



Western Indian Ocean Regional Initiative in Marine Sciences and Education



UDSM



UEM



UCT

RISE Meeting
25th – 26th October 2013
Johannesburg, South Africa

Exceptional Achievements by Graduates

❑ Fialho Nehama (Ph.D.)

✓ Currently Deputy Director for Science and Outreach at the School of Marine and Coastal Sciences, at UEM

✓ Received an IFS Grant to the tune of US \$ 12,000, which will allow him to conduct further investigation related to his Ph.D. research work “***Dynamics of the Zambezi River Plume – the nearshore circulation caused by river discharge and its effects on the ecosystem***”



Exceptional Achievements by Graduates...



❑ Fialho Nehama (Ph.D.) cont.

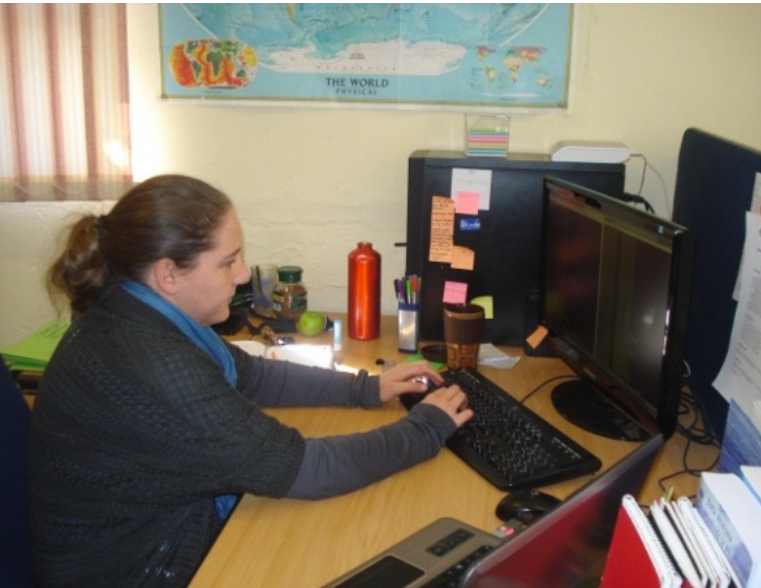
- ✓ After attending a training in South Africa, he was identified as a trainer for his nation (Mozambique), for the **Ecosystem Approach to Fisheries Management**. He will be teaching courses on the theme to various stakeholders
- ✓ Co-investigator in the project, entitled “***Oceanic and Atmospheric processes in the Mozambique Channel***”, JEAI-MOCAs: A Multi-Institutional Initiative to build research capacity in Mozambique. The project is funded by a French Agency - AIRD

Exceptional Achievements by Graduates...

☐ Charine Collins (Ph.D.)

✓ Charine will formally graduate in Dec. 2013, but she already passed well her thesis report. During her time as a student, she has published two peer-reviewed articles from her research work for Ph.D.

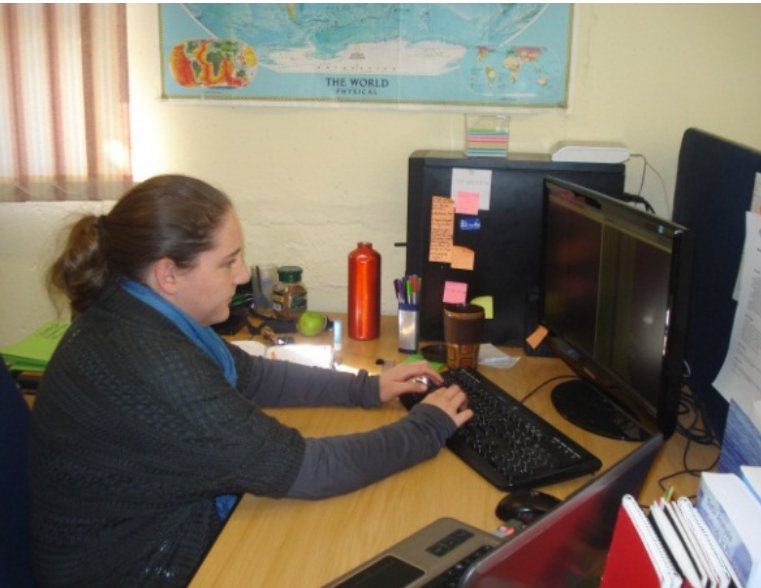
✓ Attended the 12th CAS-TWAS Forum, an International Workshop on Operational Oceanography for developing Countries, in Beijing, China (Sept 2013) and presented two posters



Exceptional Achievements by Graduates...

