

FOCUSED CALL FOR SARChI RESEARCH CHAIRS - 2009

The South African Research Chairs Initiative (SARChI) is a human intervention by the government of South Africa, led by the Department of Science and Technology (DST) and the National Research Foundation (NRF). It is designed to significantly expand the scientific research base of the country in a way that is relevant to national development and in support of making South Africa an internationally competitive global knowledge economy.

The NRF is pleased to announce that the next call for SARChI Research Chairs pre-proposal will open on 1 September and close on 30 October 2008. The call will open in the following areas:

1. **Mathematics education:** As a result of joint funding between DST and the FirstRand Foundation up to six chairs will be supported for the period of five years (2009- 2013). The vision is for these chairs to serve as beacons of excellence by initiating and co-ordinating teacher education and research projects that focus on improving the quality of mathematics teaching and learning. The initiative intends to use the existing experience and expertise of the selected chairs to address the crisis that exists in mathematics education in South Africa. The FirstRand Foundation South African Maths Education Chairs Initiative has four interrelated objectives:
 - a. To improve the quality of teaching of in-service mathematics teachers at previously disadvantaged secondary schools
 - b. To improve the mathematics results (pass rates and quality of passes) in previously disadvantaged secondary schools as a result of quality teaching and learning
 - c. To research sustainable and practical solutions to the mathematics crisis
 - d. To provide leadership in mathematics education and increase the dialogue around solutions for the mathematics education crisis.

Budget: The maximum annual budget per chair is R2 million.

2. **Social Sciences and Humanities:** The Science & Technology for Social Impact Sub-Program of the DST seeks to establish up to seven chairs in

Social Sciences & Humanities for a period of up to 15 years based on peer review assessed performance. As such this DST sub-programme is calling for proposals from suitably qualified candidates in the following thematic areas:

- a. Community-based grassroots innovation,
- b. Development economics (poverty studies)
- c. Social cohesion
- d. Development planning & modeling
- e. Social change/dynamics
- f. Econometric modeling
- g. Statistics (methodologies)

Budget: The maximum annual budget per chair is R2.5 million.

3. **Indigenous Knowledge Systems:** This chair will focus on studying how an indigenous knowledge system such as South Africa's can enter the global knowledge in its terms rather than in terms laid out by the North. It will look at stimulating the development of a knowledge system which is complementary to the global system rather than supplementary to it for a period of up to 15 years based on peer review assessed performance.

Some of the programmes under the chair might cover the following areas:

- a. What the knowledge project of postcolonial societies is and how this relates to the global knowledge system. This will be done in a comparative mode with a set of partner institutions in India, Brazil and Senegal
- b. The role of universities and other knowledge intensive institutions in these postcolonial contexts. In other words this will begin by challenging the perceived notion that these institutions are dislocated from their local contexts and to engage with how they are to re-imagine themselves
- c. Ask what the curriculum project of these universities is in these contexts
- d. Establish safe spaces in which conversations between different knowledge traditions in our society may take place as a way of understanding the social construction of knowledge in complex situations.

Budget: The maximum annual budget for this chair is R2.5 million.

4. Nanotechnology for Water: The DST has identified the use of SARChI as one of the enabling mechanisms in implementing the National Nanotechnology Strategy as well as advancing the development of nanotechnology in South Africa. The 10-Year Nanoscience and Nanotechnology Research Plan identifies issues such as the supply of clean water, water scarcity, access to water and water pollution (effluent treatment) as key challenges faced by the country today. Nanotechnology has a potential in:

- a. The development of water purification modules
- b. Development of biodegradable stimuli-dependent nano particles for the delivery of agents used in water treatment,
- c. Minimization of contaminants through the use of nano particles,
- d. Development of sensors for detecting chemical pollutants
- e. Preservation of water cleanliness,
- f. Development of alternative and cost effective systems for sea water desalination
- g. Develop system for water recycling at a point of usage
- h. Etc.

The Research Chair in Nanotechnology: Water Research would address the above and a myriad of other pertinent issues for a period of up to 15 years based on peer review assessed performance.

Budget: The maximum annual budget for this chair is R2.5 million.

