

## NOTIFICATION OF PROPOSED RESEARCH CRUISE

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## GENERAL

Part A

01. Name of research ship: **MARIA S. MERIAN** Cruise No. **MSM13-1**
02. Dates of cruise from **28.09.2009 Rostock** to **22.10.2009 Limassol**
03. Operating Authority **Institut für Meereskunde / University of Hamburg**  
**Bundesstr. 53, D-20146 Hamburg, Germany**  
**Tel.: +49-40-42838-3974 - Fax: +49-40-42838-46 44**  
**Telex: 212586 ifmhh d**
04. Owner (if different from para 3) **Federal State Mecklenburg-Vorpommern, Germany**
- 
05. Particulars of ship:
- |                 |                        |
|-----------------|------------------------|
| Name            | <b>MARIA S. MERIAN</b> |
| Nationality     | <b>German</b>          |
| Overall length  | <b>94,8 metres</b>     |
| Maximum draught | <b>6,5 metres</b>      |
| Nett tonnage    | <b>1750 NRZ</b>        |
| Propulsion      | <b>Diesel Electric</b> |
| Call sign       | <b>D B B T</b>         |
06. Crew
- |                |                       |
|----------------|-----------------------|
| Name of master | <b>von Staa</b>       |
| No. of crew    | <b><u>max. 23</u></b> |
07. Scientific personnel:
- |   |  |
|---|--|
| Name and address of scientist in charge | <b>Dagmar Hainbucher</b><br><b>Institut für Meereskunde</b><br><b>University of Hamburg</b><br><b>Bundesstr. 53</b><br><b>D-20146 Hamburg, Germany</b> |
| Tel./Fax/Telex No.                      | <b>+49-42838-5745 /+49-42838-4644</b>  |
| No. of scientists                       | <b><u>max.23</u></b>   |
08. Geographical areas in which ship will operate (with reference in latitude and longitude)  
**Area of interest: 33°30' N – 40°15' N / 16°30' E – 22°30' E and transfer: from 54°N 9°E along the Dutch, Belgian, French, Portuguese, Spanish, British and Moroccan coast to the area of interest (Ionian Sea)**
09. Brief description of purpose of cruise: **Transit to the eastern Mediterranean Sea**
10. Dates and names of intended ports of call: **not relevant**
11. Any special logistic requirements at ports of call: **not relevant**

## DETAIL

Part B

01. Name of research ship Cruise No. **MSM13-1**
02. Dates of cruise from: **28.09.2009 Rostock** to: **22.10.2009 Limassol**
03. Purpose of research and general operational methods: **Quantification of the fractions of deep water masses from the Aegean and Adriatic Seas in the Ionian Deep Water, changes of deep water mass characteristics. Measurements are carried out by CTD/ADCP surveys, Argo floats and moorings.**

**Education of students starting already during the transfer**

04. Attach chart showing (on an appropriate scale) the geographical area of the intended work, positions of intended stations, tracks of survey lines, positions of moored / seabed equipment.

***see attachment***

05. Types of samples required, e.g. Geological / Water / Plankton / Fish / Radio-activity / Isotope

***water samples only***

and methods by which samples will be obtained (including dredging / coring / drilling).

**Shipboard measurements during transfer**

06. Details of moored equipment:

| D a t e s |          |             |          |           |
|-----------|----------|-------------|----------|-----------|
| Laying    | Recovery | Description | Latitude | Longitude |
| <hr/>     |          |             |          |           |

07. Explosives: ***no explosives***

- (a) Type and Trade name
- (b) Chemical content
- (c) Dept of Trade class and stowage
- (d) Size
- (e) Depth of detonation
- (f) Frequency of detonation
- (g) Position in latitude and longitude
- (h) Dates of detonation

## 08. Detail and reference of

- (a) Any relevant previous / future cruises

**Previous: POS298, M71-3, planned: MERIAN cruise in May 2010**

- (b) Any previous published research data relating to the proposed cruise.  
(Attach separate sheet if necessary.)

**Hainbucher, D., Rubino, A., 2003. Cruise Report, Poseidon Cruise 298, Brindisi-Palermo, 12. May - 28. May 2003. Technical Report 1-2003, Institut für Meereskunde, Universität Hamburg.**

**Emeis K-C., 2007. Cruise Report, METEOR Cruise 71-3, Heraklion, Greece – Istanbul, Turkey 17. Jan. - 04. Feb 2007. Expedition brochure M71, Institut für Meereskunde, Universität Hamburg.**

**Hainbucher, D., Rubino, A., Klein, B., 2006. Water mass characteristics in the deep layers of the western Ionian Basin observed during May 2003. *Geophys. Res. Lett.*, 33, L05608.**

**Rubino, A. and Hainbucher, D., 2007: A large abrupt change in the abyssal water masses of the eastern Mediterranean. *GEOPHYS. RES. LETT.*, 34, L23607, doi:10.1029/2007GL031737**

## 09. Names and addresses of scientists of the coastal state in whose waters the proposed cruise takes place with whom previous contact has been made.

## 10. State:

- (a) Whether visits to the ship in port by scientists of the coastal state concerned will be acceptable.

**Not relevant**

- (b) Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation / disembarkation.

**Yes, after discussion.**

- (c) When research data from intended cruise is likely to be made available to the coastal state and if so by what means.

**- Cruise Report three months after finishing the research cruise**

**- Scientific publication within the following three years**

## SCIENTIFIC EQUIPMENT

( indicate 'YES' or 'NO' )

| List of all major Marine Scientific Equipment it is proposed to use and indicate waters in which it will be deployed | Fisheries Research within Fishing Limits | Research concerning Continental Shelf out to Coastal State's Margin | Within 3 NM | Between 3 - 12 NM | Between 12 - 50 NM | Between 50 - 200 NM |
|--|--|---|-------------|-------------------|--------------------|---------------------|
| a) Shipboard ADCP  | No                                       | Yes   | No          | Yes               | Yes                | Yes                 |
| b) Shipboard Thermosalinograph   | No                                       | Yes   | No          | Yes               | Yes                | Yes                 |
| c) Shipboard meteorological measurements   | No                                       | Yes   | No          | Yes               | Yes                | Yes                 |
|  |  |   |             |                   |                    |                     |

***Planned cruise track MSM13-1***  
**Transit to the eastern Mediterranean Sea**

