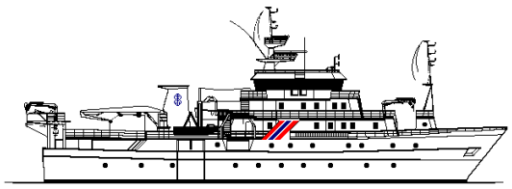
NANSEN PROJECT



Country: Myanmar

Research vessel: R/V DR. FRIDTJOF NANSEN

Survey number: 2015405

Number of days: 14

General objectives: Habitat mapping on the Myeik Archipelago

	Port	Date	Coverage	Specific objectives
Departure	Phuket, Thailand	4 June	Myanmar shelf, Bay of Bengal	• The aim of the survey was to start habitat mapping in the deeper parts of the Myeik and Merguri Archipelago stretching from outside the existing marine protected areas in shallow waters and out to 1500 m outside the shelf described by video footage and grab samples for biological and chemical parameters in the sediment related to selected organic and inorganic sources of pollution. The CTD was used to collect data regarding the physical environment to add to the information from the observation and sampling. Information about the benthic habitats will be related to fish abundance and diversity in the survey area. Bathymetric mapping was conducted in preselected parts of the survey area. The survey was designed for training and capacity building regarding benthic sampling routines and sampling of environmental parameters according to international standards. Decisions regarding the survey area and the scope of work were made in cooperation between the Myanmar and the Norwegian scientists prior to the survey.
Arrival	Phuket, Thailand	13 June		

Cruise leader: Kathrine Michalsen

Participants:

Department of Fisheries, Myanmar: Htun Thein (L.C.L) Win Ko Ko Aung Win Sein Zay Yar Min Aung Hlaing Win Min Khine
From IMR: Bjørn Serigstad (C.L) Magne Olsen Tor Ensrud Jan Frode Wilhelmsen Inge Nymark Kenneth Loven Dag Rune Nedrevåge, Martin Junker Ohldich
From Univ. Lodz: Krzysztof Pabis, Piotr Jozwiak
Mahlamyine University: Myat Thu
Myeik University: Zar Ni Ko Ko

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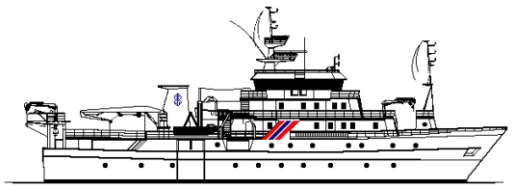

Summary of the results

42 benthic stations were sampled in the period from June 5th to June 16th. Sediment samples for grain size/sediment characterisation, chemical analysis and fauna analysis were collected from each station. In addition, CTD data was recorded on 39 of the stations and video footage from 36 of the stations for habitat mapping purposes. In addition to this 498,57 km2 was covered by the multibeam echo-sounder to provide data for bathymetric maps. 40 of the collected fauna samples have already been processed in Myanmar.

Sediment characteristics.
The sediment ranged from Sandy Medium Gravel on B1/13 to Fine Silt on TA/1500. The median distribution D50 of the sediment samples ranged from -0.671 to 7,372 with the coarsest sediments taken from around 50 meters on transect B (B1/10, -0,671) and the finest sediment coming from the deep end of transect A (TA/1500, 7,372). The general trend was finer sediments with increasing depth. The shallow stations on transect A seems to be more fine graded than the ones on the B transect. This could be due to the influence from the river outlets in the northern part of the area.
Metals.
42 stations each consisting of 2 replicates were sampled for chemical analysis.
The sampling was conducted according to the OSPAR guidelines for monitoring of offshore oil activities and analyzed in accredited laboratories. The sampled parameters were metals (Ba, As, Pb, Cu, Cr, Hg, Ni, Zn and Cd), THC,PAH's and NPD's.Because of budgets only one replicate was analysed.
Multibeam echo sounder for bottom mapping
5 major areas were with a surface of 498.57 km2 were scanned using the mulitibeam echosounder and the map was generated in fledermaus software package.

Report: status: final References:
Report ready

Constraints/Comments: