

CURRICULUM VITAE  
**Gregory K. Friestad, Ph.D.**

Department of Chemistry  
University of Iowa  
Iowa City, IA 52242

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**PROFESSIONAL APPOINTMENTS**

- 2005-present: **University of Iowa** – Iowa City, Iowa  
Department of Chemistry  
Associate Professor
- 1998-2005: **University of Vermont** – Burlington, Vermont  
Department of Chemistry  
Associate Professor (2004–2005); Assistant Professor (1998–2004)

**EDUCATION**

- 1995-1998: **University of Pennsylvania** – Philadelphia, Pennsylvania  
Department of Chemistry (Professor Amos B. Smith, III)  
NIH Postdoctoral Research Fellow
- 1990-1995: **University of Oregon** – Eugene, Oregon  
Department of Chemistry (Professor Bruce P. Branchaud)  
Doctor of Philosophy, Organic Chemistry, 1995
- 1986-1990: **Bradley University** – Peoria, Illinois  
Bachelor of Science, Chemistry, 1990  
Undergraduate Research: USDA Northern Regional Research Center, Peoria

**AFFILIATIONS**

Editorial Advisory Board, *Current Organic Chemistry*, 2009–present  
Editorial Board, *Molbank*, 2009–present  
University of Iowa Biosciences Program, 2005–present  
Vermont Cancer Center (NCI Comprehensive Cancer Center), 2002–present  
American Chemical Society, 1990–present

**AWARDS AND HONORS**

- 2016: Visiting Professor, Kunming University of Science and Technology,  
Kunming, Yunnan Province, P. R. China
- 2013: Marion L. Huit Faculty Award, University of Iowa
- 2009-2010: Obermann Scholar, Obermann Center for Advanced Studies, University of Iowa
- 2008-2011: University Faculty Scholar Award, University of Iowa
- 2005: Visiting Professor, University of Wisconsin-Madison
- 2005: Kroepsch-Maurice Excellence in Teaching Award Nominee, University of Vermont
- 2003: Japan Society for the Promotion of Science (JSPS) Invitation Fellowship
- 2003: Visiting Professor, Kobe Pharmaceutical University, Kobe, Japan
- 2001: Lake Champlain Cancer Research Organization Award, Vermont Cancer Center
- 1996-1998: NIH Postdoctoral Research Fellowship, National Cancer Institute

- 1991-1994: GAANN Teacher-Scholar Fellowship, United States Department of Education  
1990: Dean's List, Outstanding Academic Achievement, Bradley University  
1990: Certificate of Merit, United States Department of Agriculture  
1986-1987: Meyer and Anna Block Scholarship, Academic Merit Award, Bradley University

