Silvia Atim

Senior Organic Chemistry Instructor
Department of Chemistry and Biochemistry
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University of South Carolina
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EDUCATION:

University of North Texas, Denton, Texas;
Ph.D. in Organic Chemistry.
Dissertation Title: "Spin Alignment in Ferrocenylsilane Compounds" - Part 1
Advisor: Dr Trent Selby
"Studies in Regiospecific Oxidation Reactions of 1,9-dimethylpentacyclo [5.4.0.^{2,6}0.^{3,10}0.^{5,9}]undecane-8-11-dione" - Part 2
Advisor: Dr Alan P. Marchand

University of Bucharest, Bucharest, Romania
B.S. in Chemistry, Specialization in Inorganic Chemistry

RESEARCH INTERESTS:

Synthesis and characterization of fluorescent labeled cage-annulated crown-ethers, organometallic compounds, organic and polymer light emitting diodes (OLED).

TEACHING EXPERIENCE / EMPLOYMENT:

2018-present	Senior Organic Chemistry Instructor, University of South Carolina. Courses taught: Organic Chemistry I and II (CHEM 333, 334) and labs, (CHEM 331L, 332L). Introduction to Medicinal Chemistry (SCHC 278), Organic Chemistry with Biological Applications (CHEM 399) Honors Organic Chemistry labs CHEM 333L CHEM 334L
2018-2020	United States National Chemistry Olympiad Mentor.
2023-2025	United States National Chemistry Olympiad Coordinator
2017-2018	Chemistry Instructor, University of South Carolina. Courses taught: Honors' General Chemistry I and II (SCHC 141, SCHC 142) and labs, (SCHC 141L and SCHC 142L). Introduction to Medicinal Chemistry (SCHC 278).
2009 – 2017	Associate Professor of Chemistry, Benedict College Courses taught: General Chemistry I (CHEM 147) and Labs (CHEM 117L), Organic Chemistry I and II (CHEM 237 and CHEM 238) and Labs (CHEM 217 L and CHEM 218 L), Biochemistry I (CHEM 437) and lab(CHEM 417 L), Medicinal Chemistry I (CHEM336).
2008 - 2009	Visiting Assistant Professor, Coastal Carolina University. Courses taught: General Chemistry (CHEM 111), Organic Chemistry Labs (CHEM 331 and CHEM 332)

2006 - 2008	Assistant Professor, Morehead State University. Courses taught: Survey of General Chemistry (CHEM 101), General Chemistry I and II (CHEM 111 and 112) and Labs, Organic Chemistry I and II (CHEM 326 and 327) and Labs.
2001 - 2006	Teaching Assistant, University of North Texas. Courses taught: Organic Chemistry I and II Labs.

PUBLICATIONS / PRESENTATIONS:

"Synthesis of the donor–acceptor ligand 2-(4-dimethylaminobenzylidene)-4,5-bis(diphenylphosphino)-4-cyclopenten-1,3-dione (dbpcd) and X-ray diffraction structure of the platinum(II) compound $PtCl_2$(dbpcd)·1.5CH_2Cl_2 . Inorg. Chim Acta, 2010, 363, 2, 418.

"Reaction of 1-Ferrocenyl-pentane-2,4-Dione (Fcpd) with *BrRe*(*CO*)5 : X-ray Structure of fac *Re*(*CO*)3(fcpd)(*H2O*) and Regiospecific Alkyne Metalation to Give fac *Re*(*CO*)3[u-Fc-C(O)CH(Ac)CRCR']" S. Atim, X. Wang, M.G. Richmond, Manuscript in preparation for submission to Organometallics.

"Synthesis of the New Redox-active Diphosphine Ligand 2-(p-dimethylaminobenzylidene)-4,5- bis(Diphenylphosphino)-4-cyclopenten-1,3-dione(dbpcd): Redox Chemistry, MO Properties and X-rayDiffraction Structure of *PtCl*2 (dbpcd)", S. Atim, X. Wang, M.G. Richmond, Manuscript in preparation for submission to J. Chem. Crystallog.

"Synthesis of Functionalized Phenylboronic Acids for Glucose Sensing "Elid Murillo, Sierra Tubbs, Silvia Atim, Benedict College, Columbia, SC 29204, Enoch Adogla, Qian Wang, University of South of Carolina, Columbia, SC 29208, SURC, Columbia SC., January 27, 2017.

"Synthesis of PDAEMA-b-PBLG for Tissue Engineering" A. Frehiwot, S. Atim-Benedict College, Columbia, SC 29204, C. Tang- University of South of Carolina, Columbia, SC 29208, Students faculty Research Day, February 2015, Benedict College.

"Novel Metallosupramolecular helicates and Crown Ethers as Versatile Bioprobes" Faculty and Student Research Day, " D. Myers, S. Atim, M. Raja , Benedict College, Columbia, SC., February 13, 2013.

