



The German research vessel SONNE will be used to carry out a Training and Capacity Building Cruise in the framework of SPACES¹ in the waters around Southern Africa and the Indian Ocean during 22. June – 21. July 2014, from Walvis Bay (Namibia) to Port Louis (Mauritius). The co-ordinators of this project, at the GEOMAR Helmholtz Centre for Ocean Research Kiel and Namibia, invite up to 26 young scientists and students from Germany, Namibia and other countries in southern Africa to take part in one of the two legs of this cruise. Students and researchers who want to participate are requested to provide the information listed below to Project Management Jülich by 15 November 2013. Travel costs for participants will be provided by the project. Good health condition is required to join the cruise.

The aim of this cruise is research-based capacity building which should bring together researchers and students from Africa and Germany on board RV SONNE. A second goal is educating undergraduate and graduate students in different marine disciplines namely petrology, biology and maritime meteorology.



RV SONNE is the oldest but very reliable research vessels of the German fleet usually operating in the Pacific Ocean. With a length of about 98m and a beam of 14 m she has more than 200 m² in laboratory space and can host 25 scientists on cruises up to 50 days. For more technical information see: http://www.rf-bremen.de/englisch/sonne.html

The cruise will be separated into two legs of 13 days duration each. Both legs will focus on one topic. More information can soon be found on website of the Projektträger Jülich:

http://www.ptj.de/wtz-suedliches-afrika/sonne

¹ SPACES (Science for the Assessment of Complex Earth System Processes) is a cooperative research project initiated by the relevant ministries in Namibia, South Africa, Angola and Germany.

Leg 1: 22. June to 06. July 2014, Petrology and fish physiology: Cruise leader: Dr. Reinhard Werner, GEOMAR Kiel

The work on board R/V SONNE will focus on mapping, sampling, and preparation of samples rocks as well as fish for home-based analyses in the eastern part of the Walvis Ridge. Only very limited analytical work will be carried out during the cruise. Activities of the students on board will include "hands-on" experience and "learning by doing". At least some of the students should be willing to participate in night shifts since the scientific work will be conducted around-the-clock.

Leg 2: 07. to 21. July 2014, Maritime Meteorology and Chemical Oceanography: Cruise leader Dr. Kirstin Krüger, GEOMAR Kiel

The cruise will cover a diverse area, encompassing high chlorophyll-a areas and rapidly ocean warming regions within the Mozambique Channel towards Southern Madagascar, a large $CO_{2^{-}}$ sink region south east of Madagascar, and a variety of current systems including the Agulhas Current. The focus of work will be include meteorology (involving radiosonde launches), atmospheric physics (including spectrophotometric determination of reactive trace gases in the atmosphere), physical oceanography(involving deep ocean profiles (CTD casts)), biogeochemical cycling (involving gas chromatographic and mass spectrometric analysis of seawater samples), and atmospheric chemistry (involving air sampling of more than 50 trace gases).

Applicants, please provide the following information and send this as a single PDF to the Projektträger Jülich by 15 November 2013:

Dr. Barbara Tanner (b.tanner@fz-juelich.de)

(1) Background: My CV (max 1 page)

Name, age, nationality, profession, affiliation. Address, E-mail address, phone.

What is your experience in science, in particular in marine science? Any university courses? Have you been on a research vessel before? Which languages do you speak? Statements about personal fitness to work at sea for 13 days

(2) Motivation: The cruise and my future (max 2 pages)

Please answer the following questions. Not all of them may be applicable to you, so you may concentrate on those that are. Your answers will help us in selecting participants for the cruise.

A - Which of the proposed scientific topics are you mostly interested in? Why?

B - Do you have your own research topic(s) that you would like to pursue during the cruise?

C - What benefit for your personal career do you envisage from participating in the cruise? D

- What are your future career plans (basic science, industry, administration, other)?

E - Did you receive any help in preparing this application? If yes, by whom?