## PEER-REVIEWED PUBLICATIONS

55. Gregory K. Friestad; Koushik Banerjee; Jean-Charles Marié; Umesh Mali, Lei Yao "Stereoselective Access to Tubuphenylalanine and Tubovaline: Improved Mn-Mediated Radical Additions and Assembly of A Tubulysin Tetrapeptide Analog" *Journal of Antibiotics* **2016**, *69*, 294-298.
54. Kara A. Slater; Gregory K. Friestad "Mn-Mediated Radical-Ionic Annulations of Chiral *N*-Acylhydrazones." *Journal of Organic Chemistry* **2015**, *80*, 6432-6440.
53. Gregory K. Friestad "Control of Asymmetry in the Radical Addition Approach to Chiral Amine Synthesis" In *Topics In Current Chemistry: Stereoselective Formation of Amines*; Wei Li; Xumu Zhang, Eds.; Springer-Verlag: Berlin, 2014, vol. 343, pp. 1-32.
52. Xu Xiangming; Gregory K. Friestad; Yao Lei "Recent Advances in the Synthesis of Tubulysins" *Mini-Reviews in Medicinal Chemistry* **2013**, *13*, 1572-1578.
51. Gregory K. Friestad; Gopeekrishnan Sreenilayam; Joseph C. Cannistra; Luke M. Slominski "Preparation of enol ester epoxides and their ring-opening to  $\alpha$ -silyloxyaldehydes" *Tetrahedron Letters* **2012**, *53*, 5064-5067.
50. Gregory K. Friestad; An Ji; Jonas Baltrusaitis; Chandra Sekhar Korapala; Jun Qin "Scope of Stereoselective Mn-Mediated Radical Addition to Chiral Hydrazones and Application in a Formal Synthesis of Quinine." *Journal of Organic Chemistry*, **2012**, *77*, 3159-3180.
49. Gregory K. Friestad "Asymmetric Radical Addition to Chiral Hydrazones." In *Topics In Current Chemistry: Radicals in Synthesis III*; Gansauer A.; Heinrich, M., Eds.; Springer-Verlag: Berlin, 2012, vol. 320, pp. 61-92.
48. Gregory K. Friestad "Organomanganese-Mediated Radical Reactions." In *The Chemistry of Organo-Manganese Compounds*; Marek, I.; Rappoport, Z., Eds.; Wiley: Chichester, United Kingdom, 2011; pp. 559-584.
47. Gregory K. Friestad; An Ji; Chandra Sekhar Korapala; Jun Qin "Intermolecular Radical Addition to *N*-Acylhydrazones as a Stereocontrol Strategy for Alkaloid Synthesis: Formal Synthesis of Quinine." *Organic and Biomolecular Chemistry* **2011**, 4039-4043.
46. Gregory K. Friestad; Gopeekrishnan Sreenilayam "1,5-Polyols: Challenging Motifs for Configurational Assignment and Synthesis." *Pure and Applied Chemistry* **2011**, *83*, 461-478.
45. Gregory K. Friestad; Gopeekrishnan Sreenilayam "Versatile Configuration-Encoded Strategy for Rapid Synthesis of 1,5-Polyol Stereoisomers" *Organic Letters* **2010**, *12*, 5016-5019.
44. Gregory K. Friestad "Asymmetric Methods for Radical Addition to Imino Compounds." In *Chiral Amine Synthesis. Methods, Developments and Applications*; Nugent, T., Ed.; Wiley-VCH: Weinheim, Germany, 2010; pp. 51-74.

43. Gregory K. Friestad; Hye Jin Lee "Trans-2,5-Disubstituted Tetrahydrofurans via Additions of Carbon Nucleophiles to the Strained Bicyclic Acetal 2,7-Dioxabicyclo[2.2.1]heptane." *Organic Letters* **2009**, 11, 3958-3961. (Highlighted in Yamamoto, H.; Payette, J. N. *SynFacts* **2009**, 1373.)
42. Gregory K. Friestad; Koushik Banerjee "Synthesis of  $\gamma$ -Amino Esters via Mn-Mediated Radical Addition to Chiral  $\gamma$ -Hydrazonoesters." *Organic Letters* **2009**, 11, 1095-1098.
41. Gregory K. Friestad; Yaoping Wu "Intermolecular Non-Reductive Alkylation of Enamides via Radical-Polar Crossover." *Organic Letters* **2009**, 11, 819-822.
40. Gregory K. Friestad "Reaction of Acetals with Organometallic Reagents." In *Science of Synthesis, Vol. 40a: Compounds with One Saturated Carbon-Heteroatom Bond: Amines and Ammonium Salts*; Enders, D.; Shaumann, E., Eds.; Thieme: Stuttgart, Germany, 2009; pp. 91-110.
39. Gregory K. Friestad "Addition of Carbanions to Azomethines." In *Science of Synthesis, Vol. 40a: Compounds with One Saturated Carbon-Heteroatom Bond: Amines and Ammonium Salts*; Enders, D.; Shaumann, E., Eds.; Thieme: Stuttgart, Germany, 2009; pp. 305-342.
38. Gregory K. Friestad; Tao Jiang; Gina M. Fioroni "Stereocontrol in Radical Mannich Equivalents for Aminosugar Synthesis: Haloacetal and 2-(Phenylthio)vinyl Tethered Radical Additions to  $\alpha$ -Hydroxyhydrazones." *Tetrahedron* **2008**, 64, 11549-11557.
37. Gregory K. Friestad; An Ji "Mn-Mediated Coupling of Alkyl Iodides and Ketimines: A Radical Addition Route to  $\alpha,\alpha$ -Disubstituted  $\alpha$ -Aminoesters" *Organic Letters*, **2008**, 10, 2311-2313.
36. Chandra Sekhar Korapala; Jun Qin; Gregory K. Friestad "Quinine Synthesis Studies: A Radical-Ionic Annulation via Mn-Mediated Addition to Chiral *N*-Acylhydrazones" *Organic Letters*, **2007**, 9, 4243-4246.
35. Gregory K. Friestad; Alex Mathies "Effects of  $\alpha$ -Alkoxy Substitution and Conformational Constraints on 6-*exo* Radical Cyclizations of Hydrazones via Reversible Thiyl and Stannyl Additions." *Tetrahedron* **2007**, 63, 9373-9381. (Corrigendum: *Tetrahedron* **2007**, 63, 13039.)
34. Gregory K. Friestad; Tao Jiang; Alex K. Mathies "Enhanced Reactivity in Radical Cyclizations of Hydrazones Using the Silicon-Tethered 1-Bromovinyl Group" *Tetrahedron* **2007**, 63, 3964-3972.
33. Gregory K. Friestad; Tao Jiang; Alex K. Mathies "Aldehyde-Selective Wacker Oxidation in a Thiyl-Mediated Vinyl Group Transfer Route to Daunosamine." *Organic Letters* **2007**, 9, 777-780.
32. Gregory K. Friestad; Alex K. Mathies "Recent Developments in Asymmetric Catalytic Addition to C=N Bonds." *Tetrahedron*, **2007**, 63, 2541-2569.  
(#7 most downloaded article in *Tetrahedron* for the year 2007; Top 50 Most Cited Articles in *Tetrahedron* for the years 2006-2009)
31. Hui Ding; Gregory K. Friestad "Strecker Reactions of Chiral *N*-Acylhydrazones." *Heterocycles* **2006**, 70, 185-199.
30. Gregory K. Friestad; Jun Qin; YoungSung Suh; Jean-Charles Marié "Mn-Mediated Coupling of Alkyl Iodides and Chiral *N*-Acylhydrazones: Optimization, Scope, and Evidence for a Radical Mechanism." *Journal of Organic Chemistry* **2006**, 71, 7016-7027.

