



THE TECHNICAL UNIVERSITY OF KENYA

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Faculty:	Applied Sciences and Technology
School:	CHEMISTRY AND MATERIAL SCIENCE
Department:	INDUSTRIAL AND APPLIED CHEMISTRY
Current Designation:	Tutorial Fellow, GEOCHEMISTRY AND ENVIRONMENTAL CHEMISTRY (DGECE)
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EDUCATION

LEVEL	QUALIFICATION NAME	INSTITUTION	YEAR
Doctor of Engineering (Dr-Ing)	ENVIRONMENTAL SCIENCE & ENGINEERING	DONGHUA UNIVERSITY (China)	2024
Masters of Science (M.Sc.)	ENVIRONMENTAL CHEMISTRY	UNIVERSITY OF NAIROBI(Kenya)	2016
Bachelor of Science (BSc)	CHEMISTRY	MOI UNIVERSITY (Kenya)	2011
Certificate	INDUSTRIAL EFFLUENT TREATMENT	UNESCO-IHE(The Netherlands)	2017
O level/Equivalent	KENYA CERTIFICATE OF SECONDARY EDUCATION	MPEKETONI SECONDARY SCHOOL(Kenya)	2005
KCPE/Equivalent	KENYA CERTIFICATE OF PRIMARY EDUCATION	KAGAI PRIMARY SCHOOL(Kenya)	2000

WORK EXPERIENCE

PERIOD	INSTITUTION	POSITION
2018 - TO DATE	THE TECHNICAL UNIVERSITY OF KENYA	TUTORIAL FELLOW
2015 - 2017	THE TECHNICAL UNIVERSITY OF KENYA	GRADUATE ASSISTANT
2013 - 2014	SYNER-MED PHARMACEUTICALS	MEDICAL REPRESENTATIVE
2013 - 2013	WOODVALE PHARMACY LTD	MEDICAL REPRESENTATIVE
2012 - 2012	SAI PHARMACEUTICALS	MEDICAL REPRESENTATIVE

SELECTED PUBLICATIONS

TITLE	LINK TO PUBLICATION	YEAR
Effects of solution chemistry on dielectric barrier atmospheric non-thermal plasma for operative degradation of antiretroviral drug nevirapine	View online	2024
Synergistic coupling of plasma with microbubbles for enhancing short-chain fatty acids production during sludge anaerobic fermentation: Mechanistic insights into reactive specie motivation and microbial community dynamics	View online	2024
Degradation of glucocorticoids in aqueous solution by dielectric barrier discharge: Kinetics, mechanisms, and degradation pathways	View online	2019
Degradation of dichloroacetic acid in a novel corona discharge reactor integrated with microbubbles generation	View online	2021
Degradation of glucocorticoids in water by a synergistic system of peroxymonosulfate, microbubble and dielectric barrier discharges	View online	2021
Effectiveness of chelating agent-assisted Fentonlike processes on remediation of glucocorticoid contaminated soil using chemical and biological assessment: performance comparison of CaO ₂ and H ₂ O ₂	View online	2021
Degradation of glucocorticoids in water by dielectric barrier discharge and dielectric barrier discharge combined with calcium peroxide: performance comparison and synergistic effects	View online	2019
Motivation of reactive oxygen and nitrogen species by a novel non-thermal plasma coupled with calcium peroxide system for synergistic removal of sulfamethoxazole in waste activated sludge	View online	2022
Motivation of reactive oxygen and nitrogen species by a novel non-thermal plasma coupled with calcium peroxide system for synergistic removal of sulfamethoxazole in waste activated sludge	View online	2022
Synergistic effects and mechanisms of plasma coupled with peracetic acid in enhancing short-chain fatty acid production from sludge: Motivation of reactive species and metabolic tuning of microbial communities	View online	2023
Optimization of clobetasol propionate removal by calcium peroxide using the response surface methodology	View online	2019
Degradation of glucocorticoids in aqueous solution by dielectric barrier discharge: Kinetics, mechanisms, and degradation pathways	View online	2019
Reactive Nitrogen Species Generated by Gas-Liquid Dielectric Barrier Discharge for Efficient Degradation of Perfluorooctanoic Acid from Water	View online	2021
Synergistic improvement of short-chain fatty acid production from waste activated sludge via anaerobic fermentation by combined plasma-calcium peroxide process	View online	2022
Enhanced degradation of tetracycline by TiO ₂ @MXene with peroxydisulfate under visible light irradiation	View online	2024
Efficacy and mechanistic insights into dielectric barrier discharge plasma degradation of antiretroviral drug efavirenz	View online	2024
Occurrences of Glucocorticoids in Aquatic Environment and Their Removal during Wastewater Treatment	View online	2023
Ionic liquid coupled plasma promotes acetic acid production during anaerobic fermentation of waste activated sludge: Breaking the restrictions of low bioavailable substrates and altering the metabolic activities of anaerobes	View online	2024
Synergistic performance and mechanisms of plasma and peracetic acid for antibiotic degradation in water	View online	2024

POSTGRADUATE STUDENTS SUPERVISION

NAME PROJECT TITLE PERIOD

0	0	0
0	0	0

PROFESSIONAL AFFILIATIONS AND SOCIETIES

TITLE INSTITUTION

MEMBER	KENYA CHEMICAL SOCIETY
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EXTRA INFORMATION

DESCRIPTION

Short Courses

1. Integrated Water Resource Management- Norwegian University of Life Sciences; June/July 2016
2. Water Quality Challenges- University College of Southeast Norway; June/July 2016