



Atsushi MATSUOKA, Dr. Sci.

Program: Environmental Science and Technology

Area: Earth Sciences

Undergraduate: Dept. of Geology

Professional Expertise

His professional expertise encompasses the paleoceanography of the paleo-Pacific and the Tethys, the geo-tectonic development of Asia, and the evolution of marine plankton, especially radiolarians. The Jurassic Period of the Mesozoic in the Earth History is the main time slice of his research fields. Science on “Form” is a unique aspect among his research approaches.

Research Fields of Interest

Paleoceanography

- Paleo-Pacific, Tethys

Geo-tectonic development of Asia

- Japan, China, Korea, Russia, Philippines, Iran

Evolution of marine organisms

- Radiolaria, Ammonite

Education

1986: Doctoral Science degree, Graduate School, Osaka City University

1983: Master Science degree, Graduate School, Osaka City University

1981: Bachelor Science degree, Graduated from Department of Geology, Osaka City University

Research Careers (Niigata University)

2002 - : Professor, Department of Geology, Faculty of Science

1994 - 2002: Associate Professor, Faculty of Science

1993 - 1994: Associate Professor, College of General Education

1987 - 1993: Lecturer, College of General Education

Professional Societies and Activities

1. International Subcommittee on Cretaceous Stratigraphy
 - Berriasian Working Group Member (2020 -)
2. International Subcommittee on Jurassic Stratigraphy
 - Voting Member (2009 -2020)
3. Society of Science on Form, Japan
 - President (2008 - 2012), Steering Committee Member (1995 -)
4. Geological Society of Japan
 - Councilor (2004 -2017)
5. Palaeontological Society of Japan
 - Councilor (2007 - 2019)
6. International Association of Radiolarists
 - President (2015 - 2017)

Editorial Board Member: Revue de micropaleontology, Paleontological Research, Forma

Awards

1. Prize for Outstanding Contributions from the Society for Science on Form, Japan, 2016
2. Academic Award from the Palaeontological Society of Japan, 1998
3. Young Investigator Award from the Geological Society of Japan, 1986

Major Publications

Papers

Living Radiolaria

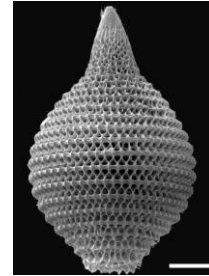
- [1] Matsuoka, A. "Late autumn living radiolarian fauna from sub-tropical surface waters in the East China Sea off Sesoko Island, Okinawa, southwest Japan." *News of Osaka Micropaleontologists, Special Volume, no. 14, 13-31, 2009.*
- [2] Sugiyama, K., Hori, R.S., Kusunoki, Y., Matsuoka, A. "Pseudopodial features and feeding behavior of living nassellarians *Eucyrtidium hexagonatum* Haeckel, *Pterocorys zancleus* (Müller) and *Dictyocodon prometheus* Haeckel." *Paleontological Research* 12, 209-222, 2008.
- [3] Matsuoka, A. "Living radiolarian feeding mechanisms: new light on past marine ecosystems." *Swiss Journal of Geoscience, 100, 273-279, 2007.*
- [4] Kouduka, M., Matsuoka, A., Nishigaki, K. "Acquisition of genome information from single-celled unculturable organisms (radiolaria) by exploiting genome profiling (GP)." *BMC Genomics, 7, 135, 2006.*
- [5] Yuasa, T., Takahashi, O., Dolven, J.K., Mayama, S., Matsuoka, A., Honda, D., Bjorklund, K.R. "Phylogenetic position of the small solitary phaeodarians (Radiolaria) based on 18S rDNA sequences by single cell PCR analysis." *Marine Micropaleontology, 59, 104-114, 2006.*



Mesozoic Radiolaria

- [6] Gorican, S., Carter, E.S., Guex, J., O'Dogherty, L., De Wever, P., Dumitrica, P., Hori, R.S., Matsuoka, A., Whalen, P.A. "Evolutionary patterns and palaeobiogeography of Pliensbachian and Toarcian (Early Jurassic) Radiolaria." *Palaeogeography, Palaeoclimatology, Palaeoecology, 386, 620-636, 2013.*
- [7] Matsuoka, A., Yoshino, T., Kishimoto, N., Ishida, N., Kurihara, T., Kimoto, K., Matsuura, S. "Exact number of pore frames and their configuration in the Mesozoic radiolarian *Pantanelium*: An application of X-ray micro-CT and layered manufacturing technology to micropaleontology." *Marine Micropaleontology, 88-89, 36-40, 2012.*

- [8] O'Dogherty, L., Carter, E., Dumitrica, P., Gorican, S., De Wever, P., Bandini, A., Baumgartner, P., Matsuoka, A. "Catalogue of Mesozoic radiolarian genera. Part2: Jurassic-Cretaceous." *geodiversitas, 31, 271-356, 2009.*



Geological application of radiolaria

- [9] Onoue, T., Nikaido, T., Zamoras, L. R., Matsuoka, A. "Preservation of larval bivalve shells in a radiolarian chert in the Late Triassic (Early Norian) interval of the Malampaya Sound Group, Calamian Island, western Philippines." *Marine Micropaleontology, 79, 58-65, 2011.*
- [10] Matsuoka, A., Yang, Q., Takei, M. "Latest Jurassic-earliest Cretaceous radiolarian fauna from the Xialu Chert in the Yarlung Zangbo Suture Zone, Southern Tibet: Comparison with coeval western Pacific radiolarian faunas and paleoceanographic implications." *The Island Arc, 14, 338-345, 2005.*
- [11] Zamoras, L.R., Matsuoka, A. "Accretion and postaccretion tectonics of the Calamian Islands, North Palawan block, Philippines." *The Island Arc, 13, 506-519, 2004.*
- [12] Yang, Q., Matsuoka, A., Wang, Y. "Progress in radiolarian micropaleontological studies of southern Tibet." *Acta Micropalaeontologica Sinica, 19(2), 105-111, 2002.*
- [13] Matsuoka, A., Yang, Q., Kobayashi, K., Takei, M., Nagahashi, T., Zeng, Q., Wang, Y. "Jurassic-Cretaceous radiolarian biostratigraphy and sedimentary environments of the Cenozoic Tethys: records from the Xialu chert in the Yarlung Zangbo Suture Zone, southern Tibet." *Journal of Asian Earth Sciences, 20, 277-287, 2002.*
- [14] Matsuoka, A., Kobayashi, K., Nagahashi, T., Yang, Q., Wang, Y., Zeng, Q. "Early Middle Jurassic (Aalenian) radiolarian fauna from the Xialu chert in the Yarlung Zangbo Suture Zone, southern Tibet." *Metcalfe, I., Smith, J M B., Morwood, M., Davidson, I. (eds.), Faunal and floral migrations and evolution in SE Asia-Australasia, A.A. Balkema (Swets & Zeitlinger Publishers) b.v., Lisse., 105-110, 2001.*
- [15] Matsuoka, A., Yang, Q. "A direct correlation between North American and Japan-Pacific radiolarian zonal schemes for the Upper Jurassic." *In R.L. Hall and P.L. Smith, eds. Advances in Jurassic Research 2000, GeoResearch Forum, 6, 119-128, 2000*