

NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART A: GENERAL

1. NAME OF RESEARCH SHIP : “Le Commandant Charcot”

2. DATES OF CRUISE: 3rd June - 15th June 2022

3. OPERATING AUTHORITY: PONANT

TELEPHONE: +47 23411080 / +881 677 105 461

TELEFAX: N/A

TELEX: N/A

4. OWNER (if different from no. 3)

5. PARTICULARS OF SHIP:

Name: “Le Commandant Charcot”

Nationality: French

Overall length: 149.9 m

Maximum draught: 10.2 m

Net tonnage: 9384

Propulsion e.g. diesel/steam: diesel - LNG

Call sign: FMNB

Registration port and number (if registered fishing vessel)

6. CREW

Name of master: Captain Etienne Garcia and/or Captain Patrick Marchesseau

Number of crew: 216

7. SCIENTIFIC PERSONNEL

Dr. Bernd Krock

Am Handelshafen 12

27570 Bremerhaven

Germany

Tel. no.: +49-471-4831-2055

Email: bernd.krock@awi.de

No. of scientists: 2

8. GEOGRAPHICAL AREA IN WHICH SHIP WILL OPERATE (with reference to latitude and longitude)

Iceland – North-East Greenland - Svalbard (64°N – 78°N / 35°W – 35° E)

9. BRIEF DESCRIPTION OF PURPOSE OF CRUISE

The cruise will be performed in the frame of the project “Response of harmful dinoflagellates to climate change” (ReHaDiCC) and focusses geographically on the European Arctic and European temperate regions. This cruise proposal aims to sample phytoplankton and establish monoclonal cultures of potentially toxigenic microalgal species for further ecophysiological experiments in the laboratory.

10. DATES AND NAMES OF INTENDED PORTS OF CALL

Reykjavik – Iceland on June 3rd 2022

Longyearbyen – Svalbard on June 15th 2022.

No calls in Greenland.

11. ANY SPECIAL REQUIREMENTS AT PORTS OF CALL NOTIFICATION OF PROPOSED RESEARCH CRUISE

no

PART B: DETAILS

1. NAME OF RESEARCH SHIP: "Le Commandant Charcot"
CRUISE NO.

2. DATES OF CRUISE : 3rd June - 15th June 2022

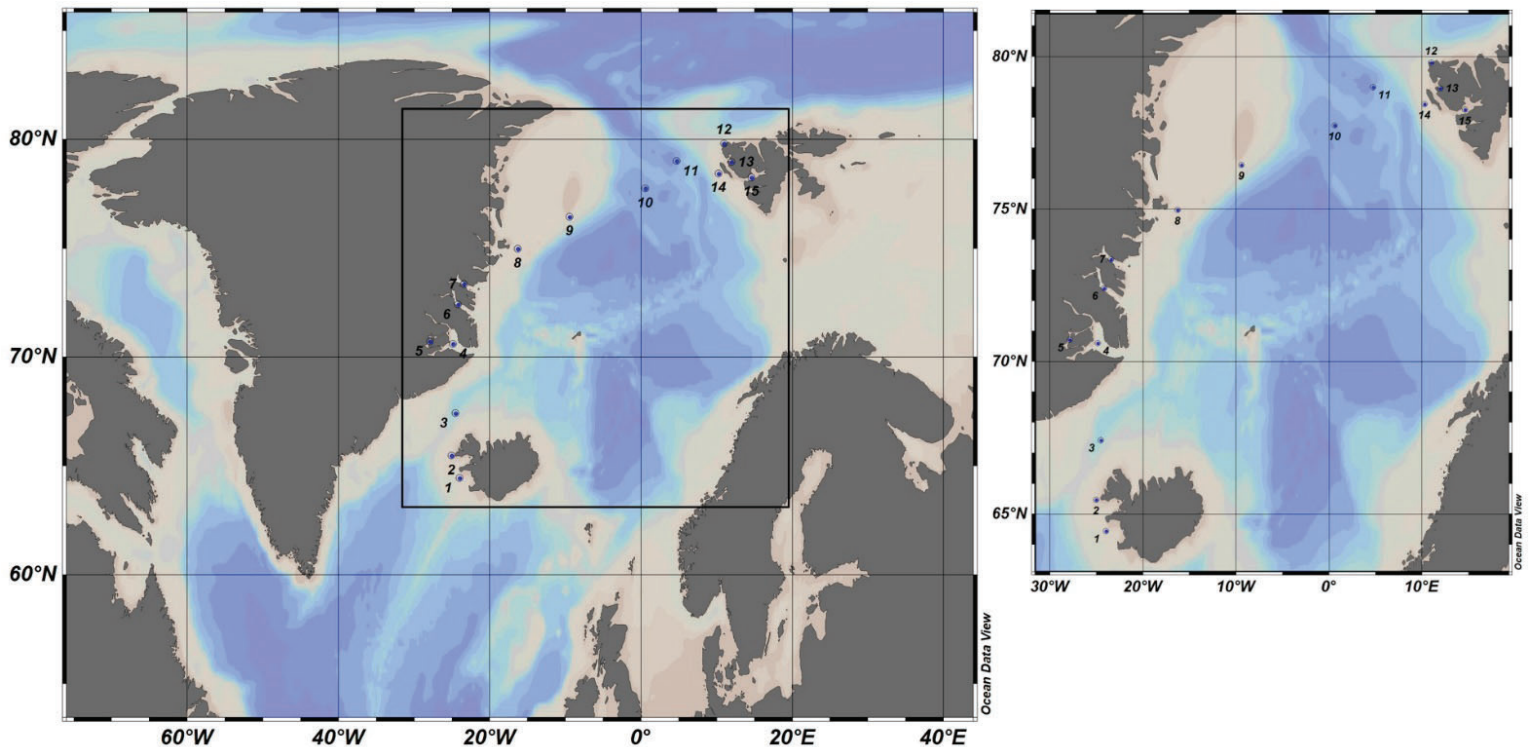
3. a) PURPOSE OF RESEARCH

Sampling of phytoplankton for taxonomic and toxinological description

b) GENERAL OPERATIONAL METHODS (including full description of any fish gear, trawl type, mesh size, etc.)

