Curriculum Vitae

THOMAS K. GREEN
Professor of Chemistry

ADDRESS

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PERSONAL

Birth Date: November 23, 1953
Married: Jane Ransdell
Children: Margaret, Joseph, Eleanor

EDUCATION

1977	B.S. Chemistry, Kearney State College, Nebraska Graduated with Honors
1977-82	Ph.D. Organic Chemistry, University of Tennessee, 1984 Coursework: Organic and Analytical Thesis Title: "The Macromolecular Structure of Coal" Thesis Director: John W. Larsen

PROFESSIONAL HISTORY

1982-84	SRI International, Menlo Park, CA Coal Liquefaction in Supercritical Water Director: David S. Ross
1984-2000	Department of Chemistry, Western Kentucky University 1984-89; Assistant Professor of Chemistry 1989-94; Associate Professor of Chemistry Tenured, 1990 1994-2000; Professor of Chemistry
2001-12	Department of Chemistry & Biochemistry Institute of Arctic Biology (joint appointment). University of Alaska Fairbanks Professor of Chemistry Tenured: 2001

COURSES TAUGHT

Chemistry 101, "Introduction to Chemistry" (WKU)
Chemistry 105, “General Chemistry I” (WKU)
Chemistry 120, "College Chemistry I" (WKU)
Chemistry 121, "College Chemistry Laboratory I” (WKU)
Chemistry 222, "College Chemistry II"(WKU)
Chemistry 314, “Introduction to Organic Chemistry” (WKU)
Chemistry 340, 341, "Organic Chemistry I and Laboratory" (WKU)
Chemistry 342, 343, "Organic Chemistry II and Laboratory" (WKU)
Chemistry 425, “Polymer Chemistry” (WKU)
Chemistry 475, "Selected Topics in Chemistry"(WKU)
"Organic Reactions and Orbital Symmetry"
"Polymer Chemistry"
"Organic Synthesis"
Chemistry 540, "Organic Reactions" (Graduate, WKU)
Chemistry 541, "Physical Organic Chemistry" (Graduate, WKU)
Chemistry 620, 420 “Spectroscopy of Natural Products” (UAF)
Chemistry 321, 322 Organic Chemistry Lecture (UAF)
Chemistry 324, Advanced Organic Chemistry Laboratory (UAF)
Chemistry 106, General Chemistry II (UAF)
Chemistry 323, Organic Chemistry Laboratory (UAF)
Chemistry 481,482,681,682 Seminar
Chemistry 488 Undergraduate Research (UAF)

RESEARCH SUPPORT

Principal Investigator

1985 "Coal Swelling in Amine Solvents"
Exxon Education Foundation, $15,000, 1985.

1986 "Thermodynamics of Coal-Solvent Interactions"
Research Corporation, $17,600, 1986.

1987-98 Faculty Research Committee, WKU, $4000
President's Unrestricted Fund, WKU, $2000

1988 "Thermodynamics of the Solvent-Swelling of Coals"
U.S. Department of Energy, $98,670, 1988.

1992 "Forms of Organic Sulfur in Coal"
Summer Faculty Research Grant, WKU, $4,000

1992 "Gel Permeation and Viscosity Equipment for Studies in Polymer Chemistry"
National Science Foundation, $38,873

1994 "Structural Characterization of Sulfur Compounds in Petroleum by NMR Spectroscopy"
National Science Foundation, Kentucky EPSCoR, $31,798

1995 "Structural Characterization of Sulfur Compounds in Petroleum by ^{13}C NMR Spectroscopy"
American Chemical Society, Petroleum Research Fund, $25,000

1996 "Acquisition of Computer-based 3-D Molecular Modeling Software and Silicon Graphics Indigo 2 Workstation"
WKU Instructional Computing Committee, $10,000

2012 "In Vivo Analysis of Adenosine Ribonucleosides by Microdialsyis and Capillary Electrophoresis and Fluorescence Detection"
National Institute Health (NINDS, R15) $400,629

