# Postdoctoral research fellowship on modelling the variability and change in the Seychelles-Chagos Thermocline Ridge (SCTR)

The Department of Oceanography at UCT and the South African Environmental Observation Network (SAEON) are jointly offering a focussed postdoctoral research fellowship to work on modelling the variability and change in the Seychelles-Chagos Thermocline Ridge (SCTR) and tropical Indian Ocean. The SCTR has been linked to tropical cyclone and MJO activity in the South Indian Ocean as well as to rainfall variability in various parts of Africa and has also been suggested to influence fisheries in the region.

The objective of this position is to use appropriate models to better understand the oceanic processes associated with change in the SCTR and its impacts on the region.

**Postdoctoral Research Fellows (PDRFs)** are PhD graduates who are granted fellowships to conduct research under the mentorship of an established academic. The postdoc has the status of an academic-in-training. The purpose of the Postdoctoral Research Fellowship is to provide an opportunity for experiential learning in research, which may serve as a path for further academic and professional development.

## Requirements (Criteria for eligibility?)

- A PhD in oceanography or closely related field
- extensive experience in or knowledge of:
  - o ROMS ocean modelling or similar
  - Analysis of large data sets using MATLAB, Ferret or Python
  - Regional oceanography of the South Indian Ocean
  - South West Indian Ocean tropical cyclone characteristics and variability
- Effective communication skills (oral, written and presentation).
- Proven ability to publish in international peer-reviewed journals.
- Be independent and able to work under pressure.

### **Conditions of Award:**

- 1. The successful candidate must be in possession or have submitted of a PhD or equivalent degree in a relevant area (Oceanography, Engineering, Mathematics, Physics)
- 2. Only individuals who have achieved the doctoral degree within the past 5 years are eligible to apply.
- 3. Applicants may not previously have held full-time professional or academic positions.
- 4. The successful candidate may, as part of their professional development, be required to participate in departmental and SAEON activities such as limited teaching and supervision and duties incidental thereto.
- 5. The successful incumbent will be required to comply with the University's approved policies, procedures and practices for the postdoctoral sector.

PDRFs who have been accepted by an academic department and who are supported by a postdoctoral fellowship, may be registered at UCT under the following conditions:

- Compliance with the University's official definition, specifically in that the prospective Postdoctoral Fellow has achieved her/his PhD degree within 5 years of such registration
- 2. On condition that the prospective Postdoctoral Fellow has not previously held any permanent professional or academic positions
- 3. Individuals may register as PDRFs if they have submitted their PhD thesis for examination. However, registration is limited to 6 months, and registration will be cancelled thereafter unless proof of having obtained the doctoral degree is submitted.
- 4. The Postdoctoral Research Fellow is expected to conduct research under the leadership of a Principal Investigators (PI).

PDRFs may undertake limited teaching and/or co-supervision of students, but these commitments may not exceed 12 hours per week.

#### Value and tenure

The value of the fellowship is ZAR 240,000 per annum as a tax free stipend. No benefits or travel allowances are included in the value of the fellowship. The fellowship is tenable for 1 year with the possibility for renewal for a second year, dependent on on satisfactory academic progress and funding.

## Application process

Applicants should provide the following by 18<sup>th</sup> November:

- A letter of application describing their academic interests, as stated above in "Conditions of Award"
- Certified copies of academic transcripts and evidence of having graduated with (or submitted for) the PhD degree
- A CV including any publications or research output;
- The names and contact details of 3 academics/referees.

Applications will be accepted until the fellowship has been awarded. Only shortlisted candidates will be contacted.

The University of Cape Town reserves the right to cancel incomplete applications, to effect changes to the conditions of the Fellowship and/or to make no awards at all.

Further information can be obtained from, and applications submitted to, Prof Chris Reason (chris.reason@uct.ac.za Tel +27 21 650 5311) or A/Prof Juliet Hermes (juliet@saeon.ac.za, Tel +27 21 402 3118).