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International Workshop on Marine & Atmospheric Sciences in West Africa

Ocean Science Centre Mindelo

Cabo Verde, Nov 13th to 17th, 2017

- Concept Note -

The German Science Year 2016*17 “Seas and Oceans” as well as the Africa strategy of the German Federal Ministry of Education and Research provide an excellent opportunity to organize an international workshop in Mindelo/Cape Verde to present and discuss the current state and future perspectives of marine and atmospheric research and academic education in West Africa. It will be jointly organized by the GEOMAR Helmholtz Centre for Ocean Research Kiel and the National Institute for Fisheries Development in Mindelo (INDP). It aims at transforming existing bilateral cooperation structures into a larger international network and to develop it into a West African research and education center for marine and atmospheric research.

The workshop will be structured into four main blocks and addresses the different topics in plenary as well as optional working group sessions. In addition, the participants of the workshop will be given the opportunity to visit the on-site research infrastructures, such as FS ISLANDIA and the atmospheric station CVAO. The workshop will bracket the opening ceremony for the Ocean Science Centre Mindelo. Also included is a reception onboard the German research vessel Maria S. Merian in the port of Mindelo.

“Atlantic Observatories”

Monday, 13 November

At the start of the workshop we will focus on the two Cabo Verdean Observatories, the Cape Verde Ocean Observatory (CVOO) and the Cape Verde Atmosphere Observatory (CVAO), that were set up in joint collaboration with the national institutes of INDP and INMG (Instituto Nacional de Meteorologia e Geofísica) already back in 2006 and have formed the nucleus of common projects of both the marine and atmospheric science community. Current results and projects of marine and atmospheric research in the region will be presented. Furthermore, the workshop will provide the opportunity to present both observatories to a wider international community and to develop concrete collaborations and research projects and to develop the technology transfer technology for solution-oriented applied science (Blue Growth).

“Inauguration of the Ocean Science Centre Mindelo”

Tuesday, 14 November



GEOMAR and INDP welcome all participants of the workshop to attend the ceremonial inauguration of the Ocean Science Centre Mindelo. Starting 2012, the partners joined to plan a scientific-logistical base for the national and international science community in order to facilitate field work in the region. The embedding of the opening of the OSCM into the context of the workshop will increase both the attractiveness and the visibility of the event and also allows the inclusion of decision-makers and stakeholders from the participating countries in the workshop.

**“The Regional Relevance – ICAWA 4th Edition & PREFACE Side Event”
Wednesday, 15 November**

During the week we will be joined by the **ICAWA 4th Edition** to trigger synergies with Cabo Verdean initiatives. The International Conference of AWA – *Ecosystem Approach to the management of fisheries and the marine environment in West African waters* – has obtained the CoP21 and CoP22 (United Nations Framework Convention on Climate Change, 21st & 22nd Conference of the Parties) labels for the former editions and the institution’s participants and delegates had redacted the common declaration “Ocean Climate of Dakar”. Coastal states of West Africa face severe problems, notably, overexploitation of fisheries resources together with climate change. The consequences of which are at the heart of debates between managers and researchers of the subregion. Within the framework of AWA, financed by IRD (France) and BMBF (Germany), the Subregional Fisheries Commission (SRFC) is to support the member states and associated West African partners with concrete actions and enhanced advisory capacities on fisheries management approaches. The long-term objective of ICATA is to promote the development of an Observatory to monitor, simulate and predict key parameters of the ecosystem of North West Africa. The primary objective of the conference is to permit member states of the SRFC and partners from West Africa and northern countries to put in place sustainable fisheries and marine environment management systems based on biological, ecological, laws, economic and social state-of-the-art knowledge. The conference enhances the observation and modelling of ocean variability supporting the ecosystem approach to marine management in West African waters. Contributions in this field are welcome. Economics integrated into the ecosystem approach to marine management and reports on “human dimension” in West African fisheries in a framework of adaptation and governance will be relevant.

A side event of **PREFACE – Enhancing Prediction of Tropical Atlantic Climate and its Impacts** – will be included as well. Funded by the European Union 7th Framework Programme the project has been designed to improve our understanding of the functioning of the tropical Atlantic climate and our capabilities to predict it and its impacts, with a particular focus on Atlantic African fishing communities.

**“The Regional Relevance – Macaronesia Matters & WASCAL”
Thursday, 16 November**

The **Macaronesia** region is a wide oceanic area that comprises four main archipelagos: Azores, Madeira, Canary Islands and Cape Verde. All clearly show a common volcanic (hotspot) origin which gives them similarities concerning biodiversity, although there is a climate variation due to their latitudinal distribution. The status of outermost region, the land fragmentation of each archipelago in islands as bounded units and the external dependence, are structural features that have conditioned and decisively influenced the development of human activities and the availability of resources. Despite this, Macaronesia has a clear and strategic international interest for all major socio-economic sectors within the marine maritime fields. The R3M (Macaronesia Marine and Maritime Network) is a regional initiative since 2004, aimed to increase the quantity and quality of marine environment observations, in order to understand and predict both the phenomena that take place on it and the related environmental and socioeconomic impacts.

This workshop aims to strengthen common efforts of the Azores, Madeira, Canary Islands and Cabo Verde in the field of marine research and observations. It will be organized in close collaboration with PLOCAN - Plataforma Oceanica de Canarias. Scientists will be given a forum to look into existing and planned research platforms and observation technologies, align ocean observation efforts and time-series management and exchange on topics of common interest and concern for observation and methodologies. The sharing of the infrastructures will be addressed including funding opportunities for collaborative research.

WASCAL - West African Science Service Centre on Climate Change and Adapted Land Use - is an initiative by the German Federal Ministry of Education and Research that has started in 2010 and is entering its second program phase in 2018. The BMBF, WASCAL, GEOMAR, INDP and the University of Cabo Verde strive to add and develop a marine component to the current agenda. The workshop will provide opportunity to bring together partners and scientists to develop a future research agenda and a marine graduate study program also considering socioeconomic aspects. It will also strengthen the research network of the West African coastal states in the context and cooperation of existing structures and projects in the field of marine and atmospheric research.

**“Outreach & Blue Growth”
Friday, 17 November**

The Cape Verdean-German-British consortia in the region strive to build a visible bridge between science, society and industry. Aspects such as "citizen science" and "blue economy" will be addressed, with a special focus on regional networks (Macaronesia, West Africa). The GEOMAR Helmholtz Centre for Ocean Research and the Future Ocean Excellence Cluster of the University of Kiel will share some of their experience in this area with the goal to develop concrete ideas for technology transfer projects for solution-oriented applied science for national and regional relevance for the society.