Curriculum Vitae — Gregory K. Friestad, Ph.D.

29. Gregory K. Friestad; Chandra Sekhar Korapala; Hui Ding "Dual Activation in Asymmetric Allylsilane Addition to Chiral *N*-Acylhydrazones: Method Development, Mechanistic Studies, and Elaboration of Homoallylic Amine Adducts." *Journal of Organic Chemistry* **2006**, *71*, 281-289.
28. Hui Ding, Gregory K. Friestad "Asymmetric Addition of Allylic Nucleophiles to Imino Compounds." *Synthesis* **2005**, 2815-2829.
27. Gregory K. Friestad; Cristian Draghici; Mustapha Soukri; Jun Qin "Radical Addition Approach to Asymmetric Amine Synthesis: Design, Implementation, and Comparison of New Chiral *N*-Acylhydrazones." *Journal of Organic Chemistry* **2005**, *70*, 6330-6338.
26. Gregory K. Friestad "Chiral *N*-Acylhydrazones: Versatile Imino Acceptors for Asymmetric Amine Synthesis." *European Journal of Organic Chemistry* **2005**, 3157-3172.  
(#1 most read article in *European Journal of Organic Chemistry* for July 2005)
25. Gregory K. Friestad; Gina M. Fioroni "Haloacetal Radical Cyclizations of  $\alpha$ - and  $\beta$ -Hydroxyhydrazones." *Organic Letters* **2005**, *7*, 2393-2396.
24. Gregory K. Friestad; Amy M. Deveau; Jean-Charles Marié "Stereoselective Mn-Mediated Coupling of Functionalized Iodides and Hydrazones: A Synthetic Entry to the Tubulysin gamma-Amino Acids" *Organic Letters* **2004**, *6*, 3249-3252.
23. Hui Ding; Gregory K. Friestad "Allyltrimethoxysilane Addition to *N*-Acylhydrazones: Two Catalytic Methods Employing CuCl and Fluoride." *Synthesis* **2004**, 2216-2221.
22. Gregory K. Friestad; Tao Jiang; Alex K. Mathies; Sara E. Massari "Silicon-Containing Heterocycles in Stereocontrolled Radical Additions to Chiral Hydrazones." *Phosphorous, Sulfur, and Silicon* **2004**, *179*, 955-956.
21. Hui Ding; Gregory K. Friestad "Trifluoroacetyl-Activated Nitrogen-Nitrogen Bond Cleavage of Hydrazines by Samarium (II) Iodide." *Organic Letters* **2004**, *6*, 637-640.
20. Gregory K. Friestad; Sara E. Massari "A Silicon Tether Approach for Addition of Functionalized Radicals to Chiral  $\alpha$ -Hydroxyhydrazones: Diastereoselective Additions of Hydroxymethyl and Vinyl Synthons." *Journal of Organic Chemistry* **2004**, *69*, 863-875.
19. Gregory K. Friestad; Yuehai Shen; Erik L. Ruggles "Enantioselective Radical Addition to *N*-Acylhydrazones Mediated by Chiral Lewis Acids." *Angewandte Chemie International Edition* **2003**, *42*, 5061-5063.
18. Gregory K. Friestad; Tao Jiang; Gina M. Fioroni "Tandem Thiyl Radical Addition and Cyclization of Chiral Hydrazones Using a Silicon-Tethered Alkyne." *Tetrahedron: Asymmetry* **2003**, *14*, 2853-2856.
17. Jun Qin; Gregory K. Friestad "Stereocontrol in Hydride Addition to Ketone-Derived Chiral *N*-Acylhydrazones." *Tetrahedron* **2003**, *59*, 6393-6402.
16. Yuehai Shen; Gregory K. Friestad "Comparison of Electrophilic Amination Reagents for *N*-Amination of 2-Oxazolidinones and Application to Synthesis of Chiral Hydrazones." *Journal of Organic Chemistry* **2002**, *67*, 6236-6239.