2012 "Synthesis of ceramide and sphingosine-based drugs in cancer pathogenesis and treatment" Innovation Seed Award, UAF Office of Intellectual Property and Commercialization." $10,000

Co-Principal Investigator

1990 "Acquisition of FT-NMR Instrumentation for Organic Laboratory"
(PI R. Holman)
National Science Foundation, $155,325

1996 "Improvement of Undergraduate Science Instruction with a Microscope-Based Raman System" (PI W. P. Pan)
National Science Foundation, $34,396

1999 "Modernization of Nuclear Magnetic Resonance Instrumentation" (PI M. Kubasik).
National Science Foundation, $76,790

2001 "Central Nervous Regulation of Metabolic Down Regulation During Hibernation during Microdialysis and Capillary Electrophoresis with Laser-induced Fluorescence Detection" (PI K. Drew)
Office of Naval Research, DEPSCoR, $299,997

2002 "Central Nervous Regulation of Metabolic Down Regulation During Hibernation during Microdialysis and Capillary Electrophoresis with Laser-induced Fluorescence Detection" (PI K. Drew)
Office of Naval Research Supplement, DEPSCoR, $27,416

2004 "Increasing Breadth in the Separation Science Curriculum in Chemistry: Addition of HPLC and CE to Analytical, Organic, and Biochemistry Lab Instruction," (PI Stolzberg) (original PI, excluded from being PI by CSEM policy since joint with IAB).
National Science Foundation, $139,177

2005 "Central Nervous System Regulation of Metabolic Suppression for Combat Casualty Care" (PI Kelly Drew)
US Department of Defense, $511,230

2010 "Hibernation Genomics, 2010-2011 Supplement, (PI, Brian Barnes and co-PI Kelly Drew). Project leader on 600 MHz NMR Spectrometer.
Department of Defense, US Army Medical Research and Materiel Command, $1,320,883.

Student Support for Research

2009, 2011 "Synthesis of ceramide and sphingosine-based drugs in cancer pathogenesis and treatment" Zhipeng Dai, $10,000 per summer.

TEACHING SUPPORT

2011 "Student Workstations & Software for UAF Nuclear Magnetic Resonance Facility" $8632, UAF Technology Advisory Board

2012 National Science Foundation Green Chemistry Workshop Award, funded for tuition, room/board July 14-20, 2012.

AWARDS AND RECOGNITIONS

1981	ARCO Graduate Student Award, University of Tennessee
1982	Teaching Assistant Award, University of Tennessee
1982	Chancellor's Award for Professional Promise, University of Tennessee
1990,1995	Ogden College Award for Research and Creativity, WKU
1992	Faculty Summer Research Fellowship, WKU
1993	Summer Faculty Research Participant, Argonne National Laboratory
1997	Outstanding Alumnus of University of Nebraska at Kearney
1997	Fox Lecturer, Department of Chemistry, University of Nebraska at Kearney
1998	National Science Foundation Summer Scholar, University of Tennessee
2012	Nominated for Robert Piacenza Excellence in Teaching Award, UAF

GRADUATE STUDENT THESES/DISSERTATIONS DIRECTED

1989 Doug Kimbler, M.S. "Air Oxidation of Soluble Coal Extracts,"

1992 Kanning Wu, M.S. "NMR Analysis of Sulfur Compounds in Petroleum,"

1994 Bijan Radmard, M.S. "NMR Spectroscopy of Sulfonium Ions in the Presence of Lanthanide Shifts Reagents"

1997 Ea-Ji-Ru Son, M.S. "Analysis of Chiral Sulfonium Ions with NMR Lanthanide Shift Reagents"

1998 Francisco Valenzuela, MS "Analysis of Chiral Sulfonium Ions with Capillary Electrophoresis"

1998 Claire Davies, M.S. "Analysis of Chiral Sulfoxides with Capillary Electrophoresis"

1998 Amanda Brooks, M.S. "Polymer Chemisty Experiments for the Undergraduate Curriculum"

2002 Marc Smeets, M.S. "The Synthesis of Single-Isomer Cyclodextrins for the Enantiomeric Separation of Sulfoxides and Sulfoximines"

