

Curriculum Vitae (October 2018)

Atsuko Yamazaki

Assistant Professor

Department of Earth and Planetary Sciences,
Faculty of Science, Kyushu University
744 Motoooka, Nishi-ku, Fukuoka, 819-0395, JAPAN
Tel:+81-92-802-4246
Email: yamazakiatsuko@geo.kyushu-u.ac.jp

Education

Ph.D Natural history sciences, Hokkaido University (2013)
“Nitrogen isotopes in coral skeletons as a new proxy for nutrient dynamics”
M.A. Natural history sciences, Hokkaido University (2010)
“Nitrogen isotopic composition of reef coral skeletons: The possibility as new nutrient proxy in oligotrophic oceans”
B.A. Earth science, Hokkaido University (2008)
“Seasonal variation of $\delta^{15}\text{N}$ in coral skeletons”

Academic Experiences

2018-present: Assistant Professor, Faculty of Science, Kyushu University
2016-2018 : Assistant Professor, Faculty of Science, Hokkaido University
2016-2016: Postdoctoral Fellow, Faculty of Science, Hokkaido University
2013-2016: JSPS research fellow PD, Atmosphere and Ocean Research Institute, The University of Tokyo
2012-2014: Visiting researcher, GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel
2010-2013: JSPS research fellow DC1, Graduate School of Science, Hokkaido University
2008-2010: Teaching Assistant, School of Science, Hokkaido University

Fellowships

April 2013–March 2016: JSPS research fellow PD
April 2010–March 2013: JSPS research fellow DC1
April 2008–March 2010: Kuroshio biological research foundation research fellow

Awards

Young Scientist Award, The Geochemical Society of Japan, 2017
JpGU Outstanding Student Presentation Award, Japan Geoscience Union, 2011
Outstanding Presentation Award, Japanese Coral Reef Society, 2010

Grants

April 2017–March 2021: Grant-in-Aid for Young Scientists (A), Japan Society for the Promotion of Science (JSPS) “Variation in Marine nitrogen budgets during the last 200-year global warming”
April 2016–March 2017: The Sasakawa Scientific Research Grant, The Japan Science Society “Adaptation of reef corals to the depth”

April 2014–March 2016: Grant-in-Aid for Young Scientists (B), Japan Society for the Promotion of Science (JSPS) “The 100-year variation of nitrogen fixation rate in Caribbean modern/fossil corals”

April 2013–March 2016: Grant-in-Aid for JSPS Fellows, Japan Society for the Promotion of Science (JSPS) “The relationship between nitrogen cycle in surface ocean and climate changes recorded in Holocene reef corals”

April 2010–March 2013: Grant-in-Aid for JSPS Fellows, Japan Society for the Promotion of Science (JSPS) “The development of nitrogen isotope proxy in coral skeletons and the application for reconstruction of paleo-environments”

Affiliations

Japanese Coral Reef Society

The Geochemical Society of Japan

Japan Geoscience Union

American Geophysical Union

International Society for Reef Studies

Peer-reviewed Publications

Komagoe, T., T. Watanabe, K. Shirai, A. Yamazaki & M. Uematsu (2018). Geochemical and microstructural signals in giant clam *Tridacna maxima* recorded typhoon events at Okinotori Island, Japan. *Journal of Geophysical Research: Biogeosciences*, 123, 1460–1474. <https://doi.org/10.1029/2017JG004082>

Watanabe, T. K., T. Watanabe, A. Yamazaki, M. Pfeiffer, D. Garbe-Schönberg, and M. R. Claereboudt (2017) Past summer upwelling events in the Gulf of Oman derived from a coral geochemical record, *Scientific Reports*, 7, 4578, doi:10.1038/s41598-017-04865-5

Kajita, H., A. Yamazaki, T. K. Watanabe, C. C. Wu, C. C. Shen, and T. Watanabe (2017) Holocene sea surface temperature variations recorded in corals from Kikai Island, Japan, *Geochemical Journal*, 54(4), e9-e14, doi:10.2343/geochemj.2.0482

Yamazaki, A., T. Watanabe, U. Tsunogai, F. Iwase, and H. Yamano (2016), A 150-year variation of the Kuroshio transport inferred from coral nitrogen isotope signature, *Paleoceanography*, 31, doi:10.1002/2015PA002880.

