

## Renewable and Sustainable Energy Scholarships (RSES) Postdoctoral Fellowship Guide 2015

### 1. Background

The Department of Science and Technology (DST) provides funding to support human capital development (HCD) for the renewable energy sector through the National Research Foundation (NRF). This funding support is called the Renewable and Sustainable Energy Scholarships (RSES) which is a component intervention of the Energy Human Capital and Knowledge Generation Programme (E-HCD&KG).

### 2. Objective

The RSES programme is intended to enhance and increase science, engineering and technology (SET) student enrolment into postgraduate research studies at the masters, doctoral and postdoctoral levels, thus increasing the SET workforce particularly in the nine (9) medium to long term energy related research themes (section 3) which have been identified in the draft national energy research, development and innovation strategy.

The objective is to provide postgraduate scholarships on research studies that will support and facilitate the shift towards a sustainable energy sector. **This funding guide provides funding for Postdoctoral Fellowships ONLY.**

### 3. Areas of Support

In line with the draft DST energy research focal areas, the Postdoctoral Fellowships are offered to candidates that are focusing on the following focus areas:

- Cleaner fossil fuel development, including clean coal technologies;
- Renewable energy (bioenergy including bio-fuels, solar energy, wind energy, etc.);

- Energy impact on the environment;
- Energy for socio-economic development;
- Energy system planning and modelling;
- Energy infrastructure optimisation;
- Energy efficiency and demand side management;
- Energy policy research; and
- Alternative energy.

#### 4. Value of the Scholarships

The value of the award is R150 000 per year over a two year period for full-time studies.

In addition, RSES Postdoctoral fellows may apply for a travel grant of up to R50 000 towards international conference participation. This amount is a once-off allowance and is the maximum allowed during the tenure of the scholarship. The grant includes subsistence, accommodation, conference registration and travel expense.

Fellowship holders who wish to access the travel grant must complete a travel grant application form provided by their university postgraduate office/research office for consideration by the NRF.

#### 5. Criteria for Selection

##### 5.1 Eligibility

##### 5.1.1 Eligibility for overall RSES Programme

The RSES Programme is meant to both support students that are in the DST-driven initiatives like the Renewable Energy Research Chairs, Renewable Energy Hub and Spokes, as well as those who may be studying towards the relevant qualifications in other universities within South Africa, particularly in the renewable and sustainable energy fields. Consideration will be given to successful applicants from these research platforms who meet the stipulated criteria.

The current DST energy research programmes are herewith mentioned below:

- Energy Research Chairs:
  - Research Chair in Biofuels and other clean alternative fuels (ligno-cellulose) at Stellenbosch University;
  - Research Chair in Clean Coal technologies at the University of Witwatersrand; and

- Associate Research Chair in Biofuels and other clean alternative fuels at North-West University.
- The Renewable Energy Hub at the Stellenbosch University; and

**PLEASE NOTE THAT THIS CALL IS ONLY OPEN TO APPLICATIONS SUBMITTED BY THE FOLLOWING GOVERNMENT FUNDED RESEARCH PROJECTS:**

- *Wind energy spoke ( Stellenbosch University and the University of Cape Town);*
- *Solar photovoltaic (PV) spoke (Nelson Mandela Metropolitan University and University of Fort Hare);*
- *Solar thermal spoke (Stellenbosch University and the University of Pretoria; AND*
- *COALGAE Project (Nelson Mandela Metropolitan University).*

- Energy Spokes Programme comprising:
  - Wind energy spoke ( Stellenbosch University and the University of Cape Town);
  - Solar photovoltaic (PV) spoke (Nelson Mandela Metropolitan University and University of Fort Hare), and
  - Solar thermal spoke (Stellenbosch University and the University of Pretoria).

### **5.1.2 Eligibility for RSES Postdoctoral Fellowships**

Funding is therefore made available for Postdoctoral Fellowships for studies from 2015 at universities across South Africa which offer research studies that will further the objectives of the renewable energy sector.

In selecting applicants for consideration for funding, the following criteria will apply:

- Fellowships are open to **South African citizens or permanent residents**
- Recipients may also be foreign citizens as stipulated in section 5.3.
- Current RSES postgraduate students in the energy human capital development pipeline are strongly encouraged to apply and will be given preference.
- Applicants should have obtained their PhD within the last 5 years.
- Full time employees of Higher Education Institutions are not eligible to apply.
- All NRF fellowship awards should be held as primary funding towards the research study.
- Fellowships must not be held simultaneously with a fellowship from any other government or NRF source or NRF administered source.
- Fellowship-holders are allowed to hold non-binding supplementary grants or emoluments to half the value of the NRF award or should the host universities have an institutional capped value, the award can be supplemented to the university capped value for the level of study.

- Fellowship-holders must not hold full-time salaried employment during the tenure of the award.
- Fellowship-holders will be allowed to undertake a maximum of 12 hours of teaching, tutorials, assistance or demonstrations duties per week on average during the year of study and may be remunerated for these duties, provided that they are reimbursed at a rate not exceeding the normal institution tariff for services rendered.
- ONLY applicants located at the targeted DST supported renewable energy research platforms will be considered, i.e. Wind Spoke (US &UCT), Solar PV Spoke (NMMU & Forth Hare), Solar Thermal Spoke (US & UP) and COALGAE (NMMU).
- Preference will be given to applications that have the supervisor's endorsement of the proposed project.

