, UNESCO/IOC.
2022-	Member, Advisory Panel on United Nations Decade of Ocean Science, PICES-ICES
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
2020-2021	Member, Study Group of ICES–PICES Ocean Decade

2020-2024　Project Coordinator (PI), JSPS Core-to-core CREPSUM program
2019-2021　Scientific Advisory Committee of the Fifth Xiamen Symposium on Marine Environmental Sciences
2019　Convenor, International Workshop on the Emergent Issues of Marine Ecosystems in the Southeast Asia: For Sustainable Use of Marine Ecosystem Services　(Sep 5-7, 2019, Kashiwa, Japan)
2017-2019　Project Coordinator (PI), JSPS Core-to-core RENSEA program
2017-　Member, NPOCE SSC, CLIVAR Pacific Panel
2016-2019　Chairman, PICES Science Board
2015-2016　Cochairman, PICES FUTURE SSC
2013-2016　Vice Chairman, PICES Science Board
2013-2014　Member, NPAFC-PICES Study Group on Scientific Cooperation in the North Pacific Ocean
2010-2012　Member, ICES/PICES Joint Study Group on "Developing a Framework for Scientific Cooperation in Northern Hemisphere Marine Science"
2009-2019　PICES Science Board
2009-2014　Chair of FUTURE Advisory Panel on Climate, Oceanographic Variability and Ecosystems, PICES
2009-2015　Member, PICES BIO Committee
2008-2010　Member, Working Group 22 (Iron supply and its impact on biogeochemistry and ecosystems in the North Pacific Ocean), PICES
2008-2009　Cochairman, Future Implementation Plan Writing Team, PICES
2007-2008　Member, FISP Writing Team, PICES
2005-2009　Member, Study Group on Future Integrative Scientific Programs, PICES
2004 -2008　Member, IFEP Advisory Panel, PICES
2004-2008　Member, IGBP/SCOR IMBER SSC
2002 -2004　Member, IGBP/SCOR Ocean Biogeochemistry and Ecosystems Transition Team
2001-2005　Member, PICES Model Task Team

国際学会・会議での招待講演、議長等

2023年10月　Invited talk at PICES Annual Meeting, Topic Workshop on Changing social-ecological-environmental system of the North East Asian

Marginal Seas: New challenges for integrative marine science. “Marine ecosystems in Southeast Asia: Status, emerging issues and scientific contribution for the sustainable use”, Seattle, USA

2023年7月　Keynote talk at the 6th World Conference on Marine Biodiversity. “Dinoflagellates in the Kuroshio Region: control factors on the diversity, biogeography and niche of each species”, Penang, Malaysia

2023年4月　Invited talk at ASI Blue carbon an the role of coastal sea in carbon sequestration. “The biological pump and potential role of C sequestration”, Hong Kong

2023年3月　Introductory Keynote “Marine ecosystem studies in the southeast ASIA: Collaborative scientific activities for sustainable use of ecosystem services”, JSPS Core-to-core CREPSUM Joint Seminar, AORI, UTokyo, Kashiwa, Japan (8 March 2023).

2022年12月 Special lecture, “Interdisciplinary study of the Kuroshio: Studying the ocean system dynamics from small scale physical processes and tiny organisms”, Universiti Sains Malaysia, Penang, Malaysia. (13 Dec 2022).

2021年11月 Moderator, IMBeR West Pacific Symposium 2021 “Changing West Pacific Ocean: Science and Sustainability” (22-25 Nov 2021)

2020年3月　Organizer of International Symposium “Fukushima Dai-ichi and the Ocean: 10 years of study and insight” （Tokyo and Woods Hole, on line)

2021年1月　Scientific Advisory Committee of the Fifth Xiamen Symposium on Marine Environmental Sciences (Xiamen, on site and on line)

2020年11月Keynote talk: talk “Sustainable use of marine ecosystem services based on scientific understanding of marine physical, chemical and biological dynamics”. International Conference on the Ocean and Earth Sciences 2020, Jakarta (on line) (Nov 18, 2020)

2019年9月　Convenor, International Workshop on Emergent Issues of Marine Ecosystems in the Southeast Asia: For Sustainable Use of Marine Ecosystem Services, Kashiwa, Japan, Sep. 5-7, 2019.

2019年9月　Introductory Keynote: Developing international science network for sustainable use of marine ecosystem services in the Southeast Asia. In: International Workshop on Emergent Issues of Marine Ecosystems in the Southeast Asia: For Sustainable Use of Marine Ecosystem

Services, Kashiwa, Japan, Sep. 5-7, 2019.

2019年8月　Invited talk:　Hiroaki Saito, Characteristics of the microbial food web the Indian Ocean. In: Workshop Bio-physical oceanic variability in the Indian Ocean variability and its impact on ecosystem in the maritime continent. Palembang, 5 Aug., 2019

2019年7月　Co-convenor on Working Group V: A Sustainably harvested and productive ocean. In: Regional Planning Workshop for the North Pacific and Western Pacific Marginal Seas. Tokyo, Japan, 31 July-Aug 2, 2019

2018年9月　日中韓IMBeRシンポジウム　Keynote speech　The history of Kuroshio studies, the progress and emerging issues.

2012年11月 Japan-Taiwan Cooperated Research Network Programme: Synthesis of observation, experiment, theory and analysis on the forecasting ecosystem responses to the climate change. Invited talk. 26 Nov 2012, Sapporo, Japan.

2012年10月 PICES 2012 Annual Meeting. Invited talk at the Science Board Symposium on Effects of natural and anthropogenic stressors in the North Pacific ecosystems: Scientific challenges and possible solutions. “Marine ecosystem responses to sporadic perturbation: their processes, social impact and possible solutions” 15 October, 2012, Hiroshima, Japan.

2012年5月　Convenor, The 2nd International Symposium on the Effects of Climate Change on the World Oceans, 15-19 May 2012, Yeosu, Korea.

2012年3月　The 5th East Asian Federation of Ecological Societies International Congress. Invited talk. “The mechanism of marine ecosystem regime shift in the Kuroshio Extension region: Wind off Hawaii and sardine fishery in Japan”, 17-21 March 2012, Otsu.

2011年11月 The 5th China-Japan-Korea IMBER Symposium Training Course. Special lecture: “A multidisciplinary ocean science program SUPRFISH (Study on Prediction and　Application of Fish Species Alternation): Implementation strategy and results.” Shanghai, PRC.

2009年8月　Asia Oceania Geosciences Society, Distinguished Lecture at the 6th Annual Meeting for AOGS 2009 “A case study of iron enrichment to HNLC subarctic North Pacific”, Singapore, Singapore.”

2008 年11月　IMBER IMBIZO, Keynote talk at the IMBER-IMBIZO “Integrating biogeochemistry and ecosystems in a changing ocean” Miami, USA.

2008 年11月　IMBER IMBIZO, Scientific organizing committee members and the co-chair of the Mesopelagic Workshop. Miami, USA.

2008年10月　PICES 17th Annual Meeting, co-chair of the BIO Topic Session on “End-to-end food webs: Impacts of a changing ocean”. Dalian, PRC.

2008年10月　PICES 17th Annual Meeting. Invited talk for the Science Board Symposium, Dalian, PRC.

2008年5月　Fourth IGBP Congress. Invited talk for the working group session “End-to-end food webs in marine ecosystems”. Cape Town, South Africa.

2006年10月　PICES 15th Annual Meeting, co-chair of the topic session “Advances in epi- and mesopelagic ecosystem research”. Yokohama, Japan.

2006年10月 PICES 15th Annual Meeting, co-convenor of the BIO committee and IMBER cosponsored session “Interactions between Biogeochemical Cycles and Marine Food Webs in the North Pacific Ocean”. Yokohama, Japan.

2006年5月　GLOBEC workshop "Mathematical Modelling of Zooplankton Dynamics". Marseille, France.

2006年2月　The 13th Ocean Sciences Meeting, co-convener of the topic session “Sinking Particle Fluxes in the Twilight Zone”. Honolulu, USA.

2004年2月　6th IOC　WESTPAC Scientific Symposium, co-chair of the Session II: “Upper ocean and lower atmosphere interaction”. Hangzhou, China.

2002年10月 Invited speaker. GLOBEC Open Science Meeting. Plenary session “Linking zooplankton with fishery dynamics” Quingdao, China.

委員等活動

2021年-　　国立研究開発法人海洋研究開発機構研究航海検討委員会アドバイザー

2020年11月 - 2024年3月　日本ユネスコ国内委員会科学小委員会調査委員（文部科学省）

2020年-　　国立研究開発法人農業・食品産業技術総合研究機構「イノベーション創出強化研究推進事業」評議員

2018年4月 - 2020年11月　日本ユネスコ国内委員会自然科学小委員会調査委員（文部科学省）

2018年4月 - 国立極地研究所運営会議南極観測審議委員会生物圏専門部会委員（国立極地研究所）

2017年3月 -　　IOC協力推進委員会WESTPAC国内専門部会委員（国立研究開発法人海洋研究開発機構）

2016年8月~2017年3月　平成28年度環境研究総合推進費課題検討会検討委員（公立研究開発法人国立環境研究所理事長）

2016年8月-2018年3月　国立研究開発法人海洋研究開発機構　海洋研究課題審査部会部会員　（海洋研究開発機構理事長）

2016年8月-2017年3月　総合海洋政策本部参与会議　総合的な沿岸域の環境管理の在り方PT構成員　（内閣官房総合海洋政策本部事務局長）

2016年4月-　マイクロプラスティックのモニタリング手法の標準化及び調和に向けた検討業務国際専門家会合委員（一社国際環境研究協会）

2010年10月－2014年3月　東京大学大気海洋研究所共同研究運営委員会学際連携研究部会委員

2006年―2016年 農林水産省競争的資金書面審査専門評価委員

2005年-2010年　文部科学省地球観測システム構築プラン　地球温暖化・炭素循環観測研究プロジェクト「海洋二酸化炭素センサー開発と観測基盤構築」研究運営員会外部委員