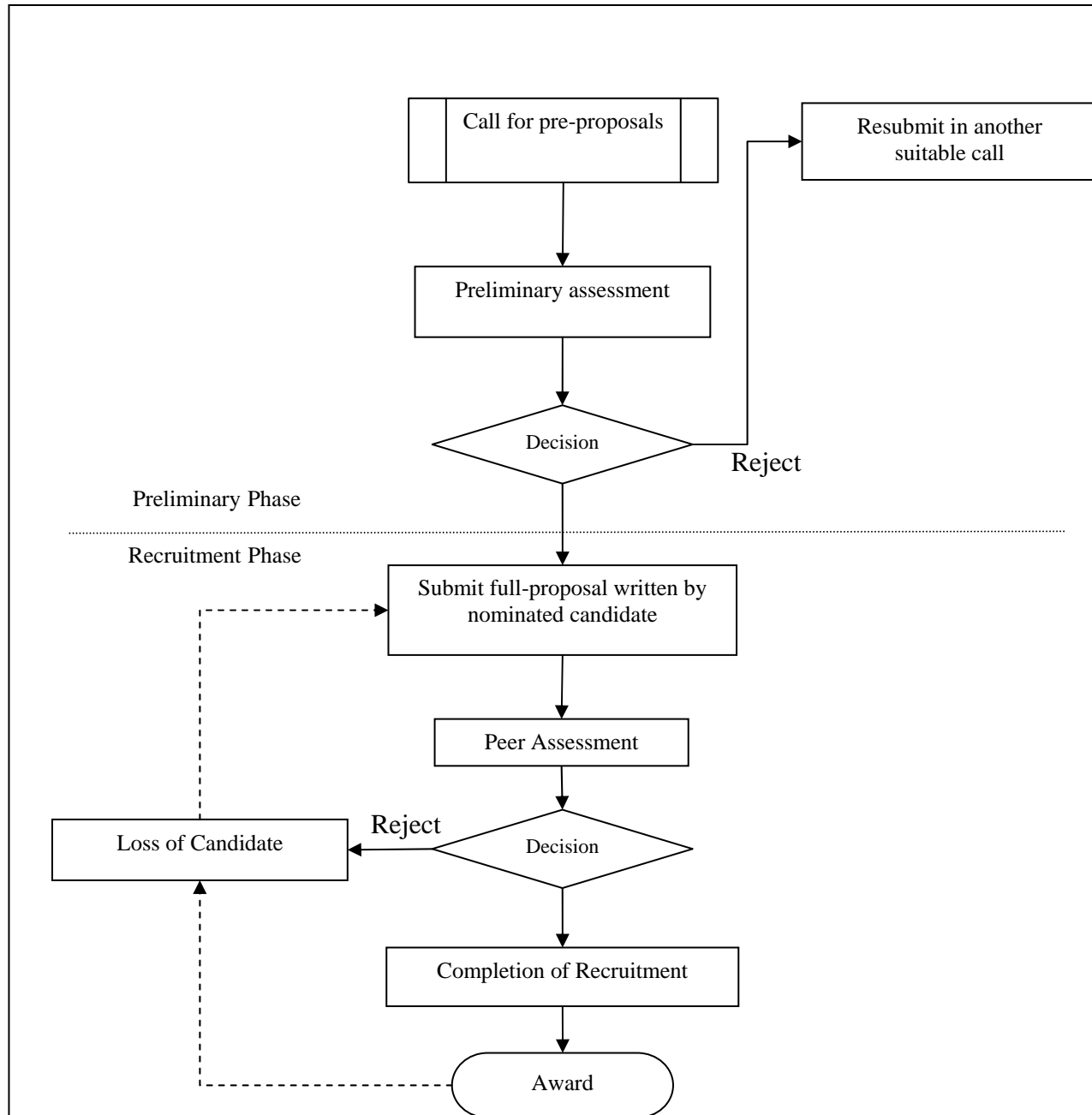
Selection Process:

The process will be divided into two parts:

