



UNIVERSITY of
RWANDA

CENTRE FOR POSTGRADUATE STUDIES (UR CPS)

African Centre of Excellence for Innovative Teaching and Learning Mathematics and Science (ACEITLMS)

Call for applications for PhD by Research Programmes Academic Year 2019/2020

The African Centre of Excellence for Innovative Teaching and Learning Mathematics and Science (ACEITLMS) based at the University of Rwanda-College of Education (UR-CE) is pleased to invite applications from interested and qualified candidates for admission in the following PhD programmes:

- PhD by Research in Biology Education
- PhD by Research in Chemistry Education
- PhD by Research in Mathematics Education
- PhD by Research in Physics Education

1. About ACEITLMS

The ACEITLMS is one of the African Centres of Excellence (ACEs) supported by the World Bank. The main aim of the centre is to strengthen human capacity in the delivery of quality teaching and learning of mathematics and science in Rwanda and across the region, in collaboration with regional and international institutions. The centre's main activities are: (i) teaching, learning and training (ii) research and (iii) community outreach. For teaching and learning, the Centre is running PhD and Masters programmes whose graduates are expected to bring quality and innovation into teaching and learning of mathematics and science for economic development of the African continent. In this regard, the ACEITLMS will offer financial support to selected Rwandan and other African citizens to pursue studies in PhD (by research) in Biology, Chemistry, Mathematics and Physics Education during academic year 2019-2020.

2. Eligibility

Candidates applying for the ACEITLMS-PhD (by research) programme should have an MSc degree in Mathematics/Science (Biology, Chemistry and Physics) with an undergraduate degree in Education or an undergraduate degree in mathematics/science subject(s) with a Master's degree in Education. The candidate must have sufficient knowledge of English, which will be the medium of instruction.

3. Application requirements

- A detailed curriculum vitae of the applicant
- Notarized copies of previous degrees/certificates and transcripts
- A motivation letter describing the candidate's motivation to join one of the programmes mentioned above.
- Two letters of recommendation from Lecturers/supervisors from previous educational institutions,
- A recent passport sized photograph and a copy of ID (or Passport).

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- vi) An abstract of Master's programme dissertation
- vii) A PhD research concept note describing the research problem, the purpose and objectives of the research, the methodology, expected outcomes and its expected impact in the area of study (see Format in Appendix 1).
- viii) Sponsorship letter from an organization (if any, added value to the application).
- ix) A proof of payment of non-refundable application fee 10,000RWF (12USD) for nationals and members of East African Community (EAC) and 12,000RWF (14USD) for others. The application fees are payable to the UR-ACEITLMS Account Number detailed below:

| UR-ACEITLMS | Account Number in Frw | Account Number in USD | Bank Name | SWIFT Code |
|-------------|-----------------------|-----------------------|----------------|------------|
| | 00094-07744802-79 | 00094-07744803-80 | Bank of Kigali | BKIGRWRW |

NB:

- Candidates who have completed their degrees/diplomas from foreign universities are also required to submit their degrees/diplomas' equivalence provided by the Higher Education Council (HEC) of Rwanda.
- Female candidates and applicants with disabilities are encouraged to apply.
- Candidates who fulfill admission requirements will have to pass interview with the ACEITLMS.

4. Place of Study

University of Rwanda- College of Education, Rukara Campus

5. Mode of attendance, duration and commencement

This PhD programme is a full time research study programme for a three year period, maximum four years. The programme will start by September 2nd, 2019. All students will be provisionally admitted and the final admission will be completed after approval of the research proposal by the appropriate organs of the UR-CE.