## 5.2 Equity

In line with the national imperative of equity and redress, the programme prioritises support for appropriately qualified blacks, women and disabled students without sacrificing quality. Scholarships and Fellowship funds are allocated with every attempt being made to meet the programme targets. This call will give preference to candidates meeting the gender and equity targets (listed below) of the programme.

◆ Black students	(African, Coloured, Indian/Asian South Africans)	80%
◆ Women students	(African, Coloured, Indian/Asian, White South Africans)	55%
◆ Students with disabilities	(African, Coloured, Indian/ Asian, White South Africans)	4%

## 5.3 South African versus Foreign Students

On aggregate, the awards are targeted in the following manner:

- ◆ 87% South African (including permanent residents)
- ◆ 5% SADC
- ◆ 4% rest of the African continent
- ◆ 4% from non-African countries.

## 5.4 Conditions of award for the RSES Postdoctoral Fellowship

The management of the RSES Programme is by the NRF who is mandated by the National Research Foundation Act, Act No.23 of 1998 to promote and support research. The NRF targets high caliber scholars and fellows on the basis of merit (qualifications, experience,

research outputs and proposed research) through selection employing NRF peer review processes. Despite the obligation to meet race and gender targets, quality remains the desired outcome.

- The award of a RSES Postdoctoral Fellowship will be based on past, current and potential academic performance. Selection criteria will include academic merit, promise of research ability, leadership qualities and previous awards, various prizes and honours.
- In addition to the above criteria, the award will be based on the feasibility and merit of the applicant's research project proposal.
- A list of successful candidates will be published on the NRF website as soon as the internal NRF approval processes for the award are finalised.

## 6. How to apply for funding

Applicants can apply by following the steps below:

- Applications must be submitted via email and in a PDF format of the RSES Postdoctoral Application Form to the National Research Foundation (NRF).
- **Applications must be submitted to Mrs Zikhona Lose via email at [Zikhona.Lose@nrf.ac.za](mailto:Zikhona.Lose@nrf.ac.za).**
- Remember to complete all sections of the application form
- Please attach the necessary documents to your application in **one PDF file in the following order: ID document, proof of permanent residence (if applicable) and certified academic transcripts.**
- Should you not follow the guidelines for attaching the necessary documents your application will not be considered.
- Remember to **submit** your application on completion.
- Completed applications should first be submitted to the host institution for verification before being forwarded to the NRF for further processing.
- Incomplete applications will not be considered.
- Applications that do not meet the eligibility criteria will not be considered (please refer to call document for details on eligibility for the RSES Postdoctoral Fellowship Call).
- Please contact the university research office if you have any queries.
- The closing date for submitting applications to the NRF is **3 August 2015**.
- The institutional closing date for submissions is **5 August 2015**.
- **Please take note of your institutions internal closing dates as these may be set before the actual call closing date.**

## 7. Scoring of proposals

### 7.1 Review process

This proposal assessment tool has been designed primarily on the basis of the RSES programme objectives, priorities and criteria. Please note the following:

- Proposals are assessed by a panel of researchers and practitioners who grade applications according to the parameters in the proposal assessment tool and award scores up to a maximum for each criterion.
- The level of funding, or a decision not to fund, is based on the utilisation of the outcome of the proposal assessment tool. Not all “fundable” projects, as recommended by the review panel, will necessarily be funded as budget may be a limiting factor.
- The panel adjudication of proposals strongly guides the RSES management team in the finalisation of the award.

### 7.2 Scorecard

The following scorecard will be utilised to assess the alignment of the application submitted with the guideline as published:

Criteria	Description	% Weighting
<b>Track Record of Applicant</b>	This refers to past research outputs recognised by the NRF. This refers to outputs such as the professional development of the applicant; journal articles; conference presentations and proceedings; books and book chapters; and patents. Reviewers will be required to comment on whether the standing and research record of the researcher suggest that the applicant has the appropriate research experience to undertake the proposed research.	20%
<b>Research Proposal</b>	<p>This refers to scientific contribution; originality and new knowledge; interdisciplinary or multidisciplinary aspects; match between the research question and the proposed research methodology and alignment with the applicant's institutional strategy and/or any national research strategy.</p> <p>Scientific and Technical Quality – Reviewers will evaluate whether the project will make a contribution to new knowledge and new methodologies in the field; apply existing knowledge and methodologies in the field; involve unique application of existing knowledge and methodologies in the field; or utilise the application of existing knowledge and methodologies in the field.</p> <p>Interdisciplinary or Multidisciplinary aspects – Reviewers will assess whether Interdisciplinary or Multidisciplinary aspects have been fully, partially or not explored in the</p>	30%

	research proposal.	
<b>Project Management</b> <ul style="list-style-type: none"> <li>• <b>Project organisation</b></li> <li>• <b>Project scheduling</b></li> </ul>	<p>Project organisation refers to how project teams and human resources are composed; the roles, responsibilities and accountabilities of team members; the proposed research activities; and the supervision.</p> <p>Project scheduling refers to the work breakdown of the project to ensure that specific outcomes are achieved; as well as the objectives and associated timelines in place to divide the scope of work into manageable activities.</p>	30%
<b>Expected Outputs</b>	This refers to NRF recognised research outputs such as the professional development of the applicant; journal articles; conference presentations and proceedings; books and book chapters; and patents. Successful applicants will be expected to deliver on all anticipated outputs or risk suspension of their funding. Reviewers will be required to assess whether the proposed outputs are fully-, partially- or not achievable within the given timeframe.	20%

**Contact persons:**

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