

**Center Title and Acronym:** Africa Center of Excellence in Materials Product Development and Nanotechnology (MAPRONANO ACE)

**Host University and Country:** Makerere University, Uganda

**Center Website Address:** [www.cedat.mak.ac.ug](http://www.cedat.mak.ac.ug) or [www.mak.ac.ug/cedat](http://www.mak.ac.ug/cedat)

**Center Director and email address:** Prof. John Baptist Kirabira [jbkirabira@cedat.mak.ac.ug](mailto:jbkirabira@cedat.mak.ac.ug)/[kirabirajb@gmail.com](mailto:kirabirajb@gmail.com)

**Primary Thematic Discipline of Center:** Materials and Product Development, Nanotechnology and Nanomedicine

**Brief Description of Center:** The Center was developed out of the need to strengthen research and training in the thematic areas of materials science and engineering, nanotechnology and nanomedicine in order to develop human resource capacity in applied science engineering disciplines for the development of the great lakes region. MAPRONANO ACE will also offer highly specialized short courses in welding technology, health safety engineering, Oil & gas, Monoclonal and Nanobodies generation, Bioinformatics & Next Generation sequencing techniques.

**Key Objectives:**

- 1) To increase capacity of research and training materials engineering and product development
- 2) To enhance teaching and training in Nanotechnology and Nanomedicine
- 3) To promote linkage among academics, industry practitioners and policy makers
- 4) To promote research spins offs for industrial development

**Outcomes**

- a) State of the art research Laboratory for Materials, Nanotechnology and Nanomedicine in the Eastern and Southern Africa Region.
- b) Graduate professional scientists who can contribute to regional development through research and development.
- c) Accredited Master’s Programs (curricula) in Materials and Product Development and Nanotechnology
- d) Well-trained technicians and engineers in Materials Science, Product design and Nano-enabled technologies
- e) Strengthen research and publication
- f) Strengthen teaching quality through Pedagogical training.

**Major Accomplishments to Date:** 5 PhD students admitted nationally, Annual steering committee meeting held between ACE and UIC, Procurement of Office furniture and IT Equipment in final stages, drafted Short courses curricula developed, M.Sc./B.Sc. curriculum review in progress, 5 students identified from University of Rwanda that will benefit from ACE research funding, Laboratory Space identified.

**Primary Regional and Global Partners:**

Senior Faculty	Email Address	Research Area
Dr. Shital Mahindra Maru, University of Nairobi	<a href="mailto:smaruspecial@gmail.com">smaruspecial@gmail.com</a> or <a href="mailto:Shital.maru@uonbi.ac.ke">Shital.maru@uonbi.ac.ke</a>	Pharmaceutics (Targeted Drug therapies/formulations)
Prof. Abhijit Biswas, USA	<a href="mailto:abtbtf@yahoo.com">abtbtf@yahoo.com</a>	Materials Science & Nanotechnology
Prof. Constantine Megaridis, UIC, USA	<a href="mailto:cmm@uic.com">cmm@uic.com</a>	Materials Science, Energy, Nano/Microfluidics systems
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Dr. Ineke Malsch, Netherlands	<a href="mailto:malschtechnoaluation@xs4all.nl">malschtechnoaluation@xs4all.nl</a>	Nano-Ethics