"Synthesis and Characterization of Metallosupramolecular Helicates Containing 2,4-(bis-1-ferrocenyl-prop-3-enol-1-one)pyridyl" D. Myers, S. Atim, M. Raja, SERMAC, Raleigh, NC, November 14-17, 2012.

"Design of Novel Metallosupramolecular Helicates Containing 2,4-(bis-1-ferrocenyl-prop-3-enol-1-one)pyridyl" D. Myers, S. Atim, M. Raja, Benedict College, Columbia, SC, July 26, 2012.

"Synthesis, Characterization and Reactivity of 4,5-Diazafluorenide Complexes of Tungsten(0)"-Rose Ndeto, poster presentation , Benedict College, SURI, summer 2011.

"Synthesis, Characterization and Reactivity of 4,5-Diazafluorenide Complexes of Molybdenum(0) Taylor Cadwell-Mctere- poster presentation, Benedict College SURI, summer 2011.

"Design of Fluorescent Sensors for Detection of **Pollutant** Metal Ions "- Rose Ndeto, S.Atim, M.Raja, SC State University, Orangeburg. November 5, 2011.

"Synthesis and Luminescence Properties of Triphenylene Derivatives" Hamilton, E; Atim, S. ; Omary, M; Vashabaktula, P; ACS national Meeting, April 2008, New Orleans.

"Synthesis and Luminescence Properties of Diphenyl-Substituted Fluoranthene Compounds",

Dotson, S.; Atim, S.; Omary, M.; Kentucky Academy of Sciences, November 2007.

"Baeyer-Viliger oxidation reactions of 1,9-dimethylpentacyclo[5.4.0.2,6.0.3,10.0.5,9]undecane-8-11-dione", Atim, S.; Marchand, A.P.; Kentucky Academy of Sciences, November 2007.

"Triplet Dication of Diferrocenyldimethylsilane", Atim, S.; Selby, T.D.; Manuscript in Preparation.

"Polyferrocenylsilane Cations. An Experimental Study of Silicon as a Magnetic Coupling Unit." Atim, S.; Selby, T. D.; Manuscript in preparation.

"Spin Alignment in Polyferrocenylsilanes" Atim, S.; Selby, T. D.; 231st ACS National Meeting, Atlanta, GA. March 26-30, 2006.

"Organometallic Redox Arrays for Control of Spin Alignment" Atim, S.; Selby, T.D.; 57th Southeast - 61st Southwest Joint Regional Meetings, Memphis, TN, November 1-4, 2005.

"Organometallic Redox Arrays for Control of Spin Alignment" Atim, S.; Selby, T. D.; University of Texas, Arlington, April 2004.
"Spin Alignment in Ferrocenylsilane Compounds" Atim, S.; Selby, T. D.; University of North Texas, Denton, April 2004.

"Synthesis of Fluorescent Labeled Cage-Annulated Crown-Ethers" Atim, S.; Marchand, A. P.; Texas A & M, Commerce, March 2003.

Synergistic Activities/ Honors

American Chemical Society Award Certificate in Recognition of support to the Chemistry Olympiad Study Camp at the US Air Force Academy 2018.

Recipient of a 2011, South Carolina Independent Universities and Colleges Grant (SCIUC) to fund an undergraduate research project.

Recipient of a 2007 Morehead State University Research Grant to fund an undergraduate research project.

Faculty Mentor for Independent Student Research Projects, including poster sessions, abstracts, since 2006.

Texas Public Education Grant, 2006.

National Organization of Professional Black Chemists and Engineers since 2009

Kentucky Academy of Science since 2007.

B.Craig Raupe Memorial Scholarship, 2005.

Robert A. Welch Predoctoral Fellowship award, 2003.

STUDENT Senior Thesis:

“Artificial Sweeteners”- origin and reaction synthesis: In preparation with Dominique Kendrick, chemistry major, for fall 2013 graduation.

“N6-Furfuriladenine and the Biochemical Applications” Keona McFadden, 2011.

“Organic Light Emitting Diode: The future Of Efficient Lighting & Electronics” Jasmine Upsher, 2010.

"Investigation of the Chemistry and Luminescence Properties of Substituted Triphenylene Compounds" - Hamilton, E., Senior Thesis 2008.

"Synthesis and Luminescence Properties of Substituted Beta-Diketonates of Triphenylene" - Chaney D., Senior Thesis 2008.

"Synthesis and Luminescence Properties of Diphenyl-Substituted Fluoranthene Compounds" - Dotson, S., Senior Thesis 2007.

AFFILIATIONS

National Organization of Professional Black Chemists and Engineers since 2009

Kentucky Academy of Science since 2007.

Texas Public Education Grant, 2006.

American Chemical Society, since 2002.