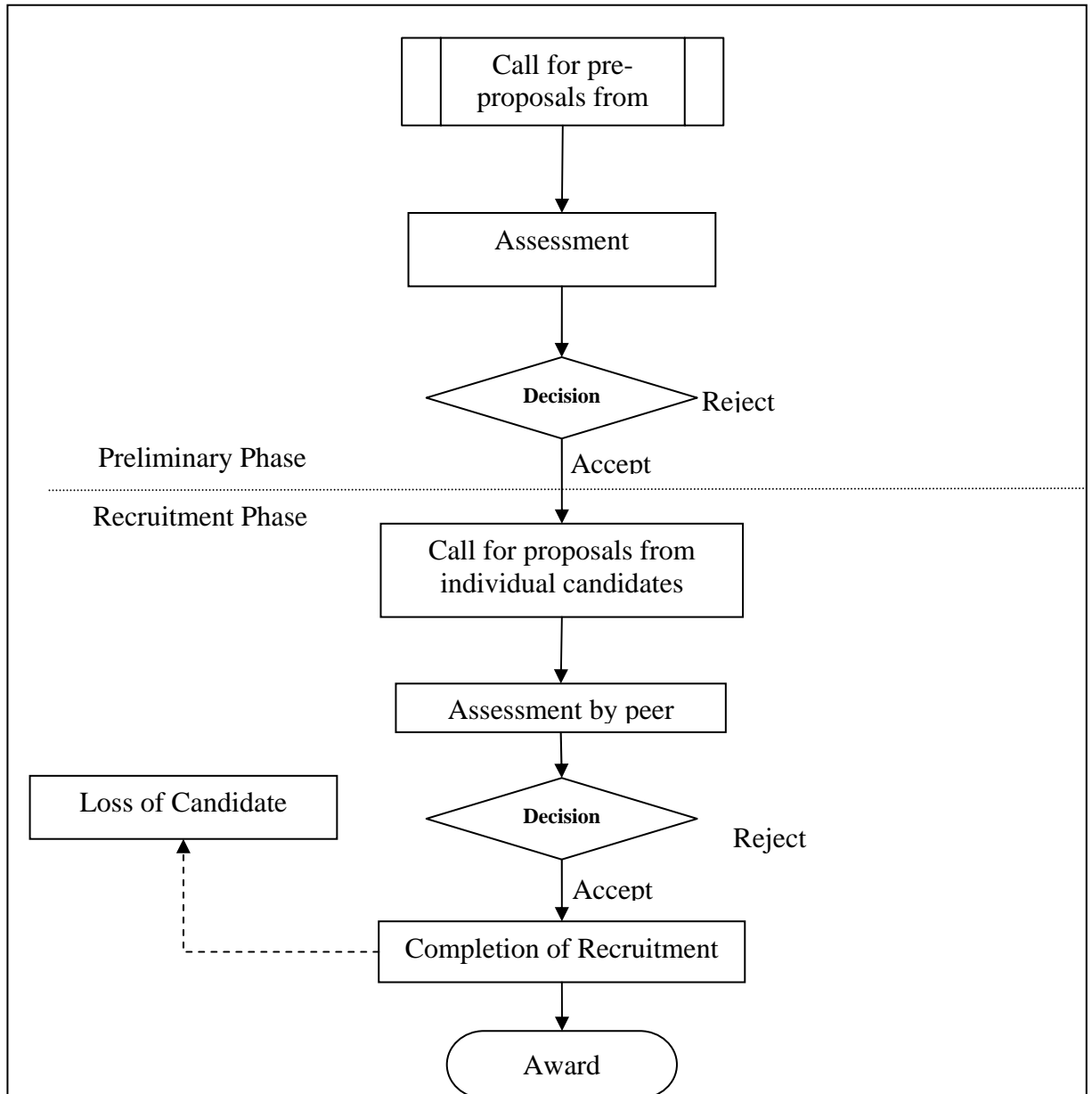
1. Pre-proposal focused on the selection of institutions that will host the chairs.
2. Full-proposal focused on the proposed research (or activity) agenda. This will be written by the candidate and will include a five year budget proposal.

The selection process used will be based on independent peer review with final decisions taken by senior management of the FirstRand Foundation, DST and the NRF, where appropriate.

The submission and selection process of all Chairs, with the exception of FirstRand Foundation South African Maths Education Chairs Initiative, will follow the route below (as stipulated in Fig 1 of the guide). [View the SARChI guide : http://www.nrf.ac.za/sarchi/sarchi_guide_082008.pdf](http://www.nrf.ac.za/sarchi/sarchi_guide_082008.pdf)



In the FirstRand Foundation South African Maths Education Chairs Initiative the applicant search is independent of the University and will undertake the route below: View the FirstRand Foundation South African Maths Education Chairs Initiative guide at http://www.nrf.ac.za/sarchi/firststrand_guide_2008.pdf



Download the SARChI pre-proposal application form

**Download our latest Q & A document for the South African Research
Chairs Initiative**

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