2005 Colin McGill, M.S. "The Cyanide Catalyzed Dimerization of 2.3-Naphthalenedicarboxylaldehyde; A Unique Oxidative Condensation Product and Derivatives"

2005 Kristian Swearingen, M.S. "Development and characterization of a capillary electrophoresis instrument with laser-induced fluorescence detection for on-line monitoring of glutamate in vivo via microdialysis "

2009 Daniel Kirschner, Ph.D. "Bioanalytical Development of Charged Cyclodextrin Capillary Electrokinetic Chromatography and Microperfusion Samping to Study Endogenous D-serine and L-glutamate Efflux in Brain"

2012 Michael Jaramillo, MS "Synthesis of New Sulfoalkyl Beta-Cyclodextrins" (anticipated)

2013 James McKee, PhD "Aggregation of Amphiphilic Cyclodextrins" Active. (anticipated)

2013 Zhipeng Dai, PhD "Synthesis of Sphingosine-related Derivatives and their Analysis" (anticipated)

GRADUATE STUDENT COMMITTEE SERVICE since 2005

Year	Student (Mentor)
2006-07	Tulasi Jinka, PhD (K.Drew)
2006-09	Adelia Falk, PhD (P. Barboza)
2008-09	Aaron Kammer, MS (K. O'Brien)
2009-11	Justin Bailey, MS (M. Harris)
2009-11	Adrienna Demmerly, PhD (W. Howard)
2009-11	Spencer Giles, MS (B. Rasley)
2009-11	Jonathan Nigg, MS (B. Rasley)
2010-12	Lori Bogren, PhD (K. Drew)
2010-11	Chris Bender, MS Engineering (Chen-fu Chen)
2010-12	Jonny Newman, MS (D. Wagner)
2011-12	Brian Allman, MS (D. Wagner)

UNDERGRADUATE RESEARCH STUDENTS MENTORED since 2005

Student	Degree, Year	Current Position
Daniel Kirschner	BS Chemistry UAF 2005 PhD Chemistry UAF 2009 (Green)	Nektar Therapeutics Huntsville, AL
Kristian Swearingen	BS, Chemistry UAF 2005 MS Chemistry UAF 2008 (Green) PhD, Chemistry U Wash	Post-doctoral, Institute of Systems Biology, Seattle
Michael Jaramillo	BS Chemistry UAF 2006 MS Chemistry UAF (Green, current)	
Pamela Meadors	BS Biological Sciences, UAF 2007	Veterinary Specialists of Alaska
Brittany Davies	BS Chemistry/BioSciences 2007 MS Biology UAF 2009	Medical School
Jennifer Dukette	BS Biological Sciences 2007	Pharmacy School
Mary Curry	BS Chemistry UAF 2010 MS Chemistry UAF (current Drew)	
Charlie Stark	BS Chemistry UAF 2010	PhD Program, Chemistry Montana St
Peter Knight	BS Biological Sciences, UAF	Medical School
Dan Widener	BS Chemistry UAF (current Drew/Green	
Amber Thompson	BS Chemistry UAF 2011	
Dan Neetz	BS Biological Sciences, UAF	
Jennifer Stuvek	BS Biological Sciences UAF	
Scott Hummel	BS Chemistry UAF, 2011	
Kyra Brown	BS Chemistry UAF (current)	UC Davis, Forsenic Chem
Sitara Chauhan	BS Chemistry UAF 2011	PhD Prorgam, Biochem University of Maryland

PEER-REVIEWED PUBLICATIONS

1. J. W. Larsen, T. K. Green, P. Choudhury, and E. Kuemmerle, "The Effect of Reagent Access on the Reactivity of Coals," Advances in Chemistry Series, No. 192; Coal Structure, M. L. Gorbaty and K. Ouchi, eds., American Chemical Society, 1981, 277-91.

