

CURRICULUM VITAE OF STEPHEN RWABONA KATASHAYA

Part 1: Personal Details

Surname	Katashaya
Other Names	Stephen Rwabona
Date of Birth	23 rd March 1951
Citizenship	Dual Uganda and South Africa citizen
Work Address	Department of Physics and Mathematics, Kabale University, P O Box 317, Kabale, Uganda
Contact Details	Mobile: (+256)78 730 7358 Email: katashayasr@gmail.com

Part 2: Educational Details

Qualification	PhD (Doctor of Philosophy)
Specialisation	Electrical Engineering Science
Institution	University of Essex, United Kingdom
Year	1980 – Dec 1982. Awarded 1983.
Type of Qualification	Coursework and Research Coursework at MSc level: Telecommunications, Computer and Software Systems Thesis Title: Depolarisation Properties of Metal and Dielectric Space Frame Radomes

Qualification	MSc (Master of Science)
Specialisation	Physics and Electronics
Institution	University of Dar es Salaam, Tanzania
Year	July 1977 – Dec 1979. Awarded 1980.
Type of Qualification	Coursework and Research Coursework: Physics and Electronics Thesis Title: Coupled Phonon-Photon Modes at Interfaces of Solids

Qualification	BSc (Bachelor of Science Honours)
Specialisation	Physics and Mathematics
Institution	Makerere University, Kampala, Uganda
Year	March 1972 – March 1975. Awarded 1975.
Type of Qualification	Graduated with Upper 2 nd Class BSc Honours degree.

Qualification	Diploma in Datametrics
Specialisation	Computer Science and Information Systems
Institution	University of South Africa (UNISA)
Year	1998
Type of Qualification	Coursework: Computer Science and Information Systems

Part 3: Work Experience

Job Title **Senior Lecturer and Head of Department (Physics and Mathematics)**
Institution Department of Physics and Mathematics, Kabale University, Uganda
Job Description Lecturing, curriculum development and research supervision in Physics and Electronics.
Period January 2017 to date

Job Title **Senior Lecturer**
Institution Department of Physics and Electronics, North West University, Mafikeng South Africa
Job Description Lecturing, curriculum development and research supervision in Electronics.
Period February 2009 to December 2016

Job Title **Senior Lecturer**
Institution Department of Physics, Medical University of University of Southern Africa (MEDUNSA), P O Box 94 Medunsa, South Africa.
Job Description Lecturing, curriculum development and research supervision in Electronics and Physics
Period October 2005 to January 2009

Job Title **Senior Lecturer**
Institution Department of Physics and Electronics, North West University, Mafikeng South Africa
Job Description Lecturing, curriculum development and research supervision in Electronics.
Period January 2004 to September 2005

Job Title **Manager – Centre for Applied Radiation Science and Technology (CARST)**
Institution Faculty of Agriculture, Science and Technology, North West University, Mafikeng South Africa
Job Description Overall management of CARST involving implementation of CARST's Strategic Plan, assurance of quality teaching and research programmes, management of centre's human and financial resources and liaison between industry and the centre.
Period March 2001 to December 2003 (Seconded from Physics Department of Physics and Electronics)

Job Title **Senior Lecturer and Head of Department**
Institution Department of Physics and Electronics, North West University, Mafikeng South Africa
Job Description (a) Lecturing, curriculum development and research supervision in Electronics.
(b) Head of Department
Period March 1998 to February 2001

Job Title	Senior Lecturer
Institution	Department of Physics, University of Transkei (renamed Walter Sisulu University), Umtata, South Africa
Job Description	Lecturing, curriculum development and research supervision in Physics specializing in Electronics.
Period	July 1989 to February 1993
Job Title	Lecturer
Institution	University of Bophuthatswana (later University of North West)
Job Description	Lecturing in Physics and Electronics
Period	March 1988 to June 1989
Job Title	Lecturer
Institution	National University of Lesotho, Roma, Lesotho
Job Description	Lecturing in Physics and specialising in Electronics.
Period	January 1986 to February 1988.
Job Title	Lecturer
Institution	Department of Mechanical Engineering, Harare Polytechnic, Harare, Zimbabwe.
Job Description	Lecturing in Physics and Electrotechnology.
Period	January 1985 to December 1985.
Job Title	Temporary Lecturer
Institution	Department of Physics, University of Nairobi, Kenya
Job Description	Lecturing in Physics.
Period	June 1984 to December 1984.
Job Title	Research Physicist
Institution	Tropical Pesticides Research Institute (TPRI), Arusha, Tanzania
Job Description	Research and development work in pesticides dispersal techniques and devices.
Period	June 1976 to June 1977.

Part 4: Research, Publications and Lecturing

4.1 Research Publications

Development of a low-cost data acquisition system for total solar insolation and temperature monitoring, *Asia Life Sciences, Supplement 9: pp 263-274 (2013)*.

A low-cost embedded web server for an institutional e-Learning strategy, *Proceedings of the 2011 3rd International Conference on Electronics Computer Technology (ICECT 2011), April 8-11, 2011, Kanyakumari, India*.

Radome cross-polarisation on Intelsat Standard A communication satellite antennas, *Electronics Letters, Vol. 25, No.8 (1989), pp 506-507*.

Dielectric Space Frame Radomes for Satellite Communications, *Int. Journal of Satellite Communications, Vol. 5, pp 227-232 (1987)*.

Metal Space Frame Radomes for Satellite Communications, *Int. Journal of Satellite Communications, Vol. 2, pp 61-72 (1984)*

Frequency dependence of some functions associated with surface polaritons, *Phy. Status Sol., (B), No. 93 (1979)*

4.2 Current Research

My current research is in embedded systems development for real-time data acquisition and control.

4.3 Lecturing and Curriculum development

I have in the past and currently developed and lectured courses in Physics and specifically in Electronics. I have in particular developed a complete Electronics curriculum for both undergraduate and postgraduate Electronics in use at North West University since 1999. I am currently lecturing in analogue and digital systems, signals and systems, embedded systems and electromagnetics.

4.4 Other capabilities and expertise

I have experience and expertise in both high-level and low-level computer programming across several development platforms. I am proficient in programming design in Fortran, Pascal, Visual Basic, Python, MATLAB, C and C++. I have experience and I am currently involved in embedded systems development.

5. Referees

Professor N. Ayiga
Director of Research and Publications
Kabale University
P O Box 317 Kabale Uganda
Email: nayiga@kab.ac.ug
Mobile (+256) 75 555 2620

Dr R .O. Ocaya
Department of Natural Sciences
University of Free State, Qwaqwa Campus
Puthaditjhaba, South Africa
Tel: (+27) 58 718 5301
Mobile: (+27) 73 640 0338
Email: ocayaro@ufs.ac.za

Dr P .O. Abedigamba
Department of Physics
North West University
Mafikeng, South Africa
Mobile: (+27) 71 827 1001
Email: ocayaro@ufs.ac.za

Dr P O

This curriculum vitae was updated on April 9th 2019