

THE NETHERLANDS MARINE RESEARCH FACILITIES (MRF)

Marieke J. Rietveld

MRF advises the Earth and Life Sciences Board (ALW) of NWO on the technical, logistic and financial aspects of the execution of the National Programme for sea research. When sea-going projects have been approved and granted by ALW, MRF helps the chief scientists in the planning, preparation and execution of the cruises. MRF also advises ALW on long-term investments, in consultation with the financial department and marine technical services of NIOZ and advisory committees on CTD systems, Auto-analyser systems, Moored instrumentation systems, Bottom sampling and seismic systems and Biological sampling systems. In these advisory committees scientists and technicians from all Dutch scientific groups involved in sea-going research participate.

In June 2004 the updated Long Term Plan on seagoing Marine Facilities 2004 – 2008 was submitted to the NWO advisory Committee for Marine Facilities (CMF). Every year the Long Term Plan will be updated.

In 2004 the National Programme consisted of:

- 1 PASS-2 2004, Palaeoceanographic, Palaeoclimatic, Palaeo-environmental and diagenetic Aspects of Sapropel formation in the Eastern Mediterranean with emphasis on the most recent S1 (PASS-2). Project manager and cruise leader Dr. G.J. de Lange, Institute of Earth Sciences, Utrecht University. The project is the sea-going contribution to the EU-programme Sapropels and Paleooceanography (SAP). The overall aim is a better understanding of the (paleo)-functioning of the Eastern Mediterranean and to determine the role in the global environment by studying the characteristic biogeochemical processes. The Project is a co-operation with Italian research groups. A 20 day cruise was performed on board RV PELAGIA.
- 2 BADE-2 (competition between flagellate grazing and viral lysis and the role of bacterioplankton cell wall-derived dissolved organic matter in the ocean; project manager Prof. Dr. G. Herndl, NIOZ) a cruise of 33 days was performed on board RV PELAGIA in the North Atlantic off Mauritania in the upwelling area towards the open Atlantic.
- 3 For the EUROCORES project MOUNDFORCE 2004 (The distribution, morphology and sedimentology of mud mounds in the Gulf of Cadiz and at the South West Rockall Trough Margin; project leader Prof. Dr. T.C.E. van Weering, NIOZ, chief scientist Dr. H. de Haas, NIOZ) a 35 day cruise was performed on RV PELAGIA in both areas.
- 4 For the EUROCORES project MEDIFLUX/MIMES (An integrated study of seepage through the seabed of the Nile deep-sea fan; chief scientist Dr. J. Woodside, VUA, co-chiefs Dr. J.P. Foucher, IFREMER, and Dr. G. de Lange, UU) a 35 day cruise was performed on RV PELAGIA in the Eastern



Lander preparation during MOUNDFORCE.

Mediterranean and Nile Delta. Through participation of German scientists and technicians the deep tow sonar system of GEOMAR, DTS-1, could be successfully operated together with the Posidonia system from IFREMER.



The logo for the site survey IODP549.

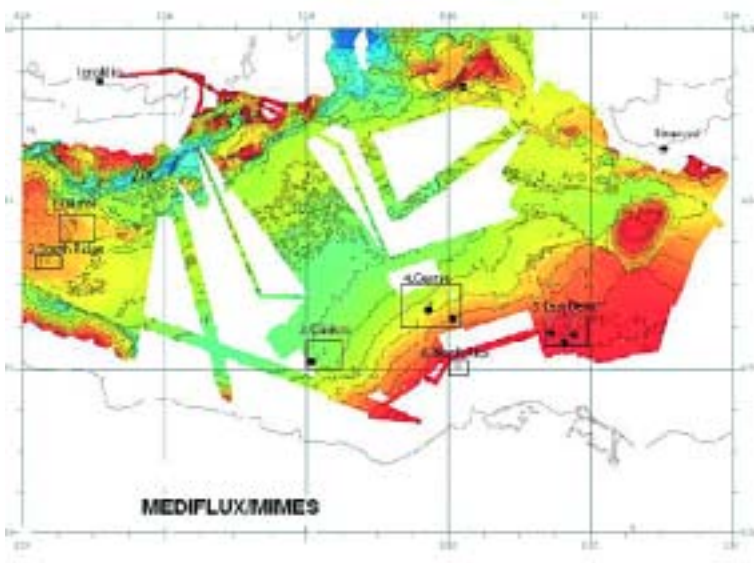
5 IODP 549 Site Survey (Recovery of 900 km multi-channel seismic (MCS) lines and 1 million years history of the Indian monsoon to support the IODP proposal 549-Full2; project leader Dr. J.W. Zachariasse, UU, chief scientist Dr. H. de Haas, NIOZ): six science days were chartered on the French RV MARION