2. J. W. Larsen, T. Green, J. Kovac, and D. Brenner, "The Macromolecular Structure of Coal," Coal Structure, R. A. Meyers, ed., Academic Press, N.Y., 1982, 199-280.

3. T. K. Green, J. Kovac, and J. W. Larsen, "A Rapid and Convenient Method for Measuring the Swelling of Coals by Solvents," *Fuel*, 1984, 63, 935.

4. T. K. Green and J. W. Larsen, "Coal Swelling in Binary Solvent Mixtures: Pyridine-chlorobenzene and N,N-dimethylaniline-methanol," *Fuel*, 1984, 63, 1538.

5. D. S. Ross, G. P. Hum, R. J. Schmitt, and T. Green, "Synthesis of Polynaphthoquinone," *Tetrahedron Lett*., 1984, 25, No. 44, 4995.

6. D. S. Ross, R. M. Laine, T. K. Green, A. S. Hirschon, and G. P. Hum, "A Regular Coal Structure and Conversion Severity," *Fuel,* 1985, 64, 1323.

7. J. W. Larsen, T. K. Green, and J. Kovac, "The Nature of the Macromolecular Network Structure of Bituminous Coals," *J. Org Chem*., 1985, 50, 4729.

8. T. K. Green and T. A. West, "Coal Swelling in Straight-Chain Amines; Evidence for Specific Site Binding," *Fuel*, 1985, 65, 298.

9. D. S. Ross, G. P. Hum, T. C. Miin, T. K. Green, and R. Mansani, "Supercritical Water/CO Liquefaction and a Model for Coal Conversion," *Fuel Process. Tech.,* 1986, 12, 277.

10. D. S. Ross, G. P. Hum, T. C. Miin, T. K. Green, and R. Mansani, "Isotope Effects in Supercritical Water: Kinetic Studies of Coal Liquefaction," ACS Symposium Series 329, American Chemical Society, Washington, D. C., 1987, pp. 242-250.

11. D. S. Ross, T. K. Green, R. Mansani, and G. P. Hum, "Coal Conversion in CO\Water. I. The Conversion Mechanism," *Energy Fuels*, 1987, 1, 287.

12. D. S. Ross, T. K. Green, R. Mansani, and G. P. Hum, "Coal Conversion in CO/Water. II. Oxygen Loss and the Conversion Mechanism," *Energy Fuels*, 1987, 1, 292.

13. T. K. Green, "The Macromolecular Structure of Coal," *J. Coal Qual*., 6, 90, 1987.

14. T. K. Green, J. E. Ball, M-W. Chen, and L. Lopez-Froedge, "Flory Interaction Parameters for Illinois No. 6 Coal Extracts and Benzene," in Coal Science II, ACS Symposium Series 461, H. H. Schobert, K. D. Bartle, and L. J. Lynch, eds., American Chemical Society, Washington, D.C., 1991, 137-158.

15. T. K. Green, J. E. Ball, and K. Conkright, "Rate of Benzene Sorption by O-Alkylated Illinois No. 6," *Energy Fuels*, 1991, 5, 609-610.

16. T. K. Green, W. G. Lloyd, L. Gan, P. Whitley, and K. Wu, "Structural Characterization of Sulfur Compounds in Petroleum by S- Methylation and ^{13}C NMR Spectroscopy" *Energy Fuels*, 1994, 8, 244-248.

17. T. K. Green and T. D. Selby, "Pyridine Sorption Isotherms of Argonne Premium Coals; Dual-Mode Sorption and Coal Microporosity," *Energy Fuels*, 1994, 8, 213-218.

18. T. K. Green and L. Wang, "Study on the Mechanism of Selective Carbon-Sulfur Bond Cleavage in Sulfide at Room Temperature" *Youje Huaxue,* 1996, **16**, 507-513.