Project

2020-2024「持続的な東南アジア海洋生態系利用のための研究教育プロジェクト」CREPSUM (Collaborative Research and Education Project in Southeast Asia for Sustainable Use of Marine Ecosystems)、日本学術振興会研究拠点形成事業（B.アジア・アフリカ学術基盤形成型）、研究代表者 https://jspscrepsum.wixsite.com/mysite

2019-2020文部科学省政府開発援助ユネスコ活動費補助金「東南アジア海洋生態系サービスの持続的な利用を目指した研究活動計画の策定」事業　事業責任者 https://www.ws-seasdg14.com/

2017-2019東南アジア沿岸生態系の研究教育ネットワーク　（RENSEA）研究代表者（プロジェクトコーディネーター）、日本学術振興会 Core-to-core program http://mits10.aori.u-tokyo.ac.jp/lirc/rensea/link.html

2012-2017新海洋像-その機能と持続的生産（NEOPS）研究代表者（A01 海洋生元素地理の高精度観測からの新海洋区系）科研費新学術領域研究（文部科学省）http://ocean.fs.a.u-tokyo.ac.jp/

2011-2020我が国の魚類生産を支える黒潮生態系の変動機構の解明（SKED）研究代表者（2011-14）、メンバー（2014-2020）文部科学省国家基幹研究開発推進事業 http://tnfri.fra.affrc.go.jp/kaiyo/sked/english/index.html

2007-2012環境変動に伴う海洋生物大発生の予測・制御技術の開発（POMAL）研究代

表者　サブプロジェクト「魚種交替の予測・利用技術の開発」
（SUPRFISH）農林水産省農林水産技術会議プロジェクト
http://tnfri.fra.affrc.go.jp/kaiyo/POMALweb/e-pomal.html

2007　BLOSSOM （Blooming Plankton Succession Study in the Oyashio Marine Ecosystem）、研究代表者

2005-2008 従属栄養性渦鞭毛虫による炭素輸送機構の解明、研究代表者
科研費基盤研究（B）kaken.nii.ac.jp/d/p/17310016/2005/3/ja.ja.html

2003　SPINUP （Study for Plankton and Iron Dynamics in the western Subarctic Pacific), 研究代表者

2002-2006 海洋生物資源の変動要因の解明と高精度変動予測技術の開発
研究代表者「深層生態系研究」（DEEP）農林水産省農林水産技術会議プロジェクト, 研究代表者
http://tnfri.fra.affrc.go.jp/personal/HP/index_j.html

2001-2004 北太平洋亜寒帯域鉄散布実験（SEEDS）
環境省環境研究総合推進費
http://www.seeds-exp.jp/intro.html#sum

1998-2000 PROVES (陸棚域における鉛直交換過程研究)
ヨーロッパ連合科学プロジェクト MUST III

1998-2002 太平洋沖合域における環境変動が漁業資源に及ぼす影響の解明(VENFISH)
農林水産省農林水産技術会議プロジェクト
http://tnfri.fra.affrc.go.jp/venfish/index-j.html

1997-2002 北太平洋亜寒帯循環と気候変動に関する国際共同研究（SAGE）
文部科学省科学技術振興調整費総合研究
http://tnfri.fra.affrc.go.jp/sage/comp/comp.html

1996-1998 紫外線増加が植物プランクトンと動物プランクトンの相互関係に与える影響の評価に関する研究、研究代表者、環境庁地球環境研究総合推進費「紫外線増加が生態系に及ぼす影響に関する研究」

1993-1995 紫外線増加が動物プランクトンに及ぼす影響の評価に関する研究　環境庁地球研究総合推進費「紫外線の増加が植物等に及ぼす影響に関する研究」

1993-1995 基礎生産測定センサの開発研究、研究代表者、科学技術庁研究開発局プロジェクト「世界海洋観測システム構築に資する革新的ブイシステムの基盤技術開発研究」

1991-1993 SARES(佐呂間－Resolute 研究プロジェクト）　日加共同研究（文部省・国際学術研究）

1990-　*A-line* モニタリング

水産総合研究センター交付金プロジェクトおよび総合科学技術会議温暖化イニシアチブプロジェクト
http://hnf.fra.affrc.go.jp/a-line/index.html

1990-1998 バイオコスモス計画（農林水産技術会議大型別枠研究“農林水産生態系秩序の解明と最適制御に関する総合研究”）

PUBLICATIONS

Refereed Publications:

1. Jiang, S., Hashihama, F., Liu, H., Yoshitake, K., Takami, H., Hamasaki, K., Ikhsani, I. Y., Obata, H., Saito, H. (2023) Variations in physiology and genomic function of Prochlorococcus across the eastern Indian Ocean. J. Geophys. Res. Oceans, 128: e2023JC019898. https://doi.org/10.1029/2023JC019898

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