15. Gregory K. Friestad; Hui Ding "Asymmetric Allylsilane Additions to Enantiopure *N*-Acylhydrazones with Dual Activation by Fluoride and In(OTf)<sub>3</sub>." *Angewandte Chemie International Edition* **2001**, *40*, 4491-4493.
14. Gregory K. Friestad; Jun Qin "Intermolecular Alkyl Radical Addition to Chiral *N*-Acylhydrazones Mediated by Manganese Carbonyl" *Journal of the American Chemical Society* **2001**, *123*, 9922-9923.
13. Gregory K. Friestad "Addition of Carbon-Centered Radicals to Imines and Related Compounds" *Tetrahedron* **2001**, *57*, 5461-5496.
12. Gregory K. Friestad; Sara E. Massari "Diastereoselective Vinyl Addition to Chiral Hydrazones via Tandem Thiyl Radical Addition and Silicon-Tethered Cyclization." *Organic Letters* **2000**, *2*, 4237-4240.
11. Gregory K. Friestad; Jun Qin "Highly Stereoselective Intermolecular Radical Addition to Aldehyde Hydrazones from a Chiral 3-Amino-2-oxazolidinone." *Journal of the American Chemical Society* **2000**, *122*, 8329-8330.
10. Rama K. Kondru; David N. Beratan; Gregory K. Friestad; Amos B. Smith, III; Peter Wipf "Chiral Action at a Distance: Remote Substituent Effects on the Optical Activity of Calyculins A and B." *Organic Letters* **2000**, *2*, 1509-1512.
9. Amos B. Smith, III; Gregory K. Friestad; Joseph Barbosa; Emmanuel Bertounesque; James J.-W. Duan; Kenneth G. Hull; Makoto Iwashima; Yuping Qiu; P. Grant Spoons; Brian A. Salvatore "Total Synthesis of (+)-Calyculin A and (-)-Calyculin B: Cyanotetraene Construction, Asymmetric Synthesis of the C(26-37) Oxazole, Fragment Assembly, and Final Elaboration." *Journal of the American Chemical Society* **1999**, *121*, 10478-10486.
8. Amos B. Smith, III; Gregory K. Friestad; Joseph Barbosa; Emmanuel Bertounesque; Kenneth G. Hull; Makoto Iwashima; Yuping Qiu; Brian A. Salvatore; P. Grant Spoons; James J.-W. Duan "Total Synthesis of (+)-Calyculin A and (-)-Calyculin B: Asymmetric Synthesis of the C(9-25) Spiroketal Dipropionate Subunit." *Journal of the American Chemical Society* **1999**, *121*, 10468-10477.
7. Gregory K. Friestad "A Silicon Tether Approach for Diastereocontrol in Radical Addition to Chiral Hydrazones." *Organic Letters* **1999**, *1*, 1499-1501.
6. Lana M. Grubb; April L. Dowdy; Heather S. Blanchette; Gregory K. Friestad; Bruce P. Branchaud "An Approach to (+)-Pancratistatin from D-Glucose: A Conformational Lock Solves a Stereochemical Problem." *Tetrahedron Letters* **1999**, *40*, 2691-2694.
5. Amos B. Smith, III; Young Shin Cho; Gregory K. Friestad "Convenient Wacker Oxidations with Substoichiometric Cupric Acetate." *Tetrahedron Letters* **1998**, *39*, 8765-8768.
4. Amos B. Smith, III; Gregory K. Friestad; James J.-W. Duan; Joseph Barbosa; Kenneth G. Hull; Makoto Iwashima; Yuping Qiu; P. Grant Spoons; Emmanuel Bertounesque; Brian A. Salvatore "Total Synthesis of (+)-Calyculin A and (-)-Calyculin B." *Journal of Organic Chemistry* **1998**, *63*, 7596-7597.
3. Gregory K. Friestad; Bruce P. Branchaud "A New Approach to the Pancratistatin C-Ring from D-Glucose: Ferrier Rearrangement, Pseudoinversion and Pd-Catalyzed Cyclizations." *Tetrahedron Letters* **1997**, *38*, 5933-5936.

2. Gregory K. Friestad *Control of Reductive vs Non-Reductive Cyclization in Palladium-Catalyzed Aryl-Enone Conjugate Additions and Application to a Synthetic Approach to (+)-Pancratistatin*. Doctoral Dissertation, Department of Chemistry, University of Oregon, 1995.
1. Gregory K. Friestad; Bruce P. Branchaud "Intramolecular Pd-Catalyzed Aryl-Enone Conjugate Additions. Control of Reductive vs. Non-Reductive Cyclization." *Tetrahedron Lett.* **1995**, 36, 7047-7050.

#### NON-PEER-REVIEWED PUBLICATIONS

11. Gregory K. Friestad "Catalytic Asymmetric Synthesis, Third Edition Edited by Iwao Ojima" *Journal of Medicinal Chemistry* **2011**, 54, 4280. (invited book review)
10. Gregory K. Friestad "Handbook of Cyclization Reactions Edited by Shengming Ma." *Journal of Medicinal Chemistry* **2010**, 53, 6522. (invited book review)
9. Gregory K. Friestad "Practical Microwave Synthesis for Organic Chemists by C. Oliver Kappe, Doris Dallinger, and S. Shaun Murphree." *Journal of Medicinal Chemistry* **2009**, 52, 3596. (invited book review)
8. Gregory K. Friestad "Dimanganese Decacarbonyl" in *Electronic Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A.; Fuchs, P.; Crich, D.; Molander, G., Eds.; Wiley: Chichester UK, in press, accepted Aug. 7, 2008. (invited review)
7. Gregory K. Friestad "Ion-Radical Organic Chemistry: Principles and Applications, 2nd ed. by Zory Vlad Todres." *Journal of the American Chemical Society* **2009**, 131, 2418. (invited book review)
6. Gregory K. Friestad "Chloriodomethane" in *Electronic Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A.; Fuchs, P.; Crich, D.; Molander, G., Eds.; Wiley: Chichester UK, [www.mrw.interscience.wiley.com/eros/articles/rc110/frame.html](http://www.mrw.interscience.wiley.com/eros/articles/rc110/frame.html), Article Online Posting Date: September 15, 2008. (invited review)
5. Tao Jiang; Gregory K. Friestad "Bis(ethoxythiocarbonyl)sulfide" in *Electronic Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A.; Fuchs, P.; Crich, D.; Molander, G., Eds.; Wiley: Chichester UK, [www.mrw.interscience.wiley.com/eros/articles/rn00637/frame.html](http://www.mrw.interscience.wiley.com/eros/articles/rn00637/frame.html), Article Online Posting Date: April 15, 2006. (invited review)
4. Gregory K. Friestad; Bruce P. Branchaud "Ammonium Tetrafluoroborate" in *Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A., Ed.; Wiley: New York, 1995; v. 1, pp. 199-200. (invited review)
3. Gregory K. Friestad; Bruce P. Branchaud "Cesium Fluoride" in *Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A., Ed.; Wiley: New York, 1995; v. 2, pp. 1042-1046. (invited review)
2. Gregory K. Friestad; Bruce P. Branchaud "Tetrafluoroboric Acid" in *Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A., Ed.; Wiley: New York, 1995; v. 7, pp. 4762-4765. (invited review)
1. Bruce P. Branchaud; Gregory K. Friestad "Vitamin B<sub>12</sub>" in *Encyclopedia of Reagents for Organic Synthesis*; Paquette, L. A., Ed.; Wiley: New York, 1995; v. 8, pp. 5511-5514. (invited review)

