



# MARE research framework

# Organisation profile



## The name of the partner organisation:

Institute of Oceanography and Environment, Universiti Malaysia Terengganu

### Contact person and e-mail address:

Assoc. Prof. Dr. Mohd Fadzil Mohd Akhir, mfadzil@umt.edu.my

#### Departments or other academic units at your organisation concerned with MARE-related topics:

1 Faculty of Science and Marine Environment

## Current and past projects implemented at your institution and concerned with MARE topics:

Add as many lines as necessary

| Project title  | Funding agency                  | Project topics<br>concerned (2-3<br>keywords)              | Type of the project<br>(research, education,<br>mobility, capacity for<br>the organization or<br>external stakeholders<br>building, promotion<br>etc) | Possible links to<br>MARE (joint<br>activities,<br>agreements,) |
|--|---------------------------------|--|---|---|
| Interaction of ocean dynamics with the climate system of past, present and future using ocean observation integrated data and numerical modeling | Ministry of<br>Higher Education | Marine<br>Science,<br>Climate<br>Change, Ocean<br>Dynamics | Reserach  | Education and mobility activities                               |





| Development of   | Ministry of    | Marine        | Research and Mobility |  |
|------------------|----------------|---------------|-----------------------|--|
| Integrated       | Science,       | Science,      |                       |  |
| System of Ocean  | Technology and | Climate       |                       |  |
| Forecasting and  | Innovation,    | Change, Ocean |                       |  |
| Observation      | MOSTI          | Dynamics,     |                       |  |
| Network in       |                | Numerical     |                       |  |
| Malaysia Waters  |                | Modeling      |                       |  |
| of Southern      |                |               |                       |  |
| South China Sea. |                |               |                       |  |
| International    |                |               |                       |  |
| Collaboration    |                |               |                       |  |
| Fund-MOSTI       |                |               |                       |  |
|                  |                |               |                       |  |

#### **PHD Programs available**

-none-

#### Topics of PhD thesis (or other graduate works if you do not have a PhD program)

- 1. The Dynamics of South China Sea Western Boundary Current and its upwelling variability
- 2. The Impact of climate change towards the ocean dynamics and upwelling processes in southern South China Sea

# Key personalities at your organisation publishing on MARE -related topics:

| Name                      | Key words (2-3)<br>describing research<br>interests             | Personal webpage, if applicable  |
|---------------------------|---|--|
| Mohd Fadzil<br>Mohd Akhir | Ocean Dynamics,<br>Upwelling Processes,<br>Numerical Modeling   | <ul> <li>https://www.scopus.com/authid/detail.uri?authorId=55260277800</li> <li>https://orcid.org/0000-0003-2055-1988</li> </ul> |
| Hing Lee<br>Siang         | Marine Pollution, Marine Productivity                           | https://www.scopus.com/authid/detail.uri?authorId=57211923397  |
| Ong Meng<br>Chuan         | Marine Pollution,<br>Microplastics, Heavy<br>Metals pollution   | https://www.scopus.com/authid/detail.uri?authorId=57220668305  |
| Nur<br>Hidayah<br>Roseli  | Coastal Processes,<br>Ocean Productibity,<br>Numerical Modeling | https://www.scopus.com/authid/detail.uri?authorId=56375926600  |

#### Current research profile of the organization in relation to MARE topics:

UMT is a higher learning institution that provide learning and research capacity with a specific focus towards the field of marine and aquatic science.





Institute of Oceanography and Environment (INOS) is an institution under UMT that focuses to excel in ocean and marine science research. It encourage a multi and transdiciplinary research which includes post graduate training and encourage knowledge transfer and technology exchange by developing linkages with marine and ocean related industry.

Our institute has always been a focal point at national level in the area of marine and ocean in Malaysia. Our connection reaches government agencies, universities, research institutions and industry players. We provide many courses and trainings throughout the years that covers emerging and important topics. On the other hand, our academics are continuously involves in postgraduates teaching. Outcome from this program will suits our regular commitment which is providing regular training courses and teachings to postgraduates subject/programs and also to officers/staffs from various agencies through training program. We would like to commit to this project as it transpire the same aspiration hold by our institutions.

Ambitions of the organization (in terms of research topics) or aspired activities in relation to MARE topics (i.e. research collaboration agreements, phd supervision, internships for phd students to Eu partners)

- INOS will providing courses and learning materials that is based on the local knowledge of the south-east Asia especially related to Malaysia context
- INOS aspire to contributes to the development of Syllabi and teaching and learning resources for marine science and oceanography
- INOS targets to develop comprehensive content and research environment for postgraduate students studies in *marine science and oceanography*

#### Obstacles and barriers hampering the aspired developments

Limited resources such as data for postgraduate research support and new equipment to cope with current technology and research needs.

Enabling conditions and positive factor behind your current successes in relation to MARE -related research developments, and/or making you hopeful about your ambitions:

Good research collaboration with international partners. This has allow transfer knowledge and idea exchange that has allow better ideas to be implemented at institutional level.

Specific capacities you want to develop to reach you aspired MARE-related research goals, such as equipment, training for academic or technical staff, access to international databases, external experts support or PhD supervision etc etc

Increase capability in blended learning by using engaging teaching materials, easily accessible data and information and readily freely accessible data for teaching and research.





Are there any national research or development policy objectives that support your current or aspired MARE-related research developments? Please expand on this, if so

Short free text

What are specific enabling conditions or obstacles for the development of research training at your organization – in general, and in MARE-related fields

Specific training for lecturer in development of quality teaching materials is lacking. This is important to make sure teaching and research content can be prepared by materializing available system such as elearning platform and eporfolio.

Kommentiert [SDLR1]: Would skip this one...