Lulama Patrick Mciteka, Ph.D.

Name: McitekaCitizenship and Race: South African (African)First Names: Lulama PatrickMobile: +27 82 633 7114Address : 3 Baron Road Heritage Park Somerset West, 7130E-mail: lulamamciteka@yahoo.comDate of Birth and Identity Number: 26 August 1970 (7008265442083)Motivation:Motivation:An enthusiastic, adaptive and eager person who is highly self-motivated,
determined and proactive individual. I also enjoy working with other people.

MBA

Management College of Southern Africa (Mancosa)

Strategic Management, Strategic Marketing Management, Human Resources Management, Information and Knowledge Management, Managerial Economics, Operations Management, Financial Management, Research and Quantitative Methods, and Healthcare Management, and Dissertation (Entrepreneurship).

Education: Currently employed as a Chemistry lecturer at the University of the Western Cape 2018 January - presently Post-doctoral Research Assistant 2012 July – 2012 December Department of Chemistry, Rhodes University, Grahamstown Continued research on the chemistry of camphor-derivatives Ph.D. in Chemistry Rhodes University, Grahamstown 2007-2012 **Degree Awarded in April 2013** Title of thesis: Novel Applications of Morita-Baylis-Hillman Methodology in Organic Synthesis Methodology in Organic Synthesis (Funded by NRF, MRC and Rhodes University) Publications: 2 more anticipated publications from this work Â¹H NMR-Based Kinetic-Mechanistic Study of the Intramolecular Trans-esterification of 2-exo-3-exo-Dihydroxybornane Monoacrylate Esters. Duggan, Andrew R.; Mciteka, Lulama P.; Lobb, Kevin A.; Kaye, Perrv T. South African Journal of Chemistry; 2013, Vol. 66, p140 Synthesi of camphor-derived chiral auxiliaries and their application in asymmetric Morita-Baylis-Hillman reactions. Lulama P. Mciteka, Kevin A. Lobb and Perry T. Kaye ARKIVOC ; 2016 (v), 151-163. Supervisors: Prof P. Kaye and Dr K. Lobb

Brief Synopsis of Research:

The overall approach in the present investigation has been to explore applications of the Morita-Baylis-Hillman (MBH) reaction in asymmetric synthesis and in the construction of complex systems with medicinal potential. To this end, a series of varied camphor-derived acrylate esters was prepared to serve as chiral substrates in asymmetric Morita-Baylis-Hillman reactions. Attention has also been given to the application of MBH methodology in the construction of heterocyclic 'cinnamate-like' AZT conjugates, which were designed to serve as dual-action HIV-1 integrase-reverse transcriptase (IN-RT) inhibitors. A number of pyridine carboxaldehyde-derived MBH adducts were synthesized using methyl, ethyl and *t*-butyl acrylates in the presence of 3-hydroxyquinuclidine (3-HQ) as catalyst.

A full abstract will be available on request.

During my Ph.D. I have presented seminars, led and supervised undergraduate practical sessions and also conducted tutorial classes.

Master of Science

University of the Orange Free State, Bloemfontein 1997-1998 Degree Awarded in May 1999

Thesis Title:

Structure and synthesis of Flavan Oligomers From *Cassiana petersiana* (Funded NRF)

Publications: 2

- Structure and synthesis of butiniflavan-epicatechin and epigallocatechin probutinidins. Coetzee, Johan; Mciteka, Lulama; Malan, Elfranco; Ferreira, Daneel. Phytochemistry vol. 52 issue 4 October, 1998. p. 737-743.
- Structure and synthesis of first procassinidin dimers based on epicatechin, and gallo- and epigallocatechin. Coetzee, Johan; Mciteka, Lulama; Malan, Elfranco; Ferreira, Daneel. Phytochemistry vol. 53 issue 7 April, 2000. p. 795-804.

Supervisors: Prof E. Malan

Co-supervisors: Prof D. Ferreira and Dr J. Coetzee

Bachelor of Science (Honours), University of Fort Hare (1996)

Bachelor of Science, University of Fort Hare (1993)

Matriculation, Ndlovukazi High School (1988)

Employment:

01 January 2018 until present Lecturer, department of Chemistry University of the Western Cape, Cape Town July 2013-31 Dec 2017 Lecturer, Department of Biomedical Sciences Cape Peninsula University of Technology, Cape Town

01 July 2012 - 31 December 2012

Postdoctoctoral Research Assistant, Department of Chemistry, Rhodes University, Grahamstown

I worked as part of Prof P. Kaye's research group where I continued with exploration of camphor chemistry.

01 March 2010 – 28 February 2011

Lecturer, Department of Chemistry, Walter Sisulu University, East London

Due to financial constraints I had to abandon my PhD studies for a while and hence worked as a replacement lecturer at Walter Sisulu University teaching Organic Chemistry. My work involved teaching Organic Chemistry to 1st, 2nd and 3rd year students as well as the BTech class. That is, I had to present lectures, tutorials and conduct practicals.

01 January 2000-31 December 2003

Lecturer, Department of Chemistry, University of South Africa, Pretoria

My job entailed teaching Organic Chemistry mainly to 1^{st} years and at times to 3^{rd} years *via* distant-learning route, that is, contact teaching was very minimal.