INVITED LECTURES

- 9/2016 Kunming University of Science and Technology (Kunming, P. R. China)  
9/2016 Yunnan University (Kunming, P. R. China)  
10/23/15 Truman State University (Kirksville, MO, USA)  
9/22/14 University of Missouri, St. Louis (St. Louis, MO, USA)  
2/7/13 North Dakota State University (Fargo, ND, USA)  
10/4/12 Grinnell College (Grinnell, IA, USA)  
9/28/12 University of New Mexico (Albuquerque, NM, USA)  
8/2/10 18th International Conference on Organic Synthesis (Bergen, Norway)  
3/3/10 University of Maryland (College Park, MD, USA)  
10/9/08 Midwest Regional Meeting of The American Chemical Society (Kearney, NE, USA)  
12/6/07 University of Alabama, Department of Chemistry (Tuscaloosa, AL, USA)  
11/15/07 University of Kansas, Department of Medicinal Chemistry (Lawrence, KS, USA)  
7/5/07 Gordon Research Conference: Radicals and Radical Ions (Holderness, NH, USA)  
2/1/07 Bradley University (Peoria, IL, USA)  
11/10/06 St. Olaf College (Northfield, MN, USA)  
9/15/06 University of Missouri (Columbia, MO, USA)  
7/21/06 Albany Molecular Research, Inc., Process Chemistry (Syracuse, NY, USA)  
7/20/06 Albany Molecular Research, Inc., Medicinal Chemistry (Albany, NY, USA)  
5/2/06 University of Iowa, Department of Medicinal and Natural Products Chemistry (Iowa City, IA, USA)  
6/15/05 Schering-Plough Research Institute (Kenilworth, NJ, USA)  
4/27/05 Merck & Company (Rahway, NJ, USA)  
4/4/05 Vanderbilt University (Nashville, TN, USA)  
2/22/05 University of Wisconsin (Madison, WI, USA)  
12/9/04 Michigan State University (East Lansing, MI, USA)  
11/15/04 1st Pacific Symposium on Radical Chemistry (Kanazawa, Japan)  
10/15/04 University of Pennsylvania, Smith Symposium (Philadelphia, PA, USA)  
10/7/04 University of Iowa, Department of Chemistry (Iowa City, IA, USA)  
6/8/04 9th International Symposium on Organic Free Radicals, plenary lecture (Porto-Vecchio, France)  
11/21/03 Kyushu University (Fukuoka, Japan)  
11/20/03 Kobe Pharmaceutical University (Kobe, Japan)  
11/19/03 Osaka University (Osaka, Japan)  
11/18/03 Osaka City University (Osaka, Japan)  
11/17/03 Kanazawa University (Kanazawa, Japan)  
11/15/03 Osaka Prefecture University (Osaka, Japan)  
11/13/03 Ninth International Kyoto Conference on New Aspects of Organic Chemistry (Kyoto, Japan)  
11/12/03 Kyoto University (Kyoto, Japan)  
10/6/03 Oregon State University (Corvallis, OR, USA)  
10/3/03 University of Oregon (Eugene, OR, USA)  
6/18/03 Northeast Regional Meeting of The American Chemical Society (Saratoga, NY, USA)  
4/8/03 University of Illinois at Chicago (Chicago, IL, USA)  
4/7/03 North Dakota State University (Fargo, ND, USA)  
4/3/03 University of Utah (Salt Lake City, UT, USA)  
4/2/03 Brigham Young University (Provo, UT, USA)  
8/8/02 Indiana University (Bloomington, IN, USA)  
8/7/02 Indiana U–Purdue U Indianapolis (Indianapolis, IN, USA)  
8/6/02 Eli Lilly & Company (Indianapolis, IN, USA)  
7/23/02 Gordon Research Conference: Organic Reactions and Processes (Bristol, RI, USA)