19. T..K. Green, J. Whetstine, E.J.R. Son, "Enantiomeric Purity of Alkylmethylsulfonium Ions with Chiral NMR shift reagents: Racemization by Pyramidal Inversion as Observed by ^{1}H NMR spectroscopy" *Tetrahedron: Asymmetry,* 1997, **8**, 3175-3181.

20. T. K. Green, D. B. Dahl, F. A. Valenzuela, "Capillary Zone Electrophoretic Separation of Sulfonium and Thiophenium Ions," *Journal of Chromatography A*, 1998, **802**, 395-398.

21. T. K. Green, L. L. Pesterfield, J. Whetstine, B. Radmard, "Methylation of Tetrakis(fod) Europate NMR Shift Reagent by S-Methyldibenzothiophenium Ion," *Magnetic Resonance in Chemistry,* 1998, **36**, 79-86..

22. T. K. Green, D. B. Dahl, F. A. Valenzuela, "Synthesis and Separation of A Diastereomeric Sulfonium Ion by Capillary Zone Electrophoresis," *Journal of Chemical Education,* 1998, **75**, 1590.

23. T. K. Green, F. A. Valenzuela, D. B. Dahl, "Enantiomeric Separation of Sulfonium Ions by Capillary Electrophoresis Using Neutral and Charged Cyclodextrins," *Analytical Chemistry* 1998, **70**, 3612-3618.

24. D. B. Dahl, J. T. Riley, T. K. Green, "Chromatographic Separation Techniques for Undergraduates," *Journal of Chemical Education* 1998, **75**, 1209.

25. Lei Wang, T. K. Green, " Preparation of sulfonium and effect of NMR shift reagent $Eu(fod)_4$- on ^1H and ^{13}C NMR spectroscopy" *Youji Huaxue* 1998, **18(1)**, 76-81.

26. M. Culha, M. Schell, S. Fox, T. K. Green, T. Betts and M. J. Sepaniak "Evaluation of newly synthesized and commercially available charged cyclomaltooligosaccharides (cyclodextrins) for capillary electrokinetic chromatography" *Carbohydrate Research* 2004, **339**, 241-249.

27. Drew, K. L.; Pehek, E. A.; Rasley, B. T.; Ma, Y. L.; Green, T. K.. Sampling glutamate and GABA with microdialysis: suggestions on how to get the dialysis membrane closer to the synapse. *Journal of Neuroscience Methods* 2004, 140, 127-131.

28. McGill, C. M.; Swearingen, K.E.; Drew, K.L.; Rasley, B.T.; Green, T.K. "Reaction of Napthalene-2,3-dialdehyde with Cyanide; A Unique Oxidative Condensation Product." *Journal of Heterocyclic Chemistry* 2005, **42(4),** 475-481.

29. Kirschner, D.L. and Green, T.K. Nonaqueous synthesis of a selectively modified, highly anionic sulfopropyl ether derivative of cyclomaltoheptaose (beta cyclodextrin)in the presence of 18-crown-6. *Carbohydrate Research* 2005, 340(11), 1773-1779.

30. Lane, C. A. and Green, T. K. Usnic Acid and the Intramolecular Hydrogen Bond; A Computational Experiment for the Organic Laboratory. *Journal of Chemical Education* 2006, 83, 1046.

31. Kirschner D, Green T, Hapiot F, Tilloy S, Leclercq, L, Bricout, H, Monflier E Heptakis (2,3-di-*O* -methyl-6-*O*-sulfopropyl)- Beta -cyclodextrin: a genuine supramolecular carrier for the Aqueous Organometallic Catalysis *Advanced Synthesis and Catalysis* 2006, 348, 379-386.

32. Kirschner, D. L.; Jaramillo, M.; Green, T. K. "Enantioseparation and Stacking of Cyanobenz[f]isoindole-Amino Acids by Reverse Polarity Capillary Electrophoresis and Sulfated beta-Cyclodextrin." *Analytical Chemistry* 2007, 79(2), 736-743.

33. Clausen, T.; Green, T; Steiner, B. "Use of the Chemical Literature as a Template to Probe Stereoselective Reactions by NMR." *Journal of Chemical Education* 2008, 85, 692-694.

