



## ACE Maritime University

Under the auspices of the  
Russian Geographical Society

*„To improve our knowledge of the ocean requires a new generation of well-trained quantitative researchers that are able to combine practical field work with modern methodologies“.*

*“Computers are a lot cheaper than boats and a lot more comfortable. I’m a little worried about so many people doing computer experiments and losing their ability in measurements at sea’.*

Prof Walter Munk – the ‘Grandfather of Ocean Science’

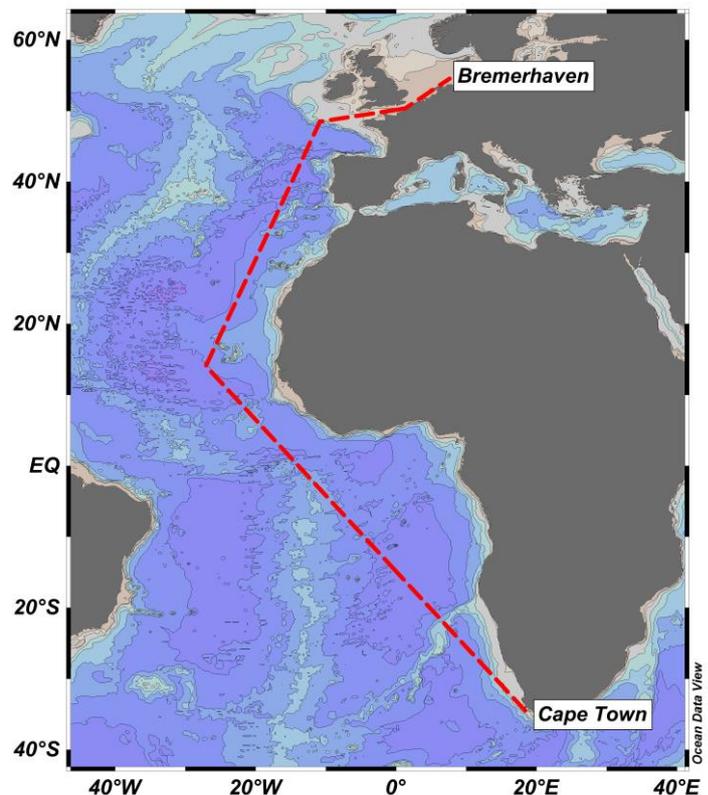
### About the Antarctic Circumnavigation Expedition (ACE)

Marine and terrestrial earth scientists from 30 countries are joining a privately-funded circumnavigation of Antarctica onboard the Russian polar research vessel *Akademik Treshnikov*. The Antarctic Circumnavigation Expedition (ACE) is a philanthropic project created by polar explorer Dr Frederik Paulsen and coordinated by the Ecole Polytechnique Fédérale de Lausanne and the Swiss Polar Institute. ACE is the first scientific expedition of its kind to circumnavigate the southernmost continent in one summer measuring marine mammal populations, ocean acidification and the uptake of carbon dioxide, marine plastic, ocean temperatures and many more projects along its path. On board there will be 54 researchers from 30 countries working on 22 research projects. The three legs of ACE will go from 1) Cape Town to Hobart, 2) Hobart to Punta Arenas and 3) Punta Arenas to Cape Town between 20 December 2016 to 18 March 2017.

### The ACE Maritime University

The ACE-funded Maritime University, under the auspices of the Russian Geographical Society, offers an opportunity for Masters or early PhD students to participate in the ~25 day transit cruise prior to the expedition. This cruise will take the ship from Bremerhaven, Germany to Cape Town, South Africa, crossing both the North and South Atlantic sectors during its transect south. **This exciting cruise will bring together participants from Europe, USA, Russia, Australia and South Africa from 20 November to 15 December 2016.**

The aim is to introduce marine science as an applied and cross-disciplinary field to students who have shown an affinity for marine/natural science disciplines. It will combine traditional classroom lectures with hands-on ship-based deck activities for a maximum of 40 to 45 students as well as providing them with an opportunity to support specialist scientists in their current marine research activities.





### **Course description:**

Teaching will comprise intense daily classroom lectures, practicals and deck work, running in parallel with the multidisciplinary research programme. Students will gain experience working with the full suite of oceanographic, atmospheric and biological ship-based instrumentation such as CTDs, underway measurements such as UCTD, XBT, TSG and using autonomous devices such as Gliders, Argo, SVP drifters as well as gaining experience via trawling for biological material. Training in the data analysis following each deployment will also be given, as well as technical and electronic experience in calibrating, assembling and modifying each instrument. In addition, each student will work on a specific scientific mini-project related to their area of interest and the scientific research underway. The programme will also include guest lectures from the scientists onboard, social events and contributions to outreach activities through social media (blogs, etc.).

### **Course prerequisites and target group:**

Applications will be accepted from graduates with a background in marine sciences. Master-level students or early PhD students registered at a university in the ACE partner countries (Australia, France, Norway, Russia, South Africa, Switzerland, United Kingdom) and the USA are eligible. 5 or 6 students will be selected for each country. A good command of English is required.

### **Costs covered:**

We are committed to admitting talented students from diverse backgrounds. Accepted applicants will receive a scholarship to cover tuition, travel to Bremerhaven and from Cape Town, lodging and food. Successful applicants will be responsible for covering costs for their health insurance, possible health checks and adequate outdoor clothing (a list will be supplied to successful applicants).

### **Practical notes:**

Applicants must hold a valid passport and be eligible for a tourist visa to enter Germany (starting point) and South Africa (ending point). Applicants should also take into account that the cruise dates are preliminary and may still be subject to change by a few days. The final cruise schedule will be finalised by August 2016. If accepted the Applicant will be required to fulfil other documentation including an acceptance of vessel rules and regulations.

### **Contact persons:**

- Australia: AAD (Gwen Fenton: [Gwen.Fenton@aad.gov.au](mailto:Gwen.Fenton@aad.gov.au))
- France: IPEV (Pascal Morin: [pascal.morin@ipev.fr](mailto:pascal.morin@ipev.fr))
- Norway: NPI (Kit Kovacs: [kit.kovacs@npolar.no](mailto:kit.kovacs@npolar.no))
- Russia: AARI/RGO (Aleksandr Makarov: [makarov@aari.ru](mailto:makarov@aari.ru))
- South Africa: UCT (Isabelle Ansorge: [isabelle.ansorge@uct.ac.za](mailto:isabelle.ansorge@uct.ac.za))
- Switzerland: EPFL/SPI (Danièle Rod: [daniele.rod@epfl.ch](mailto:daniele.rod@epfl.ch))
- USA: Explorers Club (Ted Janulis)
- United Kingdom: BAS (Alistair Crame: [acr@bas.ac.uk](mailto:acr@bas.ac.uk))

### **Application:**

To apply, interested students must fill in the attached application form (incl. annexes) and send them back in one batch until **27 May 2016** at 17:00 (CET) to the following address: [aceproject@epfl.ch](mailto:aceproject@epfl.ch)