## Curriculum Vitae — Gregory K. Friestad, Ph.D.

6/27/02	National Science Foundation Workshop on Synthetic Organic Chemistry (Holderness, NH, USA)
4/24/02	University of Connecticut (Storrs, CT, USA)
2/6/02	Université de Sherbrooke (Sherbrooke, Canada)
7/19/01	Gordon Research Conference: Free Radical Reactions (Holderness, NH, USA)
3/20/01	University of New Hampshire (Durham, NH, USA)
12/15/00	Pacificchem 2000: The 2000 International Chemical Congress of Pacific Basin Societies (Honolulu, HI, USA)
2/11/00	Hamilton College (Clinton, NY, USA)
4/15/99	Norwich University (Northfield, VT, USA)

### TEACHING ACTIVITIES

#### Undergraduate Courses (Iowa)

- 004:141/CHEM 2410: Organic Chemistry Laboratory (Spring 2006-2008, Fall 2011-2015)  
enrollment 120-160, 6–8 lab sections, one lecture per week
- 004:122: Organic Chemistry II (Spring 2012-2014)  
enrollment 250-300, three lectures per week
- CHEM 2240: Organic Chemistry II for Majors (Spring 2015-2016)  
enrollment 27-48, three lectures per week

#### Undergraduate Courses (Vermont)

- CHEM 42/44: Introductory Organic Chemistry (Spring 2000, Spring 2001)  
enrollment 115 (average), combined lecture/laboratory format
- CHEM 141: Organic Chemistry, 1st Semester (Fall 2001, Fall 2004)  
enrollment 198 (average), combined lecture/laboratory format
- CHEM 143: Organic Chemistry for Majors (Fall 2001, Fall 2002, Fall 2003)  
enrollment 19 (average), combined lecture/laboratory format
- CHEM 144: Organic Chemistry for Majors (Spring 2002, Spring 2003, Spring 2004)  
enrollment 16 (average), combined lecture/laboratory format

#### Graduate/Advanced Undergraduate Courses (Iowa)

- 004:229: Advanced Organic Synthesis (Fall 2005, Fall 2006, Fall 2007, Spring 2009, Spring 2010, Spring 2011)  
enrollment 10–16, lecture format

#### Graduate/Advanced Undergraduate Courses (Vermont)

- CHEM 241: Advanced Organic Chemistry I (Fall 1998, Fall 1999, Fall 2000)  
enrollment 9 (average), lecture format
- CHEM 242: Advanced Organic Chemistry II (Spring 1999)  
enrollment 5, lecture format
- CHEM 257: Special Topics in Organic Chemistry, “Modern Organic Synthesis” (Fall 2001)  
enrollment 6, student seminar format (team taught with Professor José Madalengoitia)

### DISSERTATIONS AND THESES

12. Kara A. Slater “The Radical-Polar Crossover Approach to Chiral Substituted Pyrrolidines & Piperidines.” PhD August 2015, University of Iowa.
11. Koushik Banerjee “Mn-Mediated Radical Addition Approach Toward gamma-Amino Esters and Synthetic Studies of the Tubulysins.” PhD July 2011, University of Iowa.