34. Kirschner, D.; Jaramillo, M.; Green, T.; Hapiot, F.; Leclercq, L.; Bricout, H.; E. Monflier, E. "Fine tuning of sulfoalkylated cyclodextrin structures to improve their mass-transfer properties in an aqueous biphasic hydroformylation reaction" *Journal of Molecular Catalysis A: Chemical* 2008, 286, 11-20.

35. Falk, A.; Green, T.; Barboza, P. "Quantitative Determination of Secondary Metabolites in Cladina stellaris and other lichens by Micellar Electrokinetic Chromatography" *Journal of Chromatography A*, 2008, 1182(1), 141-144

36. Kirschner, D. L; Wilson, A. L; Drew, K. L, Green, T. K. "Simultaneous Efflux of Endogenous D-Ser and L-Glu From Single Acute Hippocampus Slices During Oxygen Glucose Deprivation" *Journal of Neuroscience Research* 2009, 87, 2812-2820.

37. Kirschner, D. L.; Green, T. K. "Separation and sensitive detection of D-amino acids in biological matrices" *Journal of Separation Science* 2009, 32(13), 2305-2318.

38. Green, T. K.; Denoroy, L.; Parrot, S. "Fluoroescence Enhancement of a Meisenheimer Complex of Adenosine by γ-Cyclodextrin: A Thermodynamic and Kinetic Investigation" *Journal of Organic Chemistry* 2010, 75, 4048-4055.

39. Sundset, M. A.; Barboza, P.S.; Green, T. K.; Folkow, L. P.; Blix, A.S.; Mathiesen, S. D. "Microbial degradation of usnic acid in the reindeer rumen" *Naturwissenschaften* 2010, 97, 273-278.

40. Chen C-f., Rasley, BT, Warlick BPE, Green TK, Swearingen KE, Drew KL, Review of microdialysis and advances for sampling synaptic and extrasynaptic pools. *Neuromethods*. GD Giovanni (Ed.), in press 2012.

PRESENTATIONS AT SCIENTIFIC MEETINGS since 2000 (bold denotes speaker or presenter).

1. **T. K Green**, T. Warley, M. I. Smeets, "Enantiomeric Resolution of Chiral Sulfoxides and Sulfoximines using Cyclodextrin Capillary Electrophoresis," Northwest Regional Meeting of American Chemical Society, June 20, 2002, Spokane, WA, 132.

2. **T. K. Green**, T. Clausen, S. Boothroyd, C. A. Lane, "Long Distance NMR Spectroscopy in Alaska," Northwest Regional Meeting of American Chemical Society, June 20, 2002. Spokane, WA, Paper 17.

3. **K. L. Drew**, E. A. Pehek, B. T. Rasley, Y. Ma, T. K. Green, "Sampling Glutamate and GABA with Microdialysis: How to get the Membrane Closer to the Synapse" Monitoring Molecules in Neuroscience, Proceedings of the 10th International Conference on *In Vivo* Methods. June 24-27, 2003, Stockholm, Kalinska University Press, p. 413.

4. T. K. Green, C. G. McGill, **K. E. Swearingen**, B. T. Rasley, K. L. Drew, "Characterization of Side-products from NDA/NaCN On-Column Derivitization of Amino acid Neurotransmitters" Monitoring Molecules in Neuroscience, Proceedings of the 10th International Conference on *In Vivo* Methods. June 24-27, 2003, Stockholm, Kalinska University Press, p. 478.

5. B. T. Rasley, K. L. Drew, E. Dick, K. Swearingen, **T. K. Green**, "In Vivo Monitoring of Glutamate in Hibernating Ground Squirrels: Construction of an On-line Microdialysis/Capillary Electrophoresis/Laser-induced Fluorescence Instrument" Proceedings of the 10th International Conference on *In Vivo* Methods. June 24-27, 2003, Stockholm, Kalinska University Press, p. 478.

6. **Swearingen, Kristian E**.; Rasley, Brian T.; Green, Thomas K.. **"**Development and Characterization of a Capillary Electrophoresis Instrument with Laser-Induced Fluorescence Detection for On-Line In Vivo Analysis of Neurotransmitters via Microdialysis" Abstracts, 60th Northwest Regional Meeting of the American Chemical Society, Fairbanks, AK, United States, June 15-18 (2005), Abstract Number 2005:514172.

7. **Harris, Michael B**.; Drew, Kelly L.; Rasley, Brian T.; Green, Thomas K.. **"**Ultra small microdialysis microelectrode combination" Abstracts, 60th Northwest Regional Meeting of the American Chemical Society, Fairbanks, AK, United States, June 15-18 (2005), Abstract Number 2005:514157.

8. Green, T. K.; Jaramillo, M.; **Kirschner, D. L**. "Highly Sulfated β-Cyclodextrin as a Chiral Selector in Capillary Electrophoresis for NDA-tagged Biogenic Amino Acids" Abstacts, XIII International Cyclodextrin Symposium, Torino, Italy, May 14-17, 2006, Poster, 5-PO5.

9. Green, T. K.; Kirschner, D. L.; **Jaramillo**, M.; Rasley, B.; Drew, K. L. "Analysis of glutamate and D-serine by reverse polarity capillary electrophoresis using highly-charged, sulfated β-cyclodextrin" Proceedings of the 11th International Conference on In Vivo methods, May 19-22, 2006, Cagliari, Italy.

10. **Jaramillo, M.**; Kirschner, D. L.; Green, T. K. "Synthesis of a Series of Amphiphilic 2,3-Di-O-Sulfoalkyl-6-O-Alkyl Cyclodextrins for Use as Mass Transfer Promoters in Biphasic Catalytic Systems," Abstracts, 64th Northwest Regional Meeting of the American Chemical Society, Tacoma, WA, United States, June 28-July 1 (2009), NW-161.

11. **Green, T. K**.; Denoroy, L.; Parrot, S. "Cyclodextrin-Enhanced Fluorescence Detection of Ribose-Modified Meisenheimer Complexes of Adenosine and Inosine by Capillary Electrophoresis," Abstracts, 64th Northwest Regional Meeting of the American Chemical Society, Tacoma, WA, United States, June 28-July 1 (2009), NW-111.

12. **Green, T. K**.; Kirschner, D. L. "Single Isomer Sulfoalkyl β-Cyclodextrins as Chiral Resolving Agents for CBI-Amino Acids by Capillary Electrophoresis," Abstracts, 64th Northwest Regional Meeting of the American Chemical Society, Tacoma, WA, United States, June 28-July 1 (2009), NW-066.

13. **Harris, M. B**.; Bailey, J. R.; Kirschner, D. L.; Green, T.K. "Can synaptic neurotransmitter be quantified in a novel brainstep slice microperfusion system?" Abstracts, 40th Annual Meeting of the Society for Neuroscience, Nov 13-17, 2010, San Diego, CA.

14. **Green, T. K**. "Fluorescent Enhancement of an Adenosine Derivative by γ-Cyclodextrin" Abstracts, Sigma Xi International Research Conference, November 11-14, 2010, Raleigh, North Carolina. Abstract PR-20 (published as supplement).

15. **Dai, Z.**; Green, T. K. "Enantioselective reduction of γ,δ -unsaturated β-ketoesters with ruthenium-BINAP and oxazaborolidine catalysts", Abstract 603-ORGN, 242nd National Meeting of American Chemical Society, Aug 28-Sept 1, 2011.

16. **McKee, J.**; Green T. K.; Kirschner, D. L.; Jaramillo, M. "Synthesis and characterization of single-isomer amphiphilic sulfoalkyl cyclodextrins: Evidence for extended hydrophobic cavity", Abstract 61-ANYL, 242nd National Meeting of American Chemical Society, Aug 28-Sept 1, 2011.

