

## NOTIFICATION OF PROPOSED RESEARCH CRUISE

### PART A: GENERAL

1. *NAME OF RESEARCH SHIP* R.V. Heincke *CRUISE NO.* HE 189
2. *DATES OF CRUISE* From: 13/05/2003 To: 02/06/2003
3. *OPERATING AUTHORITY* Alfred-Wegener-Institute for Polar and Marine Research,  
P.O. Box 12 01 61,  
D-27515 Bremerhaven.  
  
Telephone: +49 471 4831-0  
Facsimile: +49 471 4831-1355  
Telex: 238 695 polar d
4. *OWNER*  
(if different from No. 3)
5. *PARTICULARS OF SHIP*  

<i>NAME:</i>	Heincke
<i>NATIONALITY:</i>	German
<i>OVERALL LENGTH:</i>	55.20 metres
<i>MAXIMUM DRAUGHT:</i>	4.16 metres
<i>NET TONNAGE::</i>	396
<i>PROPULSION:</i>	Diesel Electric
<i>CALL SIGN:</i>	DBCK
<i>REGISTERED PORT &amp; NUMBER:</i> (if registered fishing vessel)	Helgoland
6. *CREW*  

<i>NAME OF MASTER:</i>	Lutz Mallon
<i>NO. OF CREW:</i>	11
7. *SCIENTIFIC PERSONNEL*  

<i>NAME AND ADDRESS OF SCIENTIST IN CHARGE:</i>	Dr. Gunnar Gerdts, Alfred Wegener Institute for Polar and Marine Research, D-27515 Bremerhaven.
<i>TEL NO:</i>	+49 4725 819-245
<i>FAX NO:</i>	+49 4725 819-283
<i>TELEX NO:</i>	238 695 polar d
<i>EMAIL:</i>	ggerdts@awi-bremerhaven.de

*NUMBER OF SCIENTISTS:* 10
8. *GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE*  
(with reference to latitude and longitude)  
North Sea between 54deg 40'N - 61deg 00'N and 00deg 00'W - 05deg 00'W.
9. *BRIEF DESCRIPTION OF PURPOSE OF CRUISE*  
Chemical ecology and symbiosis research
10. *DATES AND NAMES OF INTENDED PORTS OF CALL*  
23 May 2003 (morning) - 24 May 2003 (early morning); Stromness, Orkney Islands
11. *ANY SPECIAL REQUIREMENTS AT PORTS OF CALL*  
No special requirements

# NOTIFICATION OF PROPOSED RESEARCH CRUISE

## PART B: DETAIL

1. *NAME OF RESEARCH SHIP* R.V. Heincke *CRUISE NO.* HE 189

2. *DATES OF CRUISE* From: 13/05/2003 To: 02/06/2003

### 3. a) *PURPOSE OF RESEARCH*

Chemical ecology and symbiosis research. The major goal of our research is to understand how marine invertebrates are chemically defended against predators or fouling organisms. In particular, we want to know which chemicals these organisms use to protect themselves from potential predators. Two of the current projects on invertebrates started already with the cruise two years ago (HE 151). Since we have some kind of understanding of the chemistry of these organisms and first results of biological and ecological assays, our investigations will be more specific with the focus on the organisms which were collected in 2001 (e.g. ecological observations).

### b) *GENERAL OPERATIONAL METHODS*

*(including full description of any fishing gear trawl type, mesh size, etc.)*

We will primarily collect marine invertebrates or macroalgae by scuba diving or dredging. Additional plankton (water) samples are taken by pumping or by plankton-nets (up to 300 um). No fish gear will be used.

### 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, areas to be fished)*

Working area marked in attached map (see attachment), limited by 54deg 40'N - 61deg 00'N and 00deg 00'W - 05deg 00'W. Specific stations will be selected according to the previous research cruises to the Orkney Islands.

