

F. Christopher Pigge
Curriculum Vitae

Department of Chemistry
University of Iowa
Iowa City, IA 52242

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I. Professional Experience and Education

- 8/05 – Present: Associate Professor of Chemistry, University of Iowa
- 9/02 – 8/05: Associate Professor of Chemistry, University of Missouri – St. Louis.
- 8/96 – 9/02: Assistant Professor of Chemistry, University of Missouri – St. Louis.
- 1/94 – 8/96: Postdoctoral Research Associate, Wayne State University, Detroit, MI (Prof. James H. Rigby, advisor).
- 12/93: Ph.D. (Organic Chemistry) University of North Carolina, Chapel Hill (Prof. Thomas N. Sorrell, advisor).
- 5/89: B.A. (Chemistry) College of Wooster, Wooster, Ohio.

II. Awards and Honors

- UI Career Development Award, 2010-2011.
- Adjunct Associate Professor, Department of Radiology, Univ. of Iowa (3/11 – Present)
- National Institutes of Health Postdoctoral Fellowship, Wayne State University, 1/96 – 8/96.
- U. S. Department of Education Research Fellowship, University of North Carolina, 1991 – 1993.
- Burroughs-Wellcome Fund Fellowship in Synthetic Organic Chemistry, University of North Carolina, 1990 – 1991.
- Phi Beta Kappa, College of Wooster, 1989.

III. Research

Peer-Reviewed Publications

- 59 “Influence of Halogen Bonding Interactions in Crystalline Networks of Tetraarylethylene Halobenzoyl Esters.” Pradeep P. Kapadia, Dale C. Swenson, and F. Christopher Pigge, *Cryst. Growth Des.* **2012**, *12*, 698-706.
- 58 “Improved Synthesis and Biological Evaluation of Chelator-Modified α -MSH Analogues Prepared by Copper-Free Click Chemistry.” Nicholas J. Baumhover, Molly E. Martin, Sharavathi G. Parameswarappa, Kyle C. Kloepping, M. Sue O’Dorisio, F. Christopher Pigge, and Michael K. Schultz, *Bioorg. Med. Chem. Lett.* **2011**, *21*, 5757-5761.
- 57 “Generation and Solid State Characterization of Tetrapyrindinium Perchlorate Salts Derived from Tetrapyrindyl Tetraphenylethylenes.” Pradeep P. Kapadia, Mackenzie A. Magnus, Dale C. Swenson, and F. Christopher Pigge, *J. Mol. Struct.* **2011**, *1003*, 82-86.

- 56 "Synthesis of Substituted 3,9-Diazaspiro[5.5]undecanes via Spirocyclization of Pyridine Substrates." Sharavathi G. Parameswarappa and F. Christopher Pigge, *Tetrahedron Lett.* **2011**, 52, 4357-4359.
- 55 "Semiconducting Organic Assemblies Prepared from Tetraphenylethylene Tetracarboxylic Acid and Bis(pyridine)s via Charge-Assisted Hydrogen Bonding." Pradeep P. Kapadia, Lindsay R. Ditzler, Jonas Baltrusaitis, Dale C. Swenson, Alexei V. Tivanski, and F. Christopher Pigge, *J. Am. Chem. Soc.* **2011**, 133, 8490-8493.
- 54 "Tetrapyridyl Tetraphenylethylenes: Supramolecular Building Blocks with Aggregation Induced Emission Properties." Pradeep P. Kapadia, John C. Widen, Mackenzie A. Magnus, Dale C. Swenson, and F. Christopher Pigge, *Tetrahedron Lett.* **2011**, 52, 2519-2522.
- 53 "Losing Control? "Design" of Crystalline Organic and Metal-Organic Networks using Conformationally Flexible Building Blocks." F. Christopher Pigge, *CrystEngComm* **2011**, 13, 1733-1748. [Invited review]
- 52 "Titanium-Mediated Spirocyclization Reactions of 4-Alkyl Pyridines." Sharavathi G. Parameswarappa and F. Christopher Pigge, *Org. Lett.* **2010**, 12, 3434-3437.
- 51 "A DOTA-Peptide Conjugate by Copper-Free Click Chemistry." Molly E. Martin, Sharavathi G. Parameswarappa, M. Sue O'Dorisio, F. Christopher Pigge, and Michael K. Schultz, *Bioorg. Med. Chem. Lett.* **2010**, 20, 4805-4807.
- 50 "Synthesis of a DOTA-Biotin Conjugate for Radionuclide Chelation via Cu-Free Click Chemistry." Michael K. Schultz, Sharavathi G. Parameswarappa, and F. Christopher Pigge, *Org. Lett.* **2010**, 12, 2398-2401.
- 49 "Metal Catalyzed Allylation of Organoboranes and Organoboronic Acids." F. Christopher Pigge, *Synthesis* **2010**, 1745-1762. [Invited review]
- 48 "Examination of Halogen Bonding Interactions in Electronically Distinct but Structurally Related Tris(haloarenes)." F. Christopher Pigge, Venu R. Vangala, Dale C. Swenson, and Nigam P. Rath, *Cryst. Growth Des.* **2010**, 10, 224-231.
- 47 "Synthesis of Polycyclic Cyclohexadienyl Ruthenium(II) Complexes from η^6 -Arene Precursors via Phosphine Promoted Intramolecular Nucleophilic Aromatic Addition." F. Christopher Pigge, R. Dhanya, and Dale C. Swenson, *Organometallics* **2009**, 28, 3869-3875.
- 46 "A 1D Crystalline Organic Polyrotaxane Formed via Hydrogen Bond-Mediated Self-Assembly of a Conformationally Flexible Tri-Carboxylic Acid." F. Christopher Pigge, Mayuri K. Dighe, and Dale C. Swenson, *CrystEngComm* **2009**, 11, 1227-1230.

- 45 “Metal-Mediated Dearomatization Leading to 2-Azaspiro[4.5]decanes via Tandem Nucleophilic Aromatic Addition – Horner-Wadsworth-Emmons Olefination – Oxidative Demetalation Sequences.” F. Christopher Pigge and Rashmi Dalvi, *Tetrahedron* **2008**, *64*, 10123-10131.
- 44 “Hexagonal Crystalline Inclusion Complexes of 4-Iodophenoxy Trimesoate.” F. Christopher Pigge, Venu R. Vangala, Pradeep P. Kapadia, Dale C. Swenson, and Nigam P. Rath, *Chem. Commun.* **2008**, 4726-4728.
- 43 “Effect of Remote Substituents on Solid State Packing Interactions in Macