

Name: Robert Sacha

Surname: Bogadi

**Qualifications: B. Sc. (hons.)
M. Sc.
P.G. Cert. Ed.
Ph.D.**



**Position: Research Associate
Department of Mathematics
Faculty of Applied Sciences
Durban University of Technology**

Email: robertb@dut.ac.za / bogadi.robert@gmail.com

Biography

I completed my undergraduate studies at the University of the Witwatersrand, Johannesburg, majoring in physics, mathematics and chemistry. Thereafter, continuing to obtain a B.Sc. (hons.) in physics. My interests during this time were inclined towards experiment rather than theory which led me to undertaking a masters in physical chemistry. My research involved X-ray crystallographic studies of solid-state reactions in organometallic complexes. I then had an opportunity to go to the State University of New York at Buffalo, working as a research assistant and tutor for two years. On returning to South Africa, I became involved in education and taught at a school whose curriculum and methods were based on the american ACE system. During this time, I also completed a P.G.Cert.Ed. through UNISA and obtained qualifications in music. Thereafter I looked for opportunities in higher tertiary education and became a tutor at the mathematics department in Howard College, UKZN. At this time, I pursued doctoral studies in mathematics under the supervision of Prof. M. Govender, specifically investigating relativistic astrophysical systems. I obtained a Ph.D. in 2017. In 2019 I obtained a postdoctoral fellowship from the Durban University of Technology and have been busy with research activities up until present. Numerous articles have been published in high impact journals.

Research interests

My research interests include:

- Mathematical modelling of relativistic stellar objects
- Non-linear differential equations
- X-ray crystallography and solid-state reactions
- Physics and theoretical chemistry
- Structure of music