### 5. a) *TYPES OF SAMPLES REQUIRED*

*(e.g. Geological/Water/Plankton/Fish/Radionuclide)*

1) Benthic invertebrates and macroalgae (no fish)

2) Plankton

### b) *METHODS OF OBTAINING SAMPLES*

*(e.g. dredging/coring/drilling/fishing, etc.)*

*(When using fishing gear, indicate fish stocks being worked, quantity of each species required, quantify of fish to be retained on board)*

1) Scuba diving

2) Dredging

3) Plankton-Net or pump (up to 300 um)

### 6. *DETAILS OF MOORED EQUIPMENT*

*DATES:* None

<u>Laying</u>	<u>Recovery</u>	<u>Description</u>	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
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### 7. *ANY HAZARDOUS MATERIALS*

*(Chemicals, Explosives, Gases, Radioactive etc)*

*(use separate sheet, if necessary)*

None

- a) *TYPE AND TRADE NAME*
- b) *CHEMICAL CONTENT (& FORMULA)*
- c) *IMO IMDG CODE REFERENCE & UN. NO.*
- d) *QUANTITY & METHOD OF STOWAGE ON BOARD*
- e) *IF EXPLOSIVES GIVE DATE(S) OF DETONATION*
  - *Method of detonation*
  - *Position of detonation*
  - *Frequency of detonation*
  - *Depth of detonation*
  - *Size of explosive charge in Kgs*

8. *DETAIL & REFERENCE OF*

a) *ANY RELEVANT PREVIOUS/FUTURE CRUISES*

Cruise No. HE 82 (August 1996), Cruise No. HE 89 (May/June 1997), Cruise No. HE 105 (May/June 1998), Cruise No. HE 120 (May/June 1999), Cruise No. HE 132 (May/June 2000), Cruise No. HE 134 (July 2000), Cruise No. HE 151 (July 2001)

b) *ANY PREVIOUSLY PUBLISHED DATA RELATING TO THE PROPOSED CRUISE*

H.A. Zanker, G. Gerdts & M. Kock. Antimicrobial activity of temperate water marine sponges from Orkney and Shetland Islands. Aquatic Microbial Ecology submitted.

G. Gerdts, A. Wichels, S. Wurtz & C. Schutt. Bacterial diversity in the breadcrumb sponge *Halichondria panicea* (Pallas). Aquatic Microbial Ecology submitted.

9. *NAMES AND ADDRESSES OF SCIENTISTS OF THE COASTAL STATE(S) 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*

Yes

b) *PARTICIPATION OF AN OBSERVER FROM THE COASTAL STATE FOR ANY PART OF THE CRUISE TOGETHER WITH THE DATES AND PORTS FOR EMBARKATION/DISEMBARKATION*

Yes

c) *WHEN RESEARCH DATA FROM THE INTENDED CRUISE IS LIKELY TO BE MADE AVAILABLE TO THE COASTAL STATE AND BY WHAT MEANS*

Cruise Summary Report, scientific literature

**PART C: SCIENTIFIC EQUIPMENT**

COASTAL STATE: Scotland, UK  
 PORT CALL: Stromness  
 DATES: 23 to 24 May 2003

11. COMPLETE THE FOLLOWING TABLE - SEPARATE PAGE FOR EACH COASTAL STATE  
 (indicate "Yes" or "No")

LIST SCIENTIFIC WORK BY FUNCTION e.g.	WATER COLUMN INCLUDING SEDIMENT SAMPLING OF THE SEABED	FISHERIES RESEARCH WITHIN FISHING LIMITS	RESEARCH CONCERNING THE NATURAL RESOURCES OF THE CONTINENTAL SHELF OR ITS PHYSICAL CHARACTERISTICS	DISTANCE FROM COAST		
				WITHIN 3 NM	BETWEEN 3 AND 12 NM	BETWEEN 12 and 200 nm
Plankton net (& water samples)	Yes	No	No	Yes	Yes	Yes
Dredge	Yes	No	No	Yes	Yes	Yes
Diving	Yes	No	No	Yes	No	No
Echosounding (< 50 kHz)	No	No	No	No	No	No
ROV w TV-camera	Yes (divers)	No	No	Yes	No	No
Multicorer	No	No	No	No	No	No
CTD/Rosette	No	No	No	No	No	No
Gravity corer	No	No	No	No	No	No

(On behalf of the Principal Scientist)

Dated 29<sup>th</sup> January 2003

**N.B. IF ANY DETAILS ARE MATERIALLY CHANGED REGARDING DATES/AREA OF OPERATION AFTER THIS FORM HAS BEEN SUBMITTED, THE COASTAL STATE AUTHORITIES MUST BE NOTIFIED IMMEDIATELY.**