

VITA

Dr. Daniel K. Korir

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EDUCATION:

<i>Degree Earned</i>	<i>School</i>	<i>Date Attended</i>
PhD in Chemistry	University of North Texas	2014- 2019
MSC in Chemistry	Texas Woman's University	2008-2013
BED(Sci.)	Egerton University	1992-1998

TEACHING EXPERIENCE:

<i>Position</i>	<i>Institution</i>	<i>Date</i>
Assistant Professor of Chemistry	East Texas Baptist University	2022 – Present
Adjunct Professor	Dallas College	2018-2021
Teaching Assistant	University of North Texas	2014-1019
Teaching Assistant	Texas Woman's University	2010-2013
Teacher	Dallas ISD	2007-2008

OTHER WORK EXPERIENCE:

<i>Position</i>	<i>Place</i>	<i>Date</i>
Postdoctoral Research Ass.	Univ. of Texas Health Sci. Center at Tyler	2020-2022
Consultant R&D	UNT College of Engineering Mechanical and Energy Dept.	2020-2021
Research Assistant	University of North Texas	2014-2019
Res. and Dev. Lab Tech.	Alcon Labs- Fort Worth	2013-2014
Research Assistant	Texas Woman's University	2009-2013

PROFESSIONAL DEVELOPMENT EXPERIENCES:

Protecting Human Research Participants-PHRP- NIH Certification – University of North Texas, School of Science 2019

Lab Animal Research-Active CITI Program Certification- University of North Texas, School of Science 2019

PRESENTATIONS AND PUBLICATIONS:

Selected Publications

Empirical Studies on Effect of Low-Level Laser Treatment on Glioblastoma Multiforme in Combination with Ag-PMMA-PAA Nanoparticles: Paired Red Region Optical-Property Treatment Platform. Atluri, R.; **Korir, D.**; Choi, T.-Y.; Simmons, D.P. *Appl. Nano* **2022**, 3, 112-125. <https://doi.org/10.3390/applnano3020008>

Formula-Driven, Size-Tunable Synthesis of PMMA Nanoparticles by Varying Surfactant Concentration, Kamras, B.L., Mirzanasiri, N., **Korir, D.K.**, Mandal, Hariharakumar, S.L., Petros, R.A., Marpu, S.B., Simmons, D.P., Omary, M.A. *Materials* **2020**, 13, 1834

Facile Photochemical Syntheses of Conjoined Nanotwin Gold-Silver Particles within a Biologically-Benign Chitosan Polymer. **Korir, D.K.**, Gwalani, B.; Joseph, A.; Kamras, B.; Arvapally, R. K.; Omary, M.A.; Marpu, S. B.; J. *Nanomaterials* **2019**, 9, 596

Photochemical Formation of Chitosan-Stabilized Near-Infrared-Absorbing Silver Nanoworms :A "Green" Synthetic Strategy and Activity on Gram-negative Pathogenic Bacteria, Marpu, S; Kolailat, S. S.; **Korir, D.**; Kamras, B.L.; Chaturvedi, R.; Joseph, A.; Smith, C M.; Palma, M.C.; Shah, J.; Omary, M.A. *J. of Colloid and Interface Science*, **2017**, 507, pp. 437-452

Synthesis, Structural and Photophysical Properties of Phosphorescent Oligonuclear Complexes of Monovalent Coinage Metals with Novel Compositions (Thesis-December 2013)

Trinuclear copper (I) and Silver (I) adducts of 4-chloro-3,5-bis(trifluoromethyl) pyrazolate and 4-bromo-3,5-bis(trifluoromethyl) pyrazolate- Hettiarachchi, C.V.; Rawashdeh-Omary, M. A.; **Korir, D.K.**; Kohistani, J.; Yousufuddin, M.; Dias, H. V. R. *Inorg. Chem.*, **2013**, 52 (23), pp 13576–13583

Invited talks and presentations

A potential treatment for malignant glioblastoma: Silver nanoparticles and Low-level laser combination treatment Atluri, R.; **Korir, D.K.**; Tyagi, N.; Kim, E.; Borgmann, K.; Choi, T.Y.; Simmons, D.P. *Virtual Annual Meeting II* June 22-24, 2020

“Laser-induced Metallic and Poly (Methyl Methacrylate) Nanoparticle: In Vitro Biofluid Model Informs Nanoparticle Design and In Vivo Biomolecule Interaction” Avila, Yelixza I., **Daniel Korir**, Denise Perry Simmons and Mohammad Omary, Nov Cancer Prevention Research Institute of Texas (CPRIT), Austin 2017

Facile Photochemical Synthesis and Properties of conjoined gold-silver Nanoparticles with tunable Plasmonic absorption-50th Meeting-in-Miniature, Texas Christian University, April 29th, 2017

Photochemical Syntheses of Biocompatible Silver and Gold-Silver Conjoined Nanoparticles with Tunable Plasmonic Absorption in Aqueous Media-University of North Texas 3rd year Talk. 2017

Photochemical Synthesis of Biocompatible anisotropic silver Nanoparticles: Efforts to understand the balance between Antibacterial Activity and Cytotoxicity -49th Meeting-in-Miniature, Texas Woman’s University, April 23rd, 2016

Photochemical Synthesis of Silver and Gold-Silver Alloy Nanoparticles with Tunable Plasmonic Absorption via Aqueous and Biocompatible Media- American Chemical Society-Southwest Region Meeting (SWRM) and the Southeastern Regional Meeting of the American Chemical Society (SERMACS) held November 4-7, 2015 in Memphis, Tennessee

A potential treatment for malignant glioblastoma: Silver nanoparticles and Low-level laser combination treatment Atluri, R.; Korir,D.K.; Tyagi, N.; Kim, E.; Borgmann, K.; Choi,T.Y.; Simmons,D.P. *Virtual Annual Meeting II* June 22-24, 2020

Laser-induced Metallic Poly(Methyl Methacrylate) Nanoparticle: In Vitro Biofluid Model Informs Nanoparticle Design and In vivo Biomolecule Interaction-CIPRIT 2017

Facile Photochemical Synthesis and Properties of Conjoined Gold-Silver Nanoparticles with tunable Plasmonic absorption-50th Meeting-in-Miniature, Texas Christian University, April 29th 2017

Photochemical Syntheses of Biocompatible Silver and Gold-Silver Conjoined Nanoparticles with Tunable Plasmonic Absorption in Aqueous Media-University of North Texas. 2017

Photochemical Synthesis of Biocompatible anisotropic silver Nanoparticles: Efforts to Understand the Balance Between Antibacterial Activity and Cytotoxicity 49th Meeting-in-Miniature, Texas Woman's University, April 23rd 2016

Photochemical Synthesis of Silver and Gold-Silver Alloy Nanoparticles with Tunable Plasmonic Absorption via Aqueous and Biocompatible Media- American Chemical Society-Southwest Region Meeting (SWRM) and the Southeastern Regional Meeting of the American Chemical Society (SERMACS) Nov 4-7, Memphis, TN 2015

Anisotropic Assembly of kinetically-Controlled Silver, Gold and Mixed metal Nanoparticles in Genuinely Biocompatible Media-Symposium of Federation of North Texas Universities at Texas Woman's University 2015

Synthesis, Structure and Luminescence Properties of Mixed-metal Trinuclear Complexes of the same Bridging Ligand – American Chemical Society-Indianapolis Indiana-September 2013

Molecular Jewelry: Glowing Gold, Silver, and Copper Rings and Chains that Literally Light Up Our Lives with Multi-Faceted Energy, Environmental, and Health Applications-Texas Undergraduate Research Day at the Capitol, Austin TX, April 2013

Photophysical properties of new copper(I) and Silver(I) complexes towards potential use as sensors for Volatile Organic Solvents (VOCs) and other environmental pollutants. Texas Woman's University Symposium poster presentation, April 2013

OTHER RELEVANT INFORMATION:

Professional Memberships

American Association for Cancer Research Member	2018-2019
American Chemical Society (ACS) Member	2014- 2016

Reviewer

Environmental Sciences Europe	2021-present
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