

Curriculum Vitae  
**Kristina L. Stensaas**  
Millsaps College  
Department of Chemistry & Biochemistry  
Jackson, MS 39210  
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**I. PROFESSIONAL EXPERIENCE**

1. **Associate Dean for Academic Affairs**, Millsaps College, Jackson, Mississippi; September 2018-present
2. **Professor**: Department of Chemistry & Biochemistry, Millsaps College, Jackson, Mississippi; April 2011-present
3. **Chair**: Department of Chemistry & Biochemistry, Millsaps College, Jackson, Mississippi; January 2007-September 2018
4. **Interim Chair**: Department of Chemistry, Millsaps College, Jackson, Mississippi; 2004-2005
5. **Associate Professor**: Department of Chemistry, Millsaps College, Jackson, Mississippi; 2003-2011
6. **Assistant Professor**: Department of Chemistry, Millsaps College, Jackson, Mississippi; 1997-2003
7. **Quality Control Analyst**: Church & Dwight Co., Inc., Green River, Wyoming; 1989–1993

**II. ACADEMIC TRAINING**

1. **Ph.D.**, Organic Chemistry, August 1997; University of Wyoming, Laramie, Wyoming. Ph.D. Dissertation: *Mechanistic Studies in the Reactions of High Energy Oxidants with Organosulfur Substrates*
2. **B.A.**, Chemistry, May 1989; University of Wyoming, Laramie, Wyoming

**III. TEACHING EXPERIENCE**

**College Courses**

General Chemistry I and II, General Chemistry Laboratory I, Organic Chemistry I and II (online and in-person), Organic Chemistry Laboratory I and II (online and in-person), Advanced Organic Chemistry, Advanced Inorganic Chemistry, Medical Mentoring, Liberal Studies, How Things Work, Introduction to Pathways

**IV. PUBLICATIONS (Undergraduate Student Authors)**

1. “Synthesis, Antimicrobial Properties, and Biomedical Applicability of Ag(I) Cyanoximate Complexes.” Young, K.J.; Habgood, LG.; Stensaas, K.L.; Villanueva, O.; Weigand, W. *Journal of Chemical Education*, **2021** <https://doi.org/10.1021/acs.jchemed.1c00186>.
2. “Antibacterial Reactivity of Ag(I) Cyanoximate Complexes.” Young, K.J.; Habgood, LG.; Stensaas, K.L.; Weigand, W.; Villanueva, O., **2015**

<https://www.ionicviper.org/lab-experiment/antibacterial-reactivity-agi-cyanoximate-complexes>.

3. "Competitive oxidations of Dibenzyl Trisulfide vs. Substituted Aryl Polysulfides." Stensaas, K.L.; Brownell, A.S.; Ahuja, S.; Harriss, J.K.; Herman, S.R. *Journal of Sulfur Chemistry*, **2008**, 29(3-4), 433-443.
4. "Reacting Soluble Single-Walled Carbon Nanotubes with Singlet Oxygen." Hamon, M.A.; Stensaas, K.L.; Sugar, M.A.; Tumminello, K.C.; Allred, A.K. *Chemical Physics Letters*, **2007**, 447, 1-4.
5. "A Comparison of Hydrogen Bonding Solvent Effects on the Singlet Oxygen Reactions of Allyl and Vinyl Sulfides, Sulfoxides, and Sulfones." Stensaas, K.L.; McCarty, B.V.; Touchette, N.M.; Brock, J.B. *Tetrahedron* **2006**, 62, 10683-10687.
6. "Aqueous Solvents Dictate the Regiochemistry in the Photooxidations of  $\alpha,\beta$ -Unsaturated Carboxylic Acid Salts." Stensaas, K.L. and Bajaj, A. *Synthesis*, **2005**, 15, 2623-2624.
7. "Novel Regiochemistry in the Aqueous Singlet Oxygen Ene Reaction of Carboxylic Acid Salts: A Comparison of Substrate Structure." Kristina L. Stensaas, Anisha Bajaj, and Akram Al-Turk *Tetrahedron Lett.* **2005**, 46, 715-718.
8. "Novel Solvent Hydrogen Bonding Effects in the Singlet Oxygen Ene Reaction: A Comparison of  $\alpha,\beta$ -Unsaturated Esters and Acids." Stensaas, K.L.; Payne, J.A.; Ivancic, A.N.; Bajaj, A. *Tetrahedron Lett.* **2002**, 43, 25-27.
9. "Recent Progress in the Synthesis, Properties, and Reactions of Trisulfanes and Their Oxides." Clennan, E.L.; Stensaas, K.L. *Organic Preparations and Procedures International* **1998**, 30(5), 551-600.
10. "Trapping of Peroxidic Intermediates with Sulfur and Phosphorus Centered Electrophiles." Clennan, E.L.; Stensaas, K.L.; Rupert, S.D. *Heteroatom Chem.* **1998**, 9(1), 51-56.
11. "Reactions of Bis(*p*-methoxyphenyl)trisulfane and Its Oxides with Dimethyldioxirane and (Trifluoromethyl)methyldioxirane." Clennan, E.L.; Stensaas, K.L. *J. Org. Chem.*, **1996**, 61, 7911-7917.

## V. HONORS THESES of UNDERGRADUATE STUDENTS

1. "A Comparison of Singlet Oxygen Photooxidation Reactions of Several Sulfur-Containing Compounds," Brent V. McCarty, Millsaps Chemistry Department, Jackson, MS. (2007)
2. "A Comparison of Solvent Effects on the Regioselectivity of the Singlet Oxygen Ene Reactions of 2-Methyl-3-phenylthio-2-butene and 2-Methyl-3-phenylsulfonyl-2-butene," Natacha M. Touchette, Millsaps Chemistry Department, Jackson, MS. (2004)
3. "Solvent and Substituent Effects on the Singlet Oxygen Ene Reactions of 2,3-Dimethyl-2-butenyl *p*-nitrophenyl sulfide and 2,3-Dimethyl-2-butenyl *p*-nitrophenyl sulfone," James Benjamin Brock, Millsaps Chemistry Department, Jackson, MS. (2004)

4. "Competitive Oxidations of Benzyl Trisulfide and Various Aryl Substituted Disulfides," Seema Ahuja, Millsaps Chemistry Department, Jackson, MS. (2003)
5. "Substrate Structure Effects on the Singlet Oxygen Ene Reactions of  $\alpha,\beta$ -Unsaturated Carboxylic Acid Salts in Deuterated Water," Anisha Bajaj, Millsaps Chemistry Department, Jackson, MS. (2002)
6. "A Comparison of Solvent Effects on the Photooxidations of Tiglic Acid, Methyl 2,3-dimethyl-2-butenate, and 2,3-dimethyl-2-butenic Acid," Jason A. Payne, Millsaps Chemistry Department, Jackson, MS. (2000)
7. "The Photooxidation of Methyl Tiglate, Angelic Acid, and Methyl Angelate with Singlet Oxygen," Alexa N. Ivancic, Millsaps Chemistry Department, Jackson, MS. (2000)
8. "The Synthesis and Oxidation of Symmetric Benzylic Trisulfides," Arnold S. Brownell, Millsaps Chemistry Department, Jackson, MS. (1999)
9. "Reaction of Tiglic Acid with Singlet Oxygen," Brian Means, Millsaps Chemistry Department, Jackson, MS. (1998)

**VI. PRESENTATIONS (Past 5 years; Undergraduate Student Presenters)**

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|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| April 2013    | "Characterization of <i>p</i> -Nitrophenyl Polysulfides and Their Potential Oxidative Reactivity," 245 <sup>th</sup> American Chemical Society National meeting in New Orleans, LA<br><u>A.G. Haddad, A. Bajaj, M.R. Patel, and K.L. Stensaas</u>                                  |
| February 2013 | "Potential Oxidative Reactivity of <i>p</i> -Nitrophenyl Polysulfides," 77 <sup>th</sup> Annual Meeting of the Mississippi Academy of Sciences in Hattiesburg, MS<br><u>Abed Haddad, Amit Bajaj, Murti Patel, and Kristina L. Stensaas</u>                                         |
| April 2012    | "Conditions Influencing the Decomposition of <i>p</i> -Bromophenyl Disulfide and Related Polysulfides," 44 <sup>th</sup> Annual American Chemical Society Southeast Undergraduate Research Conference in Starkville, MS<br><u>J. Serwan, M.A. Thomas, A. Haddad, K.L. Stensaas</u> |
| December 2010 | "Development of an HPLC Method for Separation of Alkyl or Aryl Polysulfides," 66 <sup>th</sup> Southwest and 62 <sup>nd</sup> Southeastern Regional Meeting of the American Chemical Society, New Orleans, LA<br><u>A.E. Martin, D.A. Williamson, M.A. Thomas, K.L. Stensaas</u>   |
| March 2010    | "Comparison of Singlet Oxygen and <i>m</i> -CPBA Oxidation Methods of Aryl and Benzyl Trisulfides," 239 <sup>th</sup> American Chemical Society National Meeting, San Francisco, CA<br><u>Diantha Williamson, Sam Herman, Hanna Olivier, Neha Solanki, Kristina L. Stensaas</u>    |
| April 2009    | "Comparison of Oxidation Methods of Trisulfides," 41 <sup>st</sup>                                                                                                                                                                                                                 |

