# 九州大学理学部附属天草臨海実験所



# Amakusa Marine Biological Laboratory Kyushu University



Originally established as a centre of research into marine biology in temperate-subtropical Japan, the Amakusa Marine Biological Laboratory has now expanded its sphere of research interests to include a wide area of ecological and biodiversity studies on both aquatic and terrestrial systems. It undertakes research and education with strong international commitment and global perspectives.



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### About the AMBL

The Amakusa Marine Biological Laboratory (AMBL) is situated on the Amakusa-Shimoshima Island (lat 32°32'N, long 130°02'E) which constitutes part of the Unzen-Amakusa National Park in western Kyushu (southernmost of the four main islands of Japan), well known for its scenic beauty with rich temperate and subtropical floras and faunas.

The Tomioka Peninsula where the AMBL is located is in the northwestern corner of the Amakusa-Shimoshima Island and has unique sand spits topography (Magarizaki). The west and the east side of the peninsula face to the Amakusa-nada, which is part of the East China Sea, and Tomioka Bay, which is located at the entrance of the Ariake Sea (the largest estuarine habitat in Japan), respectively. From Tomioka we can see the Unzen volcano to the northeast.

There are different types of coastal environments around the Tomioka peninsula: rocky shores, sandy beaches, stony beaches, sand flats, mud flats, etc. The region has a tidal amplitude of about 3.7 m at spring tide and relatively gentle shore lines. Therefore, wide intertidal areas are available for research activities. In subtidal areas, there are also various types of habitat, including seaweed and seagrass beds and coral communities. Good coverage of corals and its associated communities can be observed in Ushibuka, southern part of Amakusa. Near the AMBL, especially around the Tsuji Island, dolphins (*Tursiops aduncus*) are observed all through a year.



#### Postgraduates

Kyushu Univ Ito Campus Amakusa-nada Amakusa-shimoshima Is.



The Amakusa Marine Biological Laboratory accepts students from any country in its MSc and PhD courses. All admitted students will be officially registered as postgraduate students of the Kyushu University, one of the oldest and prestigious universities in Japan. Both MSc and PhD courses are research-orientated and students are required to submit a thesis based on their original research; MSc students are also required to take a number of classroom lectures. Generally, foreign students are admitted in the first instance as a 'non-degree course' research student ('Kenkyu-sei' in Japanese) and subsequently required to take an entrance exam to enrol formally into a MSc or a PhD course. Students intending to follow a PhD course should at least hold a MSc degree and be able to demonstrate their capacity and aptitude for carrying out independent research. Enquiries must be accompanied by a full and detailed CV with a statement of research experience and intentions. As places are limited, only those with demonstrated ability and real interest in research can be admitted. It is also the responsibility of the prospective student to arrange an adequate funding for a postgraduate study; we cannot respond to enquiries about scholarships. If you wish to seek a Japanese Government scholarship ('Monbusho' or MEXT scholarship), enquiries must be made to the Japanese consulate or embassy in the country of your nationality. Students are reminded that it is generally not possible to give a support for their application for a Japanese Government scholarship unless there is clear evidence of excellence (e.g. first-authored papers in journals).

Prospective students should be able to demonstrate a good command of English, as it is the language of communication in this Laboratory: all seminars and scientific presentations are done in English only and theses and papers must be written in English. Students from most Asian and South American countries in particular are strongly recommended to have a certificate of English language issued by recognised UK/USA/international organizations. Students with an insufficient knowledge of English cannot be admitted into a postgraduate study at AMBL.

### Field courses

The Amakusa Marine Biological Laboratory offers field courses in marine biology and ecology to people at different levels of knowledge and experience. Several undergraduate and postgraduate courses lasting 6–9 days are organised each year. In each course up to 30 students are accommodated (the capacity of our Students Laboratory and Dormitory, see Facilities). Summer field courses are particularly popular and many students come to the Lab with a little bit of holiday anticipation. However, they soon find out that a fully-academic, intensive field course is on offer. Course contents vary each year, as we keep developing new course materials. Closely guided by members of the Lab, students are required to make ecological and behavioural observations and experiments, analyse data, write reports and make presentations (all in English) at the end of the course. Accordingly, time schedules in these courses are very tight and the majority of students are seen to work until early hours in the morning (or even all through night, though we do not encourage that) towards the end of a course.

