



THE TECHNICAL UNIVERSITY OF KENYA

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Faculty:	Applied Sciences and Technology
School:	CHEMISTRY AND MATERIAL SCIENCE
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EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Doctor of Philosophy (PhD)	CHEMISTRY	UNIVERSITY OF NAIROBI(Kenya)	2020
Masters of Science (M.Sc.)	ENVIRONMENTAL CHEMISTRY	UNIVERSITY OF NAIROBI(Kenya)	2014
Bachelor of Science (BSc)	CHEMISTRY	UNIVERSITY OF NAIROBI(Kenya)	2000

SELECTED PUBLICATIONS

TITLE	LINK TO PUBLICATION	YEAR
2. NJENGA, L., Mbugua, S., Odhiambo, R., & Onani, M. O. (2023). Addressing the Gaps in Homeostatic Mechanisms of Copper and Copper Dithiocarbamate Complexes in Cancer Therapy: A Shift from Classical Platinum-drugs Mechanisms. Dalton Transactions, 2023, 52, 5823-5847.	View online	2023
1. Mbugua Simon Ngigi, (2023). "Fluorescent Chemo sensor nano-materials for Cancer bio-markers signalling: Towards development of non-invasive early detection strategies", Dyes and Pigments, Elsevier 2023, 111603, ISSN 0143-7208	View online	2023
3. Mbugua, S.N., (2022). Targeting Tumor Microenvironment by Metal Peroxide Nanoparticles in Cancer Therapy. Hindawi. Bioinorganic Chemistry and Applications, Vol. 2022.	View online	2022
4. Mbugua, S.N., Njenga, L.W., Odhiambo, R.A., Wandiga, S.O. and Onani, M.O., (2021). COVID-19 and Cancer Therapy: Interrelationships and Management of Cancer Cases in the Era of COVID-19. Hindawi. Journal of Chemistry, 2021.	View online	2021
5. Mbugua, S.N., Njenga, L.W., Odhiambo, R.A., Wandiga, S.O., Onani, M.O. (2020). Beyond DNA-targeting in Cancer Chemotherapy. Emerging Frontiers- A Review. Current Topics in Medicinal Chemistry. Bentham Science Publishers.	View online	2020
6. Simon N. Mbugua, Nicole R. S. Sibuyi, Lydia W. Njenga, Ruth A Odhiambo Shem O. Wandiga, Mervin Meyer, Roger A. Lalancette, Martin O. Onani, (2020). New Palladium II and Platinum II Complexes based on Pyrrole Schiff Bases: Synthesis, Characterization, X-Ray Structure and Anticancer Activity. American Chemical Society ACS-Omega.	View online	2020
7. Simon N. Mbugua, Nicole R. S. Sibuyi, Lydia W. Njenga, Ruth A Odhiambo Shem O. Wandiga, Mervin Meyer, Roger A. Lalancette, Martin O. Onani, (2020). Synthesis, Characterization and DNA Binding Kinetics of New Pd (II) and Pt (II) Thiosemicarbazone Complexes. Spectral, Structural and Anticancer Evaluation. Hindawi Journal of Chemistry Volume 2020	View online	2020
9. Wandiga S.O., Mbugua S.N., Macharia J.W., Otieno M.A. (2016). Challenges and Solutions to Water Problems in Africa. Book Chapter in 'Chemistry and Water' B978-0-12-809330-6.00006-4. Elsevier. 2016.	View online	2016
8. Wandiga S.O., Kamau G.N., Mbugua S.N., (2017). Titanium (IV) Oxide-Tungsten (VI) Oxide Composite Nanoparticles has photocatalytic potential to degrade selected heavy metals and pesticide pollutants in water. International Journal of Photocatalysis. Photon 121 pp.235-245.	View online	2017

PROFESSIONAL AFFILIATIONS AND SOCIETIES

TITLE	INSTITUTION
MEMBER	THE ROYAL SOCIETY OF CHEMISTRY
LEAD EXPERT	NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY