



## Conception at Conception Bay

When the super-duper high-tech German Research Vessel *Maria S Merian* recently docked at Walvis Bay it carried a very precious cargo that was unloaded in the harbour with some fanfare: students and scientists from Namibia and abroad. What they and their mentors were examining was not only interesting, it has tremendous importance for the future of Namibia.

As every Namib toktokkie knows, ecosystem health is the most important thing of all. What counts for nature, does, too, for people. While several strong pillars of the Namibian economy arise from benefits extracted from the ocean, it has been more difficult understanding and thus managing the continued health of the Benguela. To fill this need, the Benguela Current Large Marine Ecosystem programme (BCLME) has for several years coordinated research to improve the knowledge and understanding of this system and to establish the Benguela Current Commission (BCC).

In the meantime, it is clear that much more research is required to come to better grips with the Benguela. Part of this research involves cooperation between Namibia and Germany through the Science Partnerships for the Assessment of Complex Earth System processes (SPACES), which concerns the connection and exchanges between ocean, land and atmosphere along our coast. The October expedition of the *RV Maria S Merian* involved SPACES to help fill spaces in our knowledge. From its kick-off, students from the University of Namibia participated in the project, thus increasing the future potential for improving local know-how and knowledge to understand and manage our ecosystems.

Munyaradzi Tambo of UNAM, together with another student from Germany and a professor from Germany, examined our friend, the giant Namibian Sulphur Cocktail bacteria, *Thiomargarita namibiensis*. Their eye-opening research did not only reveal how pretty *Thiomargarita* glows with fluorescent CARD-FISH stains (scientists have a knack for nifty terms: CARD-FISH, if you must know, stands for CAtalysed Reporter Deposition - Fluorescence In Situ Hybridization). It also revealed that the abundance and diversity of benthic bacteria varies along our coast being highest in near-shore areas of some 100-300 metre depth off Conception Bay. This is an area where scientists participating in the same expedition detected very high levels of biological productivity, higher than elsewhere along the Namibian coast. The area off Conception Bay is also where marine phosphate mining is being planned, although the question of mining was not part of the Merian expedition. What was part of the expedition, included the characterisation of the water column and seabed, presented impressively by Frank Cloete and Monica Emvula, students of UNAM. It is reassuring that dynamic Namibian budding experts are part of this learning process on this awe-inspiring ship.

Awe-inspiring, also, are the prospects. We are on the verge of significantly increasing knowledge and management capacity of the complex Benguela ecosystem, one of Namibia's greatest jewels, an asset of true global stature.

Zophosis moralesi quips that the world is watching the conception at Conception Bay both of thriving marine productivity and of bright ideas from bright young minds.

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