

NOTIFICATION OF PROPOSED RESEARCH CRUISE

GENERAL

Part A

01. Name of research ship: **MARIA S. MERIAN** Cruise No. **MSM75**
02. Dates of cruise from **Reykjavik 29 June 2018** to **Reykjavik 8 August 2018**
03. Operating Authority **Institut für Geologie / University of Hamburg**
Bundesstr. 55, D-20146 Hamburg, Germany
Tel.: +49-40-42838-3640 - Fax: +49-40-42838-46 44
04. Owner (if different from para 3) **Federal State Mecklenburg-Vorpommern, Germany**
-
05. Particulars of ship:
- | | |
|-----------------|------------------------|
| Name | MARIA S. MERIAN |
| Nationality | German |
| Overall length | 94,8 metres |
| Maximum draught | 6,5 metres |
| Nett tonnage | 1671 NT |
| Propulsion | Diesel Electric |
| Call sign | D B B T |
06. Crew
- | | |
|----------------|-----------------------|
| Name of master | Björn Maaß |
| No. of crew | <u>max. 23</u> |
07. Scientific personnel:
- | | |
|---|---|
| Name and address of scientist in charge | Prof. Colin Devey
GEOMAR
Wischhofstr. 1-3
24148 Kiel |
| Tel./Fax/Telex No. | +49 431 600 -2257 (tel.)
-2924 (fax) |
| No. of scientists | <u>23</u> |
08. Geographical areas in which ship will operate
Reykjanes Ridge between 63°30'N/22°W and 57°N/34°W
09. Brief description of purpose of cruise
To study the volcanology and hydrothermalism of the Reykjanes Ridge to determine how the oceanic crust there is being cooled. Also to look at ecosystem zonation around hydrothermal vents

10. Dates and names of intended ports of call

Reykjavik for four days from 23.06.2018 to 02.07.2018 (intended so far from 26.06.2018 to 29.06.2018).

Reykjavik for four days from 05.08.2018 to 14.08.2018 (intended so far from 08.08.2018 to 11.08.2018).

11. Any special logistic requirements at ports of call
Crew-change, bunkering, container handling

DETAIL

Part B

01. Name of research ship Maria Sybilla Merian Cruise No. **MSM75**
 02. Dates of cruise from **Reykjavik 29 June 2018 to Reykjavik 8 August 2018**

03. Purpose of research and general operational methods

To study the volcanology and hydrothermalism of the Reykjanes Ridge to determine how the oceanic crust there is being cooled. Also to look at ecosystem zonation around hydrothermal vents. We will use AUV to map the seafloor and find vents, ROV and rock sampling tools (dredge, wax corer) to sample the seafloor and take pictures. We will use epibenthic sled and ROV to sample animals for ecosystem studies.

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

Geological
Water
Benthic fauna

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

Dredging
ROV
Epibenthic sled
Grab
CTD

06. Details of moored equipment:

D a t e s		Description	Latitude	Longitude
Laying	Recovery			
NONE				

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

NONE

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

Palgan et al. (2017) J. Volcanol. Geotherm. Res. 348, 62-81
Martinez & Hey (2017) Earth. Planet. Sci. Letts. 457, 10-22

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.

Bryndis Brandsdottir, University of Iceland
Steinunn Hilma Olafsdottir, Marine and Freshwater Res. Inst.
Ögmundur Erlendsson, ISOR
Jörundur Svavarsson, University of Iceland

10. State:

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

YES

- (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.

ICELANDIC SCIENTISTS WILL BE PART OF SCIENTIFIC TEAM

- (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

COASTAL STATE: Iceland

SCIENTIFIC EQUIPMENT

11. Complete the following table - SEPARATE COPY FOR EACH COASTAL STATE

(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) vessel mounted systems: hydroacoustic mapping / measuring (incl. ADCP, Parasound and multibeam)	No	Yes	Yes	Yes	Yes	Yes
permanent surface water sampling / pumping (incl. Thermosalinograph)	No	No	Yes	Yes	Yes	Yes
Atmospheric remote sensing (OceanRAIN ODM470 optical disdrometer, ceilometer, sun photometer MICROTOPS)	No	No	Yes	Yes	Yes	Yes
<i>Remotely operated vehicle (ROV)</i>	No	Yes	No	No	Yes	Yes
<i>Autonomous Underwater Vehicle (AUV)</i>	No	Yes	No	No	Yes	Yes
<i>Dredge</i>	No	Yes	No	No	Yes	Yes
<i>Epibenthic sled</i>	No	Yes	No	No	Yes	Yes
<i>Volcanic corer</i>	No	Yes	No	No	Yes	Yes
<i>Sediment corer</i>	No	Yes	No	No	Yes	Yes
<i>CTD</i>	No	No	No	No	Yes	Yes
<i>Grab</i>	No	Yes	No	No	Yes	Yes

ICELAND