Mitsuguchi, T., M. Hirota, Paleo Labo AMS Dating Group, A. Yamazaki, T. Watanabe, H. Yamano (2016), Post-bomb coral $\Delta^{14}\text{C}$ record from Iki Island, Japan: possible evidence of oceanographic conditions on the northern East China Sea shelf, *Geo-Marine Letters*, doi:10.1127/ejm/2016/0028-2521

Yamazaki, A., T. Watanabe, U. Tsunogai, H. Hasegawa, and H. Yamano (2015), The coral $\delta^{15}\text{N}$ record of terrestrial nitrate loading varies with river catchment land use, *Coral Reefs*, 34(1), 353-362. doi: 10.1007/s00338-014-1235-1

Watanabe, T., T. Kawamura, A. Yamazaki, M. Murayama, and H. Yamano (2014), A 106-year monthly coral record reveals that the East Asian summer monsoon modulates winter PDO variability, *Geophysical Research Letters*, doi: 10.1002/2014GL060037

Inoue, M., D. Ishikawa, T. Miyaji, A. Yamazaki, A. Suzuki, H. Yamano, H. Kawahata, T. Watanabe (2014) Evaluation of Mn and Fe in coral skeletons (Porites spp.) as proxies for sediment loading and reconstruction of 50 yrs of land use on Ishigaki Island, Japan, *Coral Reefs*, 1-11, doi:10.1007/s00338-014-1128-3.

Yamazaki, A., T. Watanabe, N. Takahata, Y. Sano, and U. Tsunogai (2013) Nitrogen isotopes in intra-crystal coralline aragonites, *Chemical Geology*, 351, 276–280, doi:10.1016/j.chemgeo.2013.05.024.

Yamazaki, A., T. Watanabe, and U. Tsunogai (2011) $\delta^{15}\text{N}$ in reef coral skeletons as a proxy of tropical nutrient dynamics, *Geophys. Res. Lett.*, 38, L19605, doi:10.1029/2011GL049053.

Yamazaki, A., T. Watanabe, N. Ogawa, N. Ohkouchi, K. Shirai, M. Toratani, and M. Uematsu (2011) Seasonal variations in the nitrogen isotope composition of Okinotori coral in the tropical Western Pacific: A new proxy for marine nitrate dynamics, *J. Geophys. Res.*, 116, G04005, doi:10.1029/2011JG001697.

Yamazaki, A., T. Watanabe, K. Sowa, S. Nakachi, H. Yamano, and F. Iwase (2009) Reconstructing palaeoenvironments of temperate regions based on high latitude corals at Tatsukushi Bay in Japan, *Journal of the Japanese Coral Reef Society*, 11, 91-107.

Presentations at International conferences

A. Yamazaki, J. Isasa, K. Nomura & T. Watanabe, Kuroshio meander recorded in coral oxygen isotopes, The EGU General Assembly 2018, Vienna, Austria, 11 April, 2018, Oral presentation

Yamazaki, A., Coral nitrogen isotopes as new tool for reconstruction of nutrient dynamics in tropical oceans, Tropical coral archives workshop, MARUM, University of Bremen, 28 September, 2017, Oral presentation, Invited

Yamazaki, A., S. Hetzinger, J. von Reumont, C. Manfrino, U. Tsunogai, T. Watanabe, Change in nitrogen fixation derived from Caribbean coral skeletons, Geobremen 2017, Bremen, Germany, September 27, 2017, Oral presentation

Yamazaki, A., 90-year variation of North Atlantic nitrogen fixation, KIKAI international symposium for coral reef sciences 2015, Kikai town, Japan August 24, 2015, Oral presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, F. Iwase, H. Yamano, Variation of the Kuroshio Transport Over the 20th Century, Asia Oceania Geosciences Society 2014, Sapporo, Japan, August, 2014, Oral presentation

Yamazaki, A., S. Hetzinger, J. von Reumont, C. Manfrino, U. Tsunogai, T. Watanabe, $\delta^{15}\text{N}$ of Caribbean coral skeletons: Implications for controlling factor of North Atlantic nitrogen fixation, JpGU International Symposium 2014, Yokohama, Japan, April 2014, Oral presentation