DUFRESNE of the Polar Institute (Institut Polaire Emile Victor (IPEV)) during a combined 18 day cruise with the French CHAMAK programme in the Arabian Sea, using the NIOZ 6- and 18-channel seismic system.

For the NWO big-investment grant for the LOCO project (Long-Term Ocean Climate Observations) two cruises were performed.

6 LOCO/IW (Long-Term Ocean Climate Observations – Internal Waves; project managers Dr. H. van Haren and Dr. L. Maas, NIOZ): a 26 day cruise was performed in the Atlantic Ocean Canary Basin on board RV PELAGIA.

7 LOCO/North Atlantic (Long-Term Ocean Climate Observations – North Atlantic;



The MEDIFLUX/MIMES research area with stations and ports of call in the East Mediterranean Sea.

project manager Dr. H. van Aken, NIOZ): a 10 day barter cruise together with a German group was performed on RRS CHARLES DARWIN in the Irminger Sea for the recovery and redeployment of the 4 LOCO moorings.

Advice to ALW for the National Programme 2005:

For the new project ARCHIMEDES (Activity, Rates, Carbon use and High-pressure Microbial Ecology of the DEap Sea); project manager Prof.dr. G. Herndl, NIOZ, a 28 day cruise was advised in the Atlantic Ocean in the Canary Basin on board RV PELAGIA

For the new project BIOSYS (BIOdiversity and EcoSYstem Functioning of Deep Water Coral Reefs in the Mediterranean and N.E.Atlantic); chief scientist Dr. F. van Duyl, NIOZ, a 21 day cruise was advised in the North Atlantic Ocean West of Ireland (Rockall Trough margin) on board RV PELAGIA.

For the NWO big-investment grant for the LOCO project (Long-Term Ocean Climate Observations) two ongoing cruises were advised. One cruise for LOCO/North Atlantic (project manager Dr. H. van Aken, NIOZ) for a 24 day cruise in combination with the



LOCO/IW preparing the towed ADCP for testing.

NIOZ CLIVAR cruise CAMP and the turn-around of the German CIS moorings, in the Irminger Sea in the North Atlantic on RV PELAGIA and for LOCO/Mozambique (project manager Dr. Ir. H. Ridderinkhof, NIOZ) in March 2005 for a 20 day cruise on board the UK research vessel RRS DISCOVERY in the Mozambique Strait.

Ocean Facilities Exchange Group (OFEG)

In this framework a number of cruises were performed. A 20 day cruise for the SAGA project of the University of Hamburg (Chief Scientist Dr. M. Hübscher) on board RV PELAGIA in the East Mediterranean Sea off Israel; A 10 day cruise for the

LOCO/Irmingersea cruise on the UK RRS CHARLES DARWIN in the North Atlantic Ocean, and a 7 day cruise for the LOICZ cruise CRENS on board the German RV ALKOR in the North Sea.

In the framework of the Tripartite Agreement, the Ocean Facilities Exchange Group (OFEG), met two times in 2004, in April in London, and in November in Barcelona.

Participants are: NERC and SOC (UK), IFREMER (Fr), BMBF (De) and NIOZ (NL). UTM-CMIMA of the Spanish research council CSIC attended the meetings as an observer.

M.J. Rietveld participated in the 18th meeting of the International research Ship Operators Meeting (ISOM), hosted by the Biological Station of the Hellenic Centre for Marine Research (HCMR) on Rhodes, Greece, in October 2004. After she served the ISOM as Secretary for six years she was nominated Chair of ISOM for a two year term. M.J. Rietveld also took part in the Ocean Fleets Working Group (OFWG) of the ESF Marine Board. In 2004 the OFWG met twice in Paris.

