



Training Workshop on Marine Radioactivity

Xiamen University Malaysia, Selangor Darul Ehsan, Malaysia

August 19-23, 2024



近海洋环境科学国家重点实验室 (厦门大学)
State Key Laboratory of Marine Environmental Science
(Xiamen University)



Center for
Marine and
Environmental
Radioactivity



XIAMEN UNIVERSITY MALAYSIA
廈門大學馬來西亞分校

A four day training workshop is being offered on marine radioactivity. The purpose of the workshop is to train University students, early career scientists, and other professionals who are interested in, or will pursue research and/or management positions that require knowledge of radioactivity and its application in ocean sciences. The workshop will include overview lectures and guest lectures covering the following subjects: Basics of radioactivity; natural, anthropogenic, and cosmogenic radioisotopes in the marine environment; radioecology, tracer and dating techniques; and other applications of radionuclides as ocean tracers. The training workshop will also provide hands-on activities and a field trip where samples are collected along the coast and subsequently processed and measured for radionuclides by workshop participants.

Organizers:

- ◎ State Key Laboratory of Marine Environmental Science, Xiamen University, China
- ◎ Center for Marine and Environmental Radioactivity, Woods Hole Oceanographic Institution, USA
- ◎ Xiamen University Malaysia, Malaysia

Local Organizer:

China-ASEAN College of Marine Sciences, Xiamen University Malaysia, Malaysia

Language: English

Venue: Xiamen University Malaysia, Selangor Darul Ehsan, Malaysia

Date: August 19-23, 2024

Confirmed Lecturers:



Dr. Núria Casacuberta Arola
ETH Zürich, Switzerland



Dr. Claudia Benitez-Nelson
University of South Carolina, USA



Dr. Ken O. Buesseler
Woods Hole Oceanographic Institution, USA



Dr. Sabine Charmasson
IRSN, Institut de Radioprotection et de Sécurité Nucléaire, France



Dr. Minhan Dai
Xiamen University, China



Dr. Pere Masqué
Edith Cowan University (Australia)
Universitat Autònoma de Barcelona (Catalonia, Spain)



Dr. Willard S. Moore
University of South Carolina, USA



Dr. Guizhi Wang
Xiamen University, China

Tentative Agenda

Day 0, August 19 (Monday)

- Arrival in Malaysia, onsite registration and icebreaker

Day 1, August 20 (Tuesday)

- Welcome and schedule of events
- Overview talk 1: Basics of radioactivity
- Overview talk 2: Introduction to marine radioactivity
- Overview talk 3: Radio isotopes as tracers in the sea
- Overview talk 4: Impact of radionuclides on marine ecosystem

Day 2, August 21 (Wednesday) (Field Day)

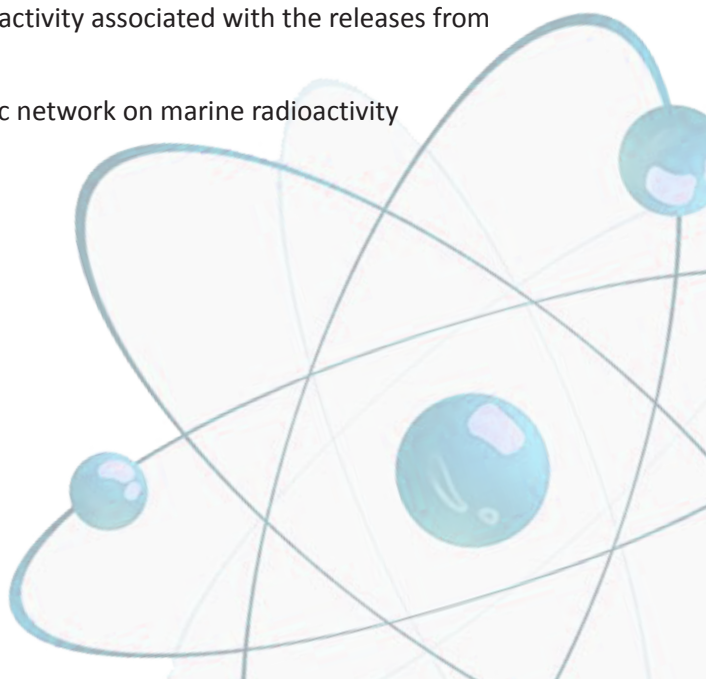
- Specific lecture in marine radioactivity I: Applications to biological pump studies
- Specific lecture in marine radioactivity II: Long-lived radionuclides for the study of water masses in the North Atlantic Ocean and Arctic Ocean
- Specific lecture in marine radioactivity III: Applications to sediment dating
- Specific lecture in marine radioactivity I: Applications to submarine groundwater discharge studies
- Specific lecture in marine radioactivity VI: Methods in marine radioactivity and instrumentation
- Field sampling, initial field processing and samples processing in the lab

Day 3, August 22 (Thursday) (Lab Day)

- Lab practical session in 3 rotating groups, including principle and operation of the instrument and data processing.

Day 4, August 23 (Friday)

- Specific lecture in marine radioactivity II: Assessment of radioactivity associated with the releases from Fukushima
- Roundtable discussion: Strategies for establishing an academic network on marine radioactivity
- Closing



Organizing Committee:

Dr. Ken Buesseler, Woods Hole Oceanographic Institution, USA

Dr. Minhan Dai, Xiamen University, China

Dr. Claudia Benitez-Nelson, University of South Carolina, USA

Dr. Weifang Chen, Xiamen University, China

Dr. Pang Swee Yun, Xiamen University Malaysia, Malaysia

How to apply?

Participants:

The course is open to 30 university students, marine scientists, and other professionals interested in, or will pursue research and/or management positions that require knowledge of radioactivity and its use in ocean sciences.

Please complete the online application form by May 17, 2024. We anticipate more applicants than can participate, and a selection of participants and confirmation will be made based upon the submitted application materials and all applicants notified within approximately one month after this deadline.

Fees:

The registration fee is \$300 US, which includes meals, accommodations at Xiamen University Malaysia campus, and workshop materials. Students may apply for financial support to cover this fee (see below) .

Financial Support:

The workshop has a limited amount of funds from CMER and MEL that may partially or fully support a limited number of eligible participants from developing countries. For those who want to apply for financial support, please complete the funding application information.

Timeline:

March 15, 2024	First Announcement and online registration open
May 17, 2024	Registration closed
June 15, 2024	Notification of successful applications
August 19, 2024	Arrival
August 20-23, 2024	Training workshop begins

Contact Us:

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Website: https://mel2.xmu.edu.cn/conference/marrad_2024