

CURRICULUM VITAE



Zachary Njiru Nkunu

Bsc.(UEAB), MSc (UoN), PhD (In Progress)

PERSONAL INFORMATION

P.o Box 1410, Meru

Date of Birth: September 16, 1983

Marital Status: Married

Mobile:+2547024024618

Religion: Christian

Denomination: SDA

Email: nkunuzach@gmail.com
zacharynjiru@seku.ac.ke

CAREER OBJECTIVE

To secure a challenging and motivating position in a dynamic and reputable institution in order to expand my training and skills, learnings and contribute knowledge to the Chemistry scientific world.

PERSONAL PROFILE

I am an ambitious, qualified and experienced self-motivated individual and a team player with good analytical skills. Has ability to use technology in development and dissemination of scientific knowledge. Have good observation, critical thinking and communication skills. Ability to work towards set objectives with priority and on time with minimal supervision. Looking for challenging position in a reputable organization to expand my learnings, knowledge, and skills. Ready to learn and grow professionally and give service to the society.

EDUCATION QUALIFICATIONS

January 2020 – Present: Doctor of Philosophy in Chemistry, University of Nairobi
(PhD Programme: Your Ref: 10908602012)

PhD Proposal title: “occurrence, distribution and environmental impact of organophosphate residues in the lower Tana river catchment: a case study of river Kathita in Tharaka- Nithi county Kenya..”

Lead Supervisor: Dr. Deborah A. Abongo, Department of Chemistry, University of Nairobi

Other Supervisors: Dr. P. M. Guto, Dr. J. G. Kithure and Dr. V.O. Madadi, Department of Chemistry, University of Nairobi

2014 - 2018: Master of Science in Analytical Chemistry, University of Nairobi.

Thesis title: “Electrocatalytic decomposition of Tetrachlorvinphos in acetonitrile-water media using Cyanocobalamin”.

2003 - 2010: Bachelor of Science in Chemistry with a Minor in Physics, University of Eastern Africa, Baraton. Cumulative Grade Point Average (G.P.A): 2.76/4.00 scale.

1998 – 2001: Kenya Certificate of Secondary Education (K.C.S.E), Kiriiria SDA Secondary School. Mean Grade: B- (Minus).

1990 – 1997: Kenya Certificate of Primary Education (K.C.P.E), Gacigongoni Primary School. Total Score: 441/700 marks.

TEACHING AND OTHER WORK RELATED EXPERIENCE

November 2020 – February 2021: Graded SCH 204: Chemical Kinetics and Electrochemistry Laboratory Reports at Chiromo campus, University of Nairobi under the Supervision and guidance of Dr. P. M. Guto

January 2020 – Present: Part-time lecturer, Department of Physical Sciences, Main Campus, South Eastern Kenya University

Units Taught/Teaching: SCH 103: General and Physical Chemistry, **SCH 201:** Chemistry of Main Group Elements, **SCH 404:** Organometallic Chemistry, **SCH 405:** Further Chemical Kinetics and Electrochemistry, and **SCH 406:** Solid State Chemistry

Reference:

Dr. James Linturi - 0723833996

Email: jmugambi@seku.ac.ke

HoD, Department of Physical Sciences, SEKU

January 2020 –Present: Part-time Lecturer, Department of Natural Sciences (Chemistry) Catholic, Lang’ata Campus, University of Eastern Africa

Units Taught/Teaching: CHEM 308: Analytical Chemistry I, **CHEM 408** Analytical Chemistry II, and **CHEM 405:** Material Chemistry

Reference:

Dr. Carolyne Songa - 0724508575/0101454703

Email: cmutambi@cuea.edu
HoD, Natural Sciences, CUEA

March, 2011 – July, 2017: High School Teacher (BOM), Department of Mathematics and Physics, Kitui SDA Secondary School

Subjects Taught: Mathematics and Physics (Form 1-4)

Achievements: Organised two successful Physics academic trips to Gitaru Dam and Bamburi Cement industry at Athi-River, Nairobi

Other Resonsibilities:

- Evaluated and graded students' class work, laboratory work, assignments, and papers.
- Maintain student attendance records, grades, and other required records.
- Supervise students' laboratory work.
- Prepare course materials such as syllabi, homework assignments, and handouts.
- Compiled, administered, and graded examinations for students.

Reference: Mr. David Ntwiga, Deputy Principal Kitui SDA School - 0720384985

January – April, 2016: Lecturer, Kitui Campus, Thika School of Medical and Health Sciences

Units Taught: Biochemistry, Applied Biology and Applied Physical Sciences

Reference: Mr. Robert Ng'ang'a – 07023592447

September – December, 2012 and September –December, 2013: Lecturer, Department of Environmental Health Sciences, Kitui Campus, Kenya Medical Training College

Units Taught: Applied Physics and Applied Chemistry

HoD Environmental and Health Sciences, Kitui Campus, KMTC

July, 2010 – May, 2011: Worked as research assistant Intern, Department of Marine Ecology and Environmental Pollution Programme, Kenya Marine and Fisheries Research Institute (KMFRI), Mombasa Head Quarters

Duties and Responsibilities: Data collection (field and laboratory work), entry and reporting.