Foreign students at any level of study are welcome in these courses and we make every effort to accommodate them. As the courses are in English, they can make valuable contributions to a successful completion of project works (students generally work in groups). When the results are presented at the end of a course, our staff and postgraduate students join to fire questions after questions in English and course participants are guaranteed with intellectual satisfaction (and, most understandably, exhaustion !).







#### Research

The issues of biodiversity is central to biological sciences. The Amakusa Marine Biological Laboratory is devoted to the study of ecological communities on local, regional and global scales. Building on the Laboratory's long-established strength in shallow water marine ecological research in Japan, we are now dealing with not only marine but also freshwater and terrestrial systems, as there is much to be gained from comparative approaches of community ecology.

As a major centre of research in community ecology in Japan, the AMBL aims at elucidating how a multitude of species can coexist and maintain ecological assemblages under different environmental conditions and evolutionary backgrounds.

Members of the AMBL conduct research not only in Amakusa but in other regions of Japan including Okinawa islands and northern Japan. Research is also undertaken in South East Asia, South Pacific, Indian Ocean and South America. We consider it important to expand our ecological research to less well-researched areas of the world, in particular the tropics.

In this Laboratory all scientific seminars and lectures are conducted in English and students are required to present talks and write reports/papers in English. Foreign visitors often find the congenial and open atmosphere of the Lab very refreshing and we have students from different parts of the world.



## Main building

#### Staff

Director, Haruki TATSUTA

Associate Professor, **Seiji ARAKAKI** (arakaki@ambl-ku.jp) Assistant Professor, **NiNiWin** (niniw@ambl-ku.jp) Technician/Administrator, **Kentaro TANAKA** (amakusa@ambl-ku.jp)

#### Facilities

- Main building: Laboratories, Seawater aquaria room, Students laboratory (capacity for 40), Seminar room, Library, Specimens room, Director's office, Administrative office, etc. Storage buildings, a pump house, a garage and a tank house in the adjacent land. Visitors can have an access to a desk and laboratory space with prior arrangement (please contact us).
- Visitor's Lodge: Situated on the hillside just above the main laboratory building, used mainly for students participating in field courses. Four western-type dormitories and two Japanese-type rooms, canteen, bath/toilets; caters for a maximum of 30.
- Research vessels: 'SERIOLA' 14 tons (capacity for 37 people), FRP hull, diesel engine (360 ps x 2), sonar, GPS, radar; 'ISOSHIGI' 2.2 tons (8 people), FRP hull, diesel engine (127 ps), 'MARLIN' 0.9 tons (8 people), FRP hull, outboat engine (50 ps)

Research vehicle: Toyota Estima

- **Library**: Major international journals in aquatic and ecological sciences, publications and reports from Japanese and foreign organizations (ca.500), plus ca.1500 Japanese and foreign books on related subjects.
- **Specimens Room**: The Laboratory houses numerous biological specimens (mainly of marine organisms, ca.9000 items) from southern Japan.





### How to arrange visits

Enquiries should first be made to academic staffs via e-mail.





### How to reach us

The AMBL offers you an unbeatable diversity of travelling opportunities. Because it is located in the geographically complex, western-most corner of mainland Kyushu, you can choose from virtually any combination of modern means of transport including ferry, bus, airplane, train and a private car from any major town in Japan. Accordingly, the time from Fukuoka will range from less than 1 hour by airplane to nearly 6 hours on a coach (express bus service). The best is to contact us for advice, as the availability and convenience of these services vary greatly with seasons.



# Amakusa Marine Biological Laoboratory Kyushu University

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