

CRUISE SUMMARY REPORT

FOR COLLATING CENTRE USE

Centre: **DOD** Ref. No.:Is data exchange Yes In part No
restricted

SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.

Name: **ALKOR**Call Sign: **DBND**Type of ship: **Research Vessel**CRUISE NO. / NAME **AL528**

enter the unique number, name or acronym assigned to the cruise (or cruise leg, if appropriate).

CRUISE PERIOD start **18/09/2019** to **30/09/2019** end
(set sail) day/ month/ year day/ month/ year (return to port)PORT OF DEPARTURE (enter name and country) **Kiel**PORT OF RETURN (enter name and country) **Kiel**

RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coordinating the scientific planning of the cruise

Name: **GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel**Address: **Wischhofstraße 1-3, 24148 Kiel**Country: **Germany**

CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

Dr. Jörg Süling, GEOMAR Helmholtz Centre for Ocean Research Kiel, Düsterbrookweg Weg 20, 24105 Kiel, Germany

OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so as to provide the context in which the report data were collected.

The overall objective of this practical for students is to investigate the ecological role of gelatinous plankton in the Baltic Sea food webs and alongside the salinity gradient. To demonstrate the temporal as well as spatial variation of pelagic communities such as bacteria-, phyto and zooplankton as well as in the benthic food webs, different food web tracers will be used. Main focus here is therefore to obtain qualitative and quantitative sample sets of gelatinous zooplankton to investigate their distinct role on benthic-pelagic processes.

Over the last several decades, a significant increase of both frequency and severity of jellyfish (JF) blooms were reported worldwide. Blooms of these organisms can extend for thousands of square kilometers, with drastic consequences and economic losses. When JF outbreak, they will not only affect the pelagic community by direct feeding on fish larvae, fish eggs or competing for the prey with bigger fishes, but only serve as organic matter source for benthic systems via sinking to the sea floor. Due to the scarcity of data on the potential role of gelatinous zooplankton from only few locations in the Baltic Sea, there is only a limited understanding on the role of JF in the benthic-pelagic food web of the Baltic Sea. A quantitative and qualitative assessment of gelatinous zooplankton in the BS systems and their functioning with regard to salinity gradient of the Baltic Sea, are now urgently needed to better account for the role of gelatinous zooplankton in the future of the system. Applicant and working group have performed this student research/educational cruise with the specific focus on jellyfish ecology every year and on a regular basis since 2013.

During this two-week cruise students will perform the compulsory „Practical at Sea“. The general goal is to survey and characterize the temporal and special distribution of bacterial, phyto-, zooplankton and macroplankton specially jellyfish in Skagerrak and Baltic Sea.