1994-1995, 2005

Teacher, Department of Education (Nkwanca High School and Daliwonga Senior Secondary School, respectively)

Skills:

General skills in research project management. Specific expertise in:

Scientific Skillls: Chromatography (Flash, PLC, TLC, Chromatotron, HPLC, etc) NMR (400 and 600 MHz) IR Spectroscopy UV Spectroscopy Mass Spectroscopy Computer Modeling ChemWindows, IsisDraw, MestRec, etc.

Communication Skills:

Teaching skills (delivering lectures, tutorials, etc) Seminars Practical demonstrations

Time Management

Meeting many deadlines in my teaching duties Experience of juggling different tasks and bringing these to a final realization

Leadership Roles

- 1. Chairman of Chemistry Society (University of Fort Hare) (1993)
- 2. Secretary of Science Society (University of Fort Hare) (1993)
- 3. Organizer and exhibitor at Arbor Day Exhibition held in Queenstown (1994)
- 4. Representative of Department of Chemistry (UOVS) at the Year of Science and Technology Exhibition held in Bloemfontein (1998)
- 5. SRC (Culture) (University of the Free State) (1998)
- 6. Participated in setting up Chemistry Exhibition Show during Science Open Days held at UNISA (My student won front page on Pretoria News) (2001)
- 7. Representative of Department of Chemistry (University of South Africa) and exhibitor at Sasol Science Festival held in Grahamstown (2001)
- 8. MBChB 1 Class Captain (University of the Free State) (2004)
- 9. Sub-warden (House Boomplaas) (University of the Free State) (2006)
- 10. Head Student (Oakdene House) (Rhodes University) (2008)
- 11. Postgraduate representative (Chemistry) (Rhodes University) (2008)

Other Skills

Knowledge of research methodologies Information collection Writing and presenting reports

Languages

Xhosa-Good in speaking, reading and writing Sotho-Good in speaking Zulu-Good in speaking English-Good in speaking, reading and writing Afrikaans-Good in writing and fair in speaking

Additional

1993-2019

1. Chemistry tutor and demonstrator at Rhodes University, Department of Chemistry

Private tutor for Chemistry, Mathematics and Pharmaceutical Chemistry
Volunteer in teaching Mathematics and Science on weekends to local kids

4. Volunteer work at Frontier Hospital

5. Motivational Speaker (Eskom Science Expo) held at Rhodes University

6. Motivational Speaker and running Science Shows for Scifest Africa

7. Story-teller and praise singing during the African Languages Heritage Festival Week held at UNISA

8. Tutor for Mathematics, Science and Biology (Grade 11 and 12)

9. Private Tutor for Financial Management, Operations Management, and Research Dissertation Writing at Mancosa

9. Motivational Speaker and participated at the Cape Peninsula University of Technology Open Day

10. Motivational Speaker and participated during Science Open Day held at the University of the Western Cape

Supervision experience 2013-2019 CPUT BHSc (IV) 2016 Smith Clement (212187503)

The prevalence of bleeding tendencies in a private sector

2017

Jenkins Lamont 214308057

The incidence of TB in HIV patients

Lodewyk Courtney 212188984

A retrospective study of the prevalence of lung cancer at Groote Schuur

Hospital, from 2013 to 2014, to determine aetiology, based on age, race,

socio-economic

status, and the prevalence of an underlying disease

Moroane Dimpho 214261115

The incidence of acute bacterial meningitis in people between 201 and 40

in GSH

Mosala Lintle 21305705

The increasing incidence of Type 2 Diabetes among South African youth

UWC BSc (Honours) (Chemistry) 2018

Fortuin Brigette Althea 3477442

Synthesis and characterization towards 5-(ethoxymethyl)-2-

methoxyresorcinol from Porphyria capensis Kützing (Red Seaweed)

Parker Amina 3465786

Synthesis of a phloroglucinol derivative

UWC MSc

Ngwekazi Andisiwe 3440771

Voltammetry determination of metformin and its analogues using Cu

modified polymer electrode

Interests

Leisure Activities: Golf, Cycling (Bicycle tricks), Snooker, Table Tennis Hobbies: Poetry, Drama, Debating, Music

REFEREES

Prof. Kaye Supervisor Department of Chemistry Rhodes University Tel: 046 603 8268 e-mail: <u>P.Kaye@ru.ac.za</u>

Dr. Lobb Co-supervisor Department of Chemistry Rhodes University Tel: 046 603 8683 e-mail: K.Lobb@ru.ac.za

Dr. Tshentu Senior lecturer Department of Chemistry Tel: 046 603 8846 e-mail: z.tshentu@ru.ac.za

Dr. Aboua Lecturer Department of Biomedical Sciences Cape Peninsula University of Technology, Cape Town Tel: 021 959 6983 Email: <u>abouay@cput.ac.za</u>

Dr. Meyer Senior Lecturer Department of Biomedical Sciences Cape Peninsula University of Technology, Cape Town Tel: 021 959 6295

Prof. Khotseng Department of Chemistry University of the Western Cape Tel: 021-959-4031