January – April 2008: Kiriiria SDA Secondary School

Subjects Taught: Chemistry and Physics (Form 2 and 4).

2009 – 2010: Part-time Laboratory assistant, Department of Chemistry, University of Eastern Africa, Baraton under Work-study programme.

Reference: HoD, Department of Chemistry, UEAB

RESEARCH AND PUBLICATIONS

Nkunu, Z. (2020). Electrocatalytic reduction and characterization of Tetrachlorvinphos in acetonitrile-water (1: 1) media in presence of cyanocobalamin. *Africa Journal of Physical Sciences ISSN: 2313-3317*, 4.

Nkunu, Z.N., Kamau, G.N., Kithure, J.G., and Muya, C.N. (2017). Electrochemical studies of potassium ferricyanide in acetonitrile-water media (1:1) using cyclic voltammetry method. *International Scientific Research and Innovation Technology*. 4, 52-58.

Nkunu Z. N. (2018). Electrocatalytic Decomposition of Tetrachlorvinphos in Acetonitrile-Water Media Using Cyanocobalamin. *Master of Science (Msc) Thesis*. University of Nairobi, Kenya.

PAPERS PRESENTED IN CONFERENCES, SEMINARS, WORKSHOPS

October 23-23, 2018: Presented a paper entitled, “Electrocatalytic Reduction and characterization of Tetrachlorvinphos in Acetonitrile-Water (1:1) Media in Presence of Cyanocobalamin,” at the College of Biological and Physical Sciences, Chiromo campus, University of Nairobi.

CONFERENCES/CONGRESSES/SYMPOSIA/SEMINAR AND PROFESSIONAL MEETINGS ATTENDED

April 21, 2021: Online Moodle Teaching training programme conducted via Zoom Platform at South Eastern Kenya University (**Series I**)

March 2020, September 2020 and April 2020: Attended online Teaching, examination setting and moderation, marking and entering scores in online grade sheets at the Catholic University of Eastern Africa via goole meet and other social network platforms.

February 11-14, 2019: Air pollution Training workshop at Chiromo Campus, University of Nairobi in collaboration with University of Leicester, UK.

6-8th November, 2018: Pan African Chemistry Network Congress 2018: Managing resources through Chemistry: Wealth not Waste at Chiromo Campus, University of Nairobi.

21 st September, 2018: Pan African Chemistry Network seminar 2018: (Homology Modelling and Computer aided Drug design)

April 21 – 26th, 2014: Kenya National Examinations Council (KNEC) & Kenya Educational Management Institute (KEMI) joint training for Physics paper (III) at Kamwenja Teachers Training College, Nyeri on April 2014.

April, 2012: Kitui SMASSE INSET Programme at Mulango Girls’ Secondary School from 15th-20th April, 2012. **Theme:** Further enhancement of Practice of ASEI-PDSI through study

and ICT integration.

March 17, 2007: 5th Exhibition by Kenyan Universities at Kisumu Hotel (Maseno University) organized by the commission of Higher education, (CHE).

September, 2007: Computer Literacy workshop at Baraton University, Organized by the University Library Department.

MEMBERSHIP OF PROFESSIONAL BODIES

2014 – 2016: Member of Royal society of Chemistry (RSC).

UNDERGRADUATE PROJECTS:

Nkunu Z. N. (2011). Nutrient pollution status in Mtwapa, Makupa and Malindi Creeks. *Bachelor of Science (Bsc) Project II*. University of Eastern Africa, Baraton, Kenya. Supervised by: Dr. Shadrack Mule M., UEAB. **(Not published)**.

Nkunu Z. N. (2010). Qualitative analysis of Lead, Cadmium and Chromium in Safaricom and Zain Scratch cards by UV/VIS Spectrophotometric method. *Bachelor of Science (Bsc) Project I*. University of Eastern Africa, Baraton, Kenya. Supervised by: Dr. Shadrack Mule M., UEAB. **(Not published)**.

REFEREES:

Dr. Mugambi J. Linturi,
Chairman,
Department of Physical Sciences,
South Eastern Kenya University,
P. O Box 170 -90200,
Kitui.
Mobile: 0723833996
Email: jmugambi@seku.ac.ke

Dr. J. G. Kithure,
Lecturer,
Department of Chemistry,
University of Nairobi,
P.O. Box 30197-00100
Nairobi.
Mobile: 0714013056
Email: jkithure@uonbi.ac.ke

Dr. P .M. Guto,
Senior Lecturer,
Department of Chemistry,
University of Nairobi
P.O Box 30197-00100,
Nairobi, Kenya.
Telephone: 0713887854
Email: Peterson.guto@uonbi.ac.ke