❑ Charine Collins (Ph.D.) cont.

- ✓ During a workshop funded under NRF/ FIN SA/ Mozam Bilateral Project, Charine gave an excellent set of lectures and tutorials on Matlab to a group of INAM (Mozambique Meteorol. Serv) employees and some researchers from UEM (Department of Physics, working on Climate Sciences).
- ✓ Co-investigator in the project, entitled ***“Oceanic and Atmospheric processes in the Mozambique Channel”***, JEAI-MOCAs: A Multi-Institutional Initiative to build research capacity in Mozambique. The project is funded by a French Agency - AIRD



Exceptional Achievements by Graduates...



☐ Joseph Jean Maurice Ravina (M.Sc.)

- ✓ He is currently working at the Mauritius Research Council, as a Research Assistant. He is based at the Rodrigues Island.
- ✓ He has initiated an NGO – Ter-Mer Rodrigues involving several young graduates and professionals in about 11 different fields of interests, in order to constitute a strong team that can think about and work towards sustainable development. The NGO has the following objectives
 - To conduct multidisciplinary research
 - To promote education and awareness campaigns around the theme of sustainable development for the Island
 - To foster capacity building
 - To conduct projects aimed at promoting a Sustainable Rodrigues Island



Exceptional Achievements by Graduates...



❑ Joseph Jean Maurice Ravina (M.Sc.) cont.

- ✓ He was appointed as the Focal point for Coral Reef Management under the Indian Ocean Commission/ ISLANDS Project of the Rodrigues Regional Government.
- ✓ Here, he is involved in fostering best coral Reef Management practices. Through this, he has participated in a study tour in Queensland, Australia



Exceptional Achievements by Graduates...

❑ **Avelino Langa (M.Sc.) cont.**

- ✓ After graduation at the University of Dar-Es-Salaam, was appointed as the Head of Department of Marine Sciences at the Eduardo Mondlane University.

Unusual Collaborative Activities: JEAI-MOCAs

□ JEAI-MOCAs: A multi-institutional initiative to build marine research capacity in Mozambique.

About JEAI-MOCAs:

- Developed by a Mozambican research group to focus on oceanic and atmospheric dynamics.
- The JEAI-MOCAs group involves faculty and students from the WIORISE nodes of UEM and UCT, among others.
- The Group relies on 15 years of collaboration between the Dept. of oceanography at UCT and Marine and Coastal Management and the French Institut de Recherche pour le Developpment.
- Four Mozambican Institutions are involved: Department of Physics at UEM, Escola Superior de Ciencias Marinhas e Costeiras at UEM, IIP and the Instituto de Hidrografia e Navegacao (INAHINA).
- JEAI-MOCAs is funded by a French Agency, 'Agence Inter-etablissements de Recherche pour le Developpment (AIRD).

JEAI-MOCAs Composition

- ❖ Primarily composed of nine Mozambican nationals:
 - ❑ Three senior researchers with Ph.D.
 - ❑ One post-doctoral fellow
 - ❑ Three Ph.D. Students at UCT
 - ❑ Two MSc. Graduates at the Dept. of Oceanography at UCT
- ❖ Two international Ph.D. students (one British and one South African), based at UCT
- ❖ JEAI-MOCAs has a supervision of seven international senior scientists (three South African and four French)
 - ❑ Supervisors specialize in physical oceanography, atmospheric sciences and marine ecosystems

JEIA-MOCAs Objectives



□ The JEIA-MOCAs programme was launched in Mozambique in May 2013 during an inaugural workshop. It deals with 3 scientific themes:

1. Impact of tropical cyclones on the ocean in the Mozambique Channel;
2. Effect of the mesoscale eddies of the Mozambique Channel on marine ecosystems;
3. Marine ecosystems along the coasts of Mozambique.

Some members of the JEIA-MOCAs group at the launch of the programme at the Inhaca Marine Biological Centre of the University of Eduardo Mondlane

JEIA-MOCAs Objectives...