- Southeastern Undergraduate Research Conference at UAB,  
Birmingham, AL  
Sam Herman, Hanna Olivier, Neha Solanki, Diantha Williamson, Kristina L. Stensaas
- April 2009 “Singlet Oxygen Oxidation of Single-Walled Carbon Nanotubes,” 41<sup>st</sup> Southeastern Undergraduate Research Conference at UAB, Birmingham, AL  
Anna K. Allred, Miles A. Sugar, Katherine C. Tumminello, Kristina L. Stensaas, Mark A. Hamon
- April 2009 “Comparison of Oxidation Methods of Aryl and Benzyl Trisulfides,” 6<sup>th</sup> Annual Mississippi College-Tougaloo College Undergraduate Research Symposium at Mississippi College in Clinton, MS.  
Sam Herman, Hanna Olivier, Neha Solanki, Diantha Williamson, Kristina L. Stensaas
- April 2008 “Competitive Oxidation of Organic Alkyl and Aryl Polysulfides,” 235<sup>th</sup> National Meeting of the American Chemical Society in New Orleans, LA.  
Sam Herman, Kristina L. Stensaas
- April 2008 “Competitive Oxidations of Dibenzyl Trisulfides and Substituted Aryl Polysulfides,” 40<sup>th</sup> Annual Southeastern Regional American Chemical Society Research Conference at Mississippi College in Clinton, MS.  
Sam Herman, Kristina L. Stensaas

## **VII. GRANTS**

1. \$25,000 Petroleum Research Fund (Type GB) grant (ACS)
2. \$6,000 Pittsburgh Conference Memorial National College grant
3. \$2,500 Millsaps College Faculty Development summer grants
4. Hearin Foundation summer grant
5. \$5000 Associated Colleges of the South, Curriculum grant
6. \$10,000 Associated Colleges of the South, Curriculum grant
7. \$2500 Associated Colleges of the South, Curriculum grant
8. \$1500 Associated Colleges of the South, Curriculum grant

## **VIII. AWARDS**

1. Distinguished Professor Award, Millsaps College (2009-2010)
2. HEADWAE Outstanding Faculty Honoree, Mississippi Legislature (2010-2011)
3. 2011 Division of Sciences Excellence in Teaching Award, Millsaps College
4. 2016 W. Charles Sallis Award for Distinguished Service to the College, Millsaps College
5. 2019 Omicron Delta Kappa Induction, Millsaps College

**IX. FORD TEACHING FELLOWS**

1. Caroline McKinney (23-24)
2. Hannah Henderson (22-23)
3. Lynzy Barrett (21-22)
4. Rachel Bravenec (19-20)
5. Priya Patel (18-19)
6. D.J. Hawkins (17-18)
7. Murti Patel (15-16)
8. Abed Haddad (13-14)
9. Diantha Williamson (09-10)
10. Hanna Olivier (08-09)
11. Neha Solanki (07-08)
12. Courtney Vowell (06-07)
13. Kaiser Harris (01-02)

**X. SPECIAL PROJECTS**

1. Mississippi Department of Education Science Framework Revision Committee (2005-2007)
2. Physical Science Teacher Enhancement Project (2001-2008)
3. Howard Hughes Medical Institute Curriculum grant (2012-present)
4. Millsaps College Summer Science Splash Camp Director, funding from the II-VI Foundation (2015-present)
5. MS Light Festival Collaborator (2016-2017)

**XI. PROFESSIONAL AND ACADEMIC AFFILIATIONS**

1. American Chemical Society (ACS)
  - a. Past Secretary for the Mississippi Section
  - b. Symposium Abstract Coordinator for ACS Mid-Winter Symposium, 2000
  - c. Coordinator of the Mississippi section ACS Chemistry Olympics, 1998-2007
2. Project Kaleidoscope Faculty
3. National Science Teachers Association
4. Mississippi Science Teachers Association
5. Mississippi Academy of Sciences (MAS)
  - a. Past member of the Awards Committee
6. Reviewer for the following journals/programs: *Tetrahedron*, *Tetrahedron Letters*, *Journal of Sulfur Chemistry*, *Molecules*, Petroleum Research Foundation, and CUNY Collaborative Incentive Research Grants Program