

NOTIFICATION OF PROPOSED RESEARCH CRUISEGENERAL
PART A

1. Name of ship **FS 'POSEIDON'**
2. Dates of cruise from **18.06.2014, Funchal** to **24.07.2014 Trondheim**
3. Operating Authority GEOMAR
Helmholtz-Zentrum für Ozeanforschung Kiel
Wischhofstraße 1-3
D-24148 KIEL
Telephone +49 (0)431- 600 2132
Telefax +49 (0)431- 600 1601
E-Mail klackschewitz@geomar.de
4. Owner (if different from para 3)
5. Particulars of ship:
- | | |
|-----------------|-------------------------------------|
| Name | POSEIDON |
| Nationality | German |
| Overall length | 60,80 metres |
| Maximal draught | 4,90 metres |
| BRT | 1105 BRT |
| Propulsion | Diesel Electric |
| Call Sign | DBKV |
| IMO no. | 7427518 |
| MMSI no. | 211204360 |
| Telephone | INMARSAT 00870761651773 |
| Telefax | INMARSAT 00870600273636 |
| E-Mail | bruecke@poseidon.briese-research.de |
6. Crew Name of Master Matthias Günther
No of Crew 15
7. Scientific Personnel
- | | |
|----------------------|----------------------------|
| Name and address of | |
| Scientists in charge | Prof. Dr. Detlef Quadfasel |
| Phone/Fax | +49 40 42838-5756 // -7477 |
| E-Mail | detlef.quadfasel@zmaw.de |
| No of Scientists | 11 |
8. Geographical area in which ship will operate (with reference to latitude and longitude)
58°N – 70°N 8°W – 32° W
9. Brief description of purpose of cruise
- (1) Investigation of small scale structures of the ocean**
(2) Exchanges across the Greenland Scotland Ridge – overflows and Atlantic Water inflow

10. Dates and names of intended ports of call

Reykjavik, Iceland, in between 30.06. to 06.07.2014 for 48 hours (intended so far July 2nd and 3rd)

Akureyri, Iceland, in between 11.07. to 18.07.2014 for 48 hours (intended so far July 14th and 15th)

11. Any special logistic requirement at ports of call:

Crew change, loading and unloading of equipment

DETAIL

PART B

1. Name of research ship POSEIDON Cruise No. **P471**

2. Dates of cruise from **18.06.2014, Funchal** to **24.07.2014 Trondheim**

3. Purpose of research and general operational methods.

(1) Investigation of small scale structures of the ocean

(2) Exchanges across the Greenland Scotland Ridge – overflows and Atlantic Water inflow

Shipborne hydrographic and mooring work

4. 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 map attached -

5. Types of samples required e.g. Geological/Water/Plankton/Fish/Radioactivity/Isotope

Water column samples

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

CTD Rosette system

6. Details of moored equipment:

Dates:

<u>Deployment</u>	<u>Exchange/Recovery</u>	<u>Description</u>	<u>Latitude N</u>	<u>Longitude W</u>
	<u>tentative</u>			

05. July 2014	09. July 2014	Current meter	65.0000 N	-030.0000 W
10. July 2014	July 2015	Current meter	66.1205 N	-027.2678 W
10. July 2014	July 2015	Current meter	66.1863 N	-027.5917 W
10. July 2014	July 2015	current meter	66.2531 N	-027.9147 W
10. July 2014	July 2015	current meter	66.0067 N	-027.0815 W
n/a	12. July 2014	PIES	67.4007 N	-023.6930 W
n/a	10. July 2014	PIES	66.0765 N	-027.0807 W
n/a	10. July 2014	PIES	66.1202 N	-027.2690 W

7. Explosives:

none

- (a) Type and Trade Name
- (b) Chemical content
- (c) Depth 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

8. Detail and reference of

- (a) Any relevant previous/future cruises

Poseidon P418, P437, MERIAN MSM21/1

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

Paka, V., V. Zhurbas, B. Rudels, D. Quadfasel, A. Korzh, and D. Delisi (2013): Microstructure measurements and estimates of entrainment in the Denmark Strait overflow plume. Ocean Sci. Discuss., 10, 1067-1098, doi:10.5194/osd-10-1067-2013.

Voet, G. and D. Quadfasel (2010): Entrainment in the Denmark Strait overflow plume by meso-scale eddies. *Ocean Sci.* 6, 301-310.

Jochumsen, K., D. Quadfasel, H. Valdimarsson and S. Jonsson (2012): Variability of the Denmark Strait Overflow: moored time series from 1996 – 2011, *J. Geophys. Res.*, 117, doi:10.1029/2012JC008244.

Serra, N., R. H. Käse, A. Köhl, D. Stammer, and D. Quadfasel, (2010): On the low-frequency phase relation between the Denmark Strait and the Faroe-Shetland Channel dense overflow. *Tellus*, 62, 530–550, DOI: 10.1111/j.1600-0870.2010.00445.

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

Dr. Hedinn Valdimarsson, Marine Research Institute, Reykjavik, hv@hafro.is

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.

Yes, after discussion

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

After the cruise / recovery of moored instruments:

SCIENTIFIC EQUIPMENT

COASTAL STATE :

Iceland

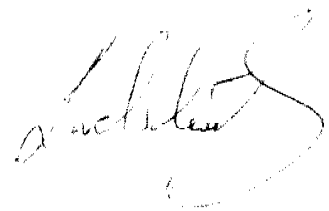
11. Complete the following table - SEPARATE COPY FOR EACH COASTAL STATE
(INDICATE 'YES' OR 'NO')

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	DISTANCE FROM COAST		
			Within 12 NM	Between 12-50 NM	Between 50-200 NM
CTD-Rosette	No	Yes	Yes	Yes	Yes
Underway CTD	No	Yes	Yes	Yes	Yes
Ship ADCP	No	Yes	Yes	Yes	Yes
Surface Thermosalinograph	No	Yes	Yes	Yes	Yes
Multibeam Echosounder	No	Yes	Yes	Yes	Yes

(on behalf of the Principal Scientist)

Dated: 26.11.2013

Operating Authority:



Appendix:

Planned cruise Track of RV POSEIDON cruise P471