- ❖ **The ultimate goal of JEIA-MOCAs is to create and strengthen the research capacity of a well-motivated group of oceanographers and atmospheric scientists in Mozambique.**

Some members of the JEIA-MOCAs group at the launch of the programme at the Inhaca Marine Biological Centre of the University of Eduardo Mondlane

JEIA-MOCAs Implementation

- ❖ Total budget for JEAI-MOCAs: USD 50,000 for the duration of three years (2013-2015).
- ❖ Funding in three phases, each year getting one third of the total amount funded.
- ❖ Three Linux-based computers will be purchased and installed at three institutions: UEM, IIP and INAHINA.
- ❖ International missions for the JEAI-MOCAs team every year of the programme involve:
 - ❑ Travelling of Mozambican researchers to SA and France for collaboration and capacity building;
 - ❑ Travel of SAn and French researchers to Mozambique for monitoring of the achievements/performance of the programme.
- ❖ Organisation of and participation in summer/winter Schools as well as workshops and Symposia (one will run parallel to the WIOMSA Symposium in Maputo – next week).

WIO-RISE contribution to capacity building at ESCMC-UEM

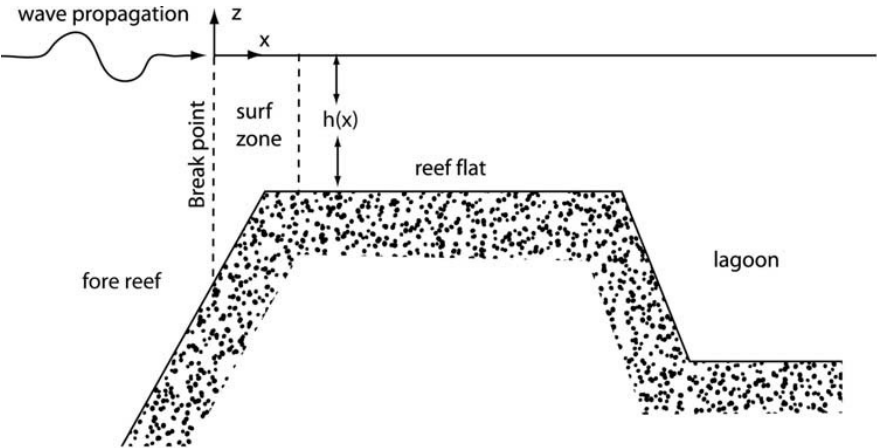
Research facilities set by WIO-RISE supported:

- undergraduate and post graduate students
- a PhD student from Cambridge University
- various research and technology innovative projects

Research onboard of Pluma



Waves and costal currents in Xai-Xai Beach



Innovative projects -Solar fridges



Innovative projects – wind turbines



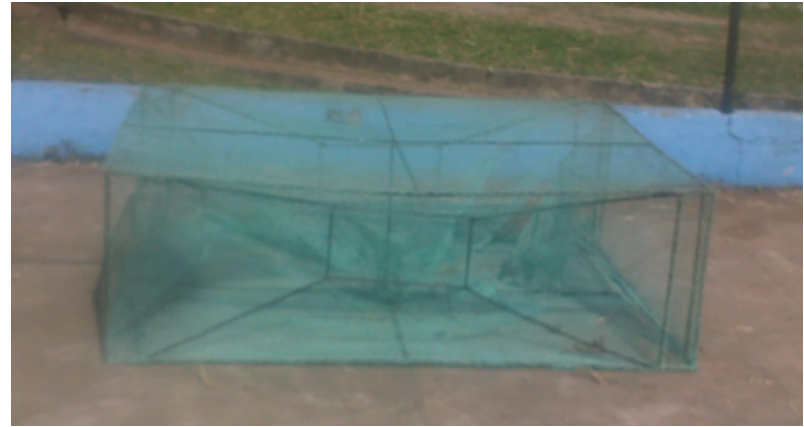
Innovative projects: Solar dessalinators



Innovative projects - Fishing gears



A - 2,5 m x 2m x1,5m = 7,5 m³



C - 2,0 m x 1,5 m x 1,0m = 3,0 m³



B - Ensaio experimental



D - Massificação das

Innovative projects – aquaculture in cages



Innovative projects – Fish processing



Innovative projects – fish food production



Updates on graduates since last meeting

❖ One PhD –

- Ms Charine Collins (UCT)

❖ Three MSc -

- Ms Nyamisi PETER (UDSM - IMS).
- Mr Stefano Hanolo (UDSM - IMS)
- Mr Richard Clement (UDSM - IMS)
- Mr Sidonio Chamo (UEM)





Thank you