Water sampling by Niskin bottles and plankton sampling by phytoplankton net hauls (Apsin nets, 40 cm diameter, 20 µm mesh size)

4. ATTACH CHART showing (on an appropriate scale) the geographical area of intended work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment, areas to be fished



5. a) TYPES OF SAMPLES REQUIRE (e.g..geological/water/plankton/fish/radionuclide)

Water samples and phytoplankton samples

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, and quantity of fish to be retained- on board).

Water sampling by Niskin bottles and plankton sampling by phytoplankton net hauls (Apsin nets, 40 cm diameter, 20 µm mesh size)

6. DETAILS OF MOORED EQUIPMENT

N/A

7. ANY HAZARDOUS MATERIALS (chemicals/explosives/gasses/radioactives, etc.)
(Use separate sheet if necessary)

N/A

a) Type and trade name

N/A

b) Chemical content (and formula)

N/A

c) IMO IMDG code (reference and UN no.)

N/A

d) Quantity and method of storage on board

N/A

e) If explosives give dates of detonation

- Method of detonation
- Position of detonation
- Position of detonation
- Frequency of detonation
- Depth of detonation
- Size of explosive charge in kg.

8. DETAIL AND REFERENCE OF

a) Any relevant previous/future cruises

2017: RV Maria. S. Merian, cruise MSM65 "GreenHAB"

b) Any previously published research data relating to the proposed cruise

Baggesen, C., Ø. Moestrup, N. Daugbjerg, B. Krock, A. D. Cembella and S. Madsen (2012).

"Molecular phylogeny and toxin profiles of *Alexandrium tamarens* (Lebour) Balech (Dinophyceae) from the west coast of Greenland." Harmful Algae 19(0): 108-116.

Harðardóttir, S., M. Pančić, A. Tammilehto, B. Krock, E. Møller, T. Nielsen and N. Lundholm (2015). "Dangerous Relations in the Arctic Marine Food Web: Interactions between Toxin Producing *Pseudo-nitzschia* Diatoms and *Calanus* Copepodites." Marine Drugs 13(6): 3809-3835.

Krock, B., U. Tillmann, A. D. Cembella, G. A. Lovrich and C. M. Borel (2013). Comparison of phycotoxin composition and distribution in toxigenic plankton from the north and south

Atlantic. 9th International Conference on Molluscan Shellfish Safety, Sydney, Australia, FAO.

Tillmann, U., M. Gottschling, E. Nézan and B. Krock (2015). "First records of *Amphidoma languida* and *Azadinium dexteroporum* (Amphidomataceae, Dinophyceae) from the Irminger Sea off Iceland." Marine Biodiversity Records 8: null-null.

Tillmann, U., A. Kremp, P. Tahvanainen and B. Krock (2014). "Characterization of spirolide producing *Alexandrium ostenfeldii* (Dinophyceae) from the western Arctic." Harmful Algae 39(0): 259-270.

Tillmann, U., S. Wietkamp, B. Krock, A. Tillmann, D. Voss and H. Gu (2020).

"Amphidomataceae (Dinophyceae) in the western Greenland area, including description of *Azadinium perforatum* sp. nov." Phycologia 59(1): 63-88.

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

Karl Skírnisson

Dr. rer. nat – Dýrafræðingur / Parasitólgi

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Keldnavegur 3

112 Reykjavík

Iceland

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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 the ports for embarkation and disembarkation

possible at port, but not possible during the cruises (no place available).

embarkation at Reykjavík (03/06/2022)

disembarkation at Longyearbyen (15/06/2022)

c) When research data from the intended cruise are likely to be made available to the coastal state and by what means

Cruise data and highlights of the findings will be disseminated by publication in the scientific peer-reviewed literature, in scientific society bulletins, such as Remote Sensing or Harmful Algae News, at scientific conferences and via public media interviews, and in the ship cruise report. All data will be published through the German research portal www.pangaea.de approx. one year after the cruise. Furthermore, all cruise data will be shared among participating institutions including NIVA.

PART C. SCIENTIFIC EQUIPMENT

Complete the following table using a separate page for each coastal

state Coastal state: Iceland

Port of call: Reykjavik

Dates: 03/06/2022 to 15/06/2022

Indicate "YES" or "NO"

				distance	from the	Coast
<u>List scientific work by function</u> 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	Within 3 nm	between 3-12 nm	between 12-200 nm
Underway measurements, pumping of surface water (thermosalinograph)	Yes	No	No	Yes	Yes	Yes
Water sampling with Niskin bottles	Yes	No	No	Yes	Yes	Yes
Phytoplankton net hauls from 30 m depth to surface	Yes	No	No	Yes	Yes	Yes



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Am Alten Hafen 26
27568 Bremerhaven

Marius Hirsekorn

Dated 28.03.2022

(on behalf of the Principal Scientist)

NB 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