## Curriculum Vitae — Gregory K. Friestad, Ph.D.

10. Gopeekrishnan Sreenilayam "Asymmetric 1,5-Polyol Synthesis: A Concise Configuration-Encoded Approach." PhD May 2011, University of Iowa.
9. An Ji "Mn-Mediated Radical Coupling Toward Synthesis of alpha,alpha-Disubstituted alpha-Amino Esters and Formal Synthesis of Quinine." PhD May 2011, University of Iowa.
8. Hye Jin Lee "Nucleophilic Additions to the Strain-Activated Bicyclic Acetal, 2,7-Dioxabicyclo[2.2.1]heptane." MS December 2008, University of Iowa.
7. Alex K. Mathies "Radical Cyclizations to Imino Acceptors Directed Toward the Total Syntheses of Aminosugars." PhD December 2006, University of Iowa.
6. Tao Jiang "Synthesis of Chiral Amines by Radical Cyclizations of Chiral Hydrazones and Application to Asymmetric Synthesis of L-Daunosamine." PhD May 2005, University of Vermont.
5. Gina M. Fioroni "Haloacetals and Ethynylsilanes as Tethered Radical Precursors for Diastereoselective Addition to Chiral Alpha-Hydroxyhydrazones." MS January 2005, University of Vermont.
4. Sathish Rangarajan "Comparison of the Endo- and Exocyclic Stereocontrol Elements on the Diastereoselectivity of the Silicon-Tethered Radical Cyclization of Hydrazones.", MS January 2005, University of Vermont.
3. Hui Ding "Asymmetric Synthesis of Amines by Allylation, Cyanation and Radical Addition to N-Acylhydrazones." PhD, October 2004, University of Vermont.
2. Jun Qin "Design, Synthesis, and Radical Addition Reactions of Chiral N-Acylhydrazones and their Applications in Chiral alpha-Branched Amine and Natural Product Synthesis." PhD, January 2003, University of Vermont.
1. Sara Massari "Diastereoselective Vinyl Addition to Chiral Hydrazones via Tandem Thiyl Radical Addition and Silicon-Tethered Cyclization." MS, March 2001, University of Vermont.

## PROFESSIONAL SERVICE

### Organizational Leadership and Support Activities

2010	Session Chair, 18th International Conference on Organic Synthesis, Bergen, Norway
2009	General Chair, Midwest Regional American Chemical Society Meeting, Iowa City
1998	Session Chair, 216th American Chemical Society National Meeting, Boston

### Peer Review Activities

#### Editorial Advisory Boards:

2009–present	<i>Current Organic Chemistry</i>
2009–present	<i>Molbank</i>

Manuscript Review: Peer reviews for 33 journals, approximately 10–20 manuscripts per year

#### Grant Review: Panels and Study Sections:

2016	American Cancer Society Cancer Drug Discovery Review Committee, Atlanta, GA
2015	NSF Chemical Synthesis Panel E
2014	NSF Graduate Research Fellowship Program Panel Review
2013	NIH K99/R00 Panel Review, Pathway to Independence program
2012	NIH K99/R00 Panel Review, Pathway to Independence program
2011	NIH Study Section, Synthetic and Biological Chemistry B, Baltimore, MD

Curriculum Vitae — Gregory K. Friestad, Ph.D.

- 2011 NIH K99/R00 Panel Review, Pathway to Independence program  
2010 NIH Chemical and Bioanalytical Sciences F04A Panel Review, Kirchstein NRSA  
Postdoctoral Fellowships (BCMB), Washington DC  
2008 NSF Organic Synthesis Panel S, Arlington, VA  
2008 NIH Study Section, Synthetic and Biological Chemistry B, Rockville, MD  
2007 NIH Chemical and Bioanalytical Sciences F04A Panel Review, Kirchstein NRSA  
Postdoctoral Fellowships (BCMB), Washington DC (June and October meetings)  
2006 NIH K99/R00 Panel Review, Pathway to Independence program  
2006 NIH Chemical and Bioanalytical Sciences F04A Panel Review, Kirchstein NRSA  
Postdoctoral Fellowships (BCMB), Washington DC  
2005 NIH Chemical and Bioanalytical Sciences F04A Panel Review, Kirchstein NRSA  
Postdoctoral Fellowships (BCMB), Washington DC
- Grant Review: Ad Hoc, by Mail or Internet  
2009-present Grinnell College, Harris Faculty Fellowship,  
2009-present Vermont Genetics Network  
2005-present American Cancer Society  
2000-present National Science Foundation, MPS-CHE  
2000-present Petroleum Research Fund, Types B, G, and AC  
2000-present Research Corporation