6. Payments and fee structure for Postgraduate Studies

See the University fee structure downloadable from the University of Rwanda's website: https://ur.ac.rw/IMG/pdf/fees_structure_2018_2019_combined-pivote.pdf

7. Application Procedure

- Go to UR CPGS Webpage (<https://www.postgraduate.ur.ac.rw/>)
- Go to Student Portal and click to (New Application)
- Fill the **Biographical Form** and click (Save) at the end
- You will get "**Your Student ID Reference Number**" and create PIN.
- Please keep this ID Reference Number as it will be your identification for your study and all transactions at UR.
- Go to the Bank and pay your application fees using your created Student ID Reference Number (10,000FRW (12USD) for Rwanda and EAC candidates and 12,000FRW (14USD) for International Students).
- Go back to Student Portal on (www.postgraduate.ur.ac.rw)



- *On the right panel under Registered Users, put your Student ID Reference Number and create PIN. You will get a link where there is a Form for Application.*
- *Fill the Application Form and Save at the end.*

Applicants must submit the soft copies of all documents (*as specified in point 3 above and saved as one file in PDF, the name of the file must be the reference number.*) through the following email addresses: admissions.pgs@ur.ac.rw, aceitlms@ur.ac.rw and florinsanga@gmail.com

8. Opportunity for funding

There are scholarships opportunities available on a competitive basis. The Financial support shall be provided to selected candidates for up to four years. The support will initially be granted for one year renewable upon a successful completion of the first year.

Self sponsored applicants are highly encouraged to apply.

9. Key dates

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| i. Call for application | 6 th May 2019 |
| ii. Deadline of application | 26 th June 2019 |
| iii. Announcement for short listed candidates | 10 th July 2019 |
| iv. Interviews | 15 th -19 th July 2019 |
| v. Final selection of candidates | 26 th July 2019 |
| vi. Start of the Programme | 19 th August 2019 |

10. Notification of Selection

Selected candidates will be informed by email.

11. Address and contact details

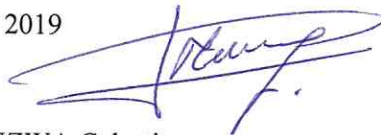
For any additional information, clarification or inquiry, please do not hesitate to contact:

- Postgraduate Studies Officer. Tel: (+250) 786147759; email: jmutaganda@ur.ac.rw
- Dr. Florien Nsanganwimana, Head of Research, ACEITLMS. Tel: (+250) 783891757; email: florinsanga@gmail.com

ACEITLMS websites: www.aceitlms.ur.ac.rw

E-Mail: aceitlms@ur.ac.rw; Telephone: +25078822103

Done at Kigali, on 6th May 2019




Dr. Celestin NTIVUGURUZA Celestin

Acting Director, University of Rwanda Centre for Postgraduate Studies (UR CPGS)

APPENDIX 1: PhD concept note format

1. Guidelines for a PhD research concept note *(To be strictly applied)*

- i. **Cover page** *(with the applicant's personal information)*
- ii. **PhD Research area** (See guidelines in point 2 below)

- iii. **Research Title** *(no more than 15 words)*
- iv. **Project Summary:** Here provide an overall description of your anticipated PhD research concept and what you want to achieve. Describe in general terms the problems you want to address. *(Maximum 500 words)*
- v. **Project Problem and Outputs:** Description and background of the research problem(s) you intend to address and descriptions of the individual outputs you expect to realize(300 words)
- vi. **Literature Review:** Provide a description of the methodology and research approach that have been used by previous researcher on the problems you wish to research in your PhD study. Based on the reviewed literature, describe the existing knowledge and experience that you will build on from your own research or that of others, and how your PhD project will contribute to new scientific knowledge. *(500 words maximum)*
- vii. **Policy implications of the research (if any):** Please provide an indication of how your research addresses the following: How relevant are the research outputs to policy change for development? *(200 words maximum)*
- viii. **Expected users of the research:** Who will use your research results – during your project, and at the end? (Organizations, Educators, Researchers, Policy Makers, Farmers, Community groups, etc.) *(300 words)*

2. Research areas

Research topics should mainly focus on (but not necessarily limited to) the following:

- i. Issues in teaching and learning of science and mathematics
- ii. Teaching approaches, curricula and assessment methods, experimental problem-solving in science and mathematics
- iii. Scientific and mathematical thinking in students at school and college level
- iv. ICT integration in teaching and learning of science and mathematics
- v. Visual and spatial modes in STEM learning
- vi. Socio-cultural and gender factors in learning STEM
- vii. Science-Technology-Society-Environment Education
- viii. Structure and dynamics of knowledge
- ix. Space and environmental science education