17. **Green, T. K**; Dai, Z.; Chauhan, S. "Atropisomers of serotonin dimer: Synthesis, purification and characterization" Abstract 1, 67th Northwest Regional Meeting of
the American Chemical Society, June 24-27, 2012.

18. **Green, T. K**.; McKee, J. "Self-assembled cyclodextrin-polystyrene nanoparticles via emulsion polymerization" Abstract 72, 67th Northwest Regional Meeting of the American Chemical Society, June 24-27, 2012

PRESENTATIONS AT UNIVERSITIES since 2000

"Resolution of Chiral Sulfonium Ions by NMR Spectroscopy and Capillary Electrophoresis" University of Alaska Fairbanks, February 8, 2000,

"Microdialysis: Theory, application and coupling to capillary electrophoresis with laser-induced fluorescence detection" University of Alaska Fairbanks, February 7, 2001.

"Capillary Electrophoresis and Cyclodextrins: A Winning Combination for Trace Analysis of D-amino Acids in Biological Samples" Life Sciences Seminar, University of Alaska Fairbanks, September 22, 2006.

"Capillary Electrophoresis and Cyclodextrins: A Winning Combination for Trace Analysis of D-amino Acids in Biological Samples" Department of Biology, University of Alaska Anchorage, March 6, 2007.

"Capillary Electrophoresis Chromatography and Microperfusion Sampling to Study Endogenous D-serine and L-glutamate Efflux in Brain" Department of Neuropharmacology, University Lyon Claude Bernard, May 14, 2009.

"Cyclodextrin-enhanced Fluorescence of Ribose-Modified Meisenheimer Complexes of Adenosine" University of Nebraska – Kearney, August 27, 2010.

WORKSHOPS AND COURSES ATTENDED since 2000

2001 Workshop on Fastlane, National Science Foundation, UAF

2001 System Manager Course, Varian Mercury 300 NMR Spectrometer. Palo Alto, CA, October 8-12.

2002 Assessment Institute, Indianapolis, IN, November 3-5.

2003 UAF Short Course on Brain Chemistry/NMR Spectroscopy July, 16-18.

2004 Arctic Regional Supercomputer Center, Summer Faculty Camp, August 7-20, UAF

2012 University of Oregon Green Chemistry in Education Workshop, National Science Foundation, Eugene, Oregon, July 14-20.

SERVICE

Committee Appointments and Service

State-wide

2010-12 President, Alaska Chapter Sigma Xi Research Society
2010-12 Reviewed applications for William S. Wilson Scholarship (Sigma Xi)
2001-12 Alaska Statewide High School Science Symposium, Judge and Session Chair

University/College

2006-08 University Pre-tenure Committee (Chair 2nd Year), UAF
2011-12 CNSM Curriculum Committee, UAF
2001-12 Occasional contributor/volunteer CNSM Science Potpourri

Departmental

2007-08 Search Committee, Chemistry Lab Coordinator
2010-11 Search Committee, Organic Chemistry
2010-11 Search Committee, NMR Research Associate
2011 Search Committee, INBRE/IAB/Biochemistry
2011 Led effort to renovate Reichardt 136 for new NMR spectrometer
2001-11 Maintenance of Departmental NMR spectrometer
2010-11 Chair, Unit Peer, Chemistry & Biochemistry
2010-12 Advisor for Biochemistry majors
2012 Presented advising talk "Pathways to degrees in Chemistry and Biochemistry"

Ad-hoc Reviewer

Analytical, Analytical Letters, Talanta, Journal of Organic Chemistry, Phytochemical Analysis

Book Reviews

"Advances in Coal Chemistry ," *Energy Fuels*, 1989, 4, 539.

"Enantiomer Separation: Fundamentals and Practical Methods," edited by Fumio Toda**.** *Journal of the American Chemical Society* 2006, 128(5), 1771.

"Organic Chemistry" David Klein, Wiley, 2012. Reviewed several Chapters.

Society memberships

American Chemical Society
Sigma Xi Scientific Research Society