Yamazaki, A., S. Hetzinger, J. von Reumont, C. Manfrino, U. Tsunogai, T. Watanabe, $\delta^{15}\text{N}$ of Caribbean coral skeletons: Multi-decadal variation of North Atlantic nitrogen fixation, International Joint workshop on coral reef environmental earth sciences, March 25-30, 2014, Sapporo, Japan, Oral presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, F. Iwase, H. Yamano, A 150-year variation of Kuroshio transport detected by the nitrate $\delta^{15}\text{N}$ records in coral skeletons, Goldschmidt conference 2013, Florence, Italy, 28th August 2013, Oral presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, F. Iwase, H. Yamano, A 150-year coral record reveals intensification of oligotrophic Kuroshio transport to the temperate North Pacific, 3rd International Sclerochronology Conference, Bangor, Wales, UK, 19th May 2013, Oral presentation

Yamazaki, A., Nitrogen isotope of coral skeletons as a proxy for marine nitrate sources in coral reefs, 2nd IL-CREES symposium, Palau, July 16, 2012, Oral presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, Application of coral ^{15}N proxy: interannual variability of water mass in Tatsukushi Bay due to Kuroshio volume changes, JpGU International Symposium 2012, Makuhari, Japan, May 2012, Oral presentation

Yamazaki, A., Nitrogen isotope in coral skeletons: a new proxy for nitrogenous nutrients in oligotrophic ocean, 1st IL-CREES symposium, Sapporo, Japan April 16, 2012, Oral presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, Nitrogen isotope of coral skeletons: A new proxy for nitrogenous nutrients in oligotrophic oceans, 2nd International Geoscience symposium, Keelung, Taiwan, March 2012, Oral presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, F. Iwase, H. Yamano, Variation of Kuroshio transport during 1860-2007 AD inferred from coral nitrogen isotope signature, International Coral Reef Symposium, Hawaii, USA, June 20, 2016, Poster presentation

Yamazaki, A., T. Watanabe, F. Sinniger, Y. Sano, U. Tsunogai, S. Harii, Organic nitrogen and carbon isotopic composition of mesophotic Porites coral skeletons from Okinawa, Japan, Mesophotic The Second International Workshop on Mesophotic Coral Reef Ecosystems, Eilat, Israel, October 2014, Poster presentation

Yamazaki, A., S. Hetzinger, J. von Reumont, U. Tsunogai, T. Watanabe, $\delta^{15}\text{N}$ of Caribbean coral skeletons: Implications for controlling factor of North Atlantic nitrogen fixation, 2014 Ocean Sciences Meeting, Hawaii, USA, 26th February 2014, Poster presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, Nitrogen isotope of coral skeletons as a proxy for marine nitrate sources in coral reefs, 12th International Coral Reef Symposium, Cairns, Australia, 11 July 2012, Poster presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, Nitrogen isotope of coral skeletons: A new proxy for nitrogenous nutrients in oligotrophic oceans, AGU fall meeting 2011, San Francisco, December 2011, Poster presentation

Yamazaki, A., T. Watanabe, U. Tsunogai, Nitrogen isotope of coral skeletons: A new proxy for nitrogenous nutrients in subtropical and tropical ocean, JpGU International Symposium 2011, Makuhari, Japan, May 2011, Oral presentation, Student Outstanding Presentation Award (Biogeosciences)

Yamazaki, A., T. Watanabe, N. Ogawa, N. Ohkouchi, , K. Shirai, M. Toratani, and M. Uematsu, Seasonal variations in nitrogen isotopic composition from Okinotori coral in the tropical Western Pacific: A new proxy for marine nitrate dynamics, EGU General Assembly 2010, Vienna, Austria, May 2010, Poster presentation

Yamazaki, A., T. Watanabe, T. Kawashima, N. Ohkouchi, N. Ogawa, M. Uematsu, Seasonal variation of $\delta^{15}\text{N}$ in coral skeletons. 11th International Coral Reef Symposium, Fort Lauderdale, Florida, July 2008, Poster presentation