John K. Coleman SSN:

Associate Professor & Chairman Department of Physical Sciences 311 Hamilton Hall Langston University Langston, OK 73050

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Academic Degrees

Post Doctorate Study: Interaction of Sigma and Pi Electrons in Di-Ketone Systems; University of Oklahoma; Norman, Oklahoma. 1976-1978.

Ph.D. Theoretical Physical Chemistry: Molecular Orbital and Structural Investigations of Substituted Cyclobutanediones. University of Oklahoma; Norman, Oklahoma. 1976. **B.S.** Chemistry and Mathematics. *Summa Cum Laude*. Langston University; Langston, Oklahoma. 1965

Professional Experience

Department Chairperson – Associate Professor: Physical Sciences & Chemistry Department; Langston University, Langston, Oklahoma. 1993 - Present

Classroom Instructor - Chemistry I & II, Organic I & II; Physics I & II,

Langston University. 1993 - Present

Principal Investigator/Director – Langston's Integrated network College for Science, Technology, Engineering and Mathematics (LINC). (National Science Foundation Grant). September 1, 2003 – Present.

Research and Presentation Oversight – LINC Scholars and Science majors. 1994 – Present. **Principal Investigator** – An Intensive Summer Academy In Mathematics, Science and Technology for Grades 10-12. (Oklahoma State Regents For Higher Education). March, 2007 – September, 2009. & March, 1994 – September, 2005.

Co-Principal Investigator – Oklahoma Transportation Center, Collaboration with University of Oklahoma, Civil Engineering. "Evaluation of the Current Test Method for Measuring Bulk Specific Gravity – July 2006 – December 2007,

Co-Principal Investigator – Oklahoma Transportation Center, Collaboration with University of Oklahoma, Civil Engineering. "Effect of Anti--stripping Additives on Performance Graded Binders in Oklahoma". July, 2004 – June, 2007.

Co-Principal Investigator – Oklahoma Transportation Center, Collaboration with University of Oklahoma, Civil Engineering. "An Alternative Method for Determination of Asphalt Content". May-Sept. 2003; July, 2004 – June, 2006.

Principal Investigator/Director – An Intensive Summer Academy In Mathematics, Science and Technology for Grades 7-8. (Oklahoma State Regents For Higher Education). 2 years.

Principal Investigator/Director, Math & Science Academy year-round follow-up program – Sept. 1998 – Sept. 2001. (Department of Energy).

C0- Author of Curriculum Folio Program Review for Science Education Program – National Council for the Accreditation of Teacher Education (NCATE) Langston University, Langston, OK., 2004.

Assistant Professor – Hudson Community College; Jersey City, NJ. Summer, 1993.

Assistant Professor – Natural Sciences, City University of New York; New York, N.Y. 1992-93 **Assistant Professor** – Chemistry, Bergen County Community College; Paramus, New Jersey. 1992

Consultant – Market development, financial planning, and implementation for small minority businesses; Exquisite Finds, Inc.; St. Louis, MO. 1978-Present.

Instructor – University of Oklahoma; Norman, Oklahoma. 1972-78

Researcher – Halliburton Company; Duncan, Oklahoma. 1964-68 & 1978-80

Additional Prof. activities

Member, Oklahoma State Regents' Science Transfer Curriculum Committee

Member, Institutional Review Board (IRB).

Member. University Senate.

Member, Undergraduate Biomedical Education Program at LU (UBEP) Board/Mentorship Prog. **Advisor,** Beta Kappa Chi Scientific Honorary Society., Advisor, Alpha Chi Honorary Society **Advisor,** Chemistry club, Mentor, Chemistry majors.

Professional memberships

Southwest Regional Vice-President of Beta Kappa Chi Scientific Honorary Society, 3 yrs National Association for Equal Opportunity in Higher Education

Beta Kappa Chi Scientific Honorary Society, National Organization of Black Chemists and Chemical Engineers, Alpha Phi Alpha Fraternity, Inc.

American Chemical Society, National Institute of Science

Recent Publications

The Effect of Anti-Stripping Additives on Performance-Graded Binders in Oklahoma, M. Zaman, J. Laguros, Civil Engineering & Env. Sci, University of Oklahoma, Norman, OK.

J. Coleman, Department of Chemistry, Langston University, Presented: DOT Center, Langston University Oklahoma City Campus, October, 2005.

Author of Curriculum Folio Program Review for Science Education, Chemistry Program - Accepted in compliance with the National Science Teachers Association (NSTA) Standards, the National Council for the Accreditation of Teacher Education (NCATE), and the Oklahoma Commission for Teacher Preparation (OCTP), 2004.

An Alternate Method For Determination of Asphalt Content, M. Zaman, J. Laguros, Civil Engineering & Env. Sci, University of Oklahoma, Norman, OK. ,J. Coleman, Department of Chemistry, Langston University, 2003

"The Effect of Sigma and Pi Electron Interactions for Various Rotations of Alkyl Substituents on the n-pi* transitions of Selected Cyclobutanediones". A. Daniels and J.

Coleman Department of Chemistry, Langston University, Langston, OK. Presented: ⁺NSF-Research Day. Edmond, OK., October, 2002.

Alleopathic Effect Of Mimosine And Albizziin on Seed Germination and Seedling *Growth.* **T. Hutcherson, J. Coleman and R. D. Williams* ¹, Department of Chemistry and Research & Extension1, Langston University, Langston, Oklahoma. Presented, ⁰BKX National Convention (Columbia, S.C., March, 2002), "NSF Research Day", "NSF-OKAMP" and LU. 2001-2.

Detector Efficiency Analysis of D-Zero In Search of the Higgs Particle. B. Trotter, J. Coleman, and. T.McMahon¹. Department of Physical Sciences¹, and the Department of Mathematics¹, Langston University, Langston, OK Presented: ⁰BKX National Convention (Atlanta, Ga., Mar.2001), *NSF-OKAMP, **LU, 2002

The Alleopathic Effects of Silver Nightshade on various seedling growths. *L. Fitzgerald, J. Coleman and A. Malik, Department of Chemistry and Research & Extension, Langston University, Langston, Oklahoma. *Presented*, Beta Kappa National Convention (Nashville, Tn., 2000) and Langston University, Research Day at the Oklahoma State Capitol. 2000.

Recent Grant Awards

PI (Principal Investigator)

GRANT TITLE SUPPORTING INSTITUTION DURATION

Langston's Integrated Network College for Science, Technology, Engineering and Mathematics	National Science Foundation HBCU-UP	September 1, 2003- August,-2008
Langston's Integrated Network College for Science, Technology, Engineering and Mathematics	National Science Foundation HBCU-UP	September 1, 2008- August,-2013 2008-2013
An Intensive Summer Academy In Mathematics, Science and Technology For Grades 10-12.	Oklahoma State Regents For Higher Education	March 2007 - September 2009
"Evaluation of the Current Test Method (AASHTO T 84) for Measuring Bulk Specific Gravity of Fine Aggregates and Correlation Between Bulk Specific Gravity and Specific Surface Area"	Oklahoma Transportation Center Collaboration with University of Oklahoma, Civil Engineering	July 1, 2006 - December 30, 200
Effect of Anti-Stripping Additives on Performance-Graded Binders in Oklahoma	Oklahoma Transportation Center Collaboration with University of Oklahoma, Civil Engineering	July 1, 2004 - June 30, 2006
An Alternate Method For Determination of Asphalt Content	Okla. Transportation Center Collaboration with University of Oklahoma, Civil Engineering	May 1, 2003 - Sept 30, 2003.
An Intensive Summer Academy In Mathematics, Science and Technology For Grades 10-12.	Oklahoma State Regents For Higher Education	March 1994 - Sept 30, 2005.
Year-round Follow-up Math & Science Academy	Department of Energy	From 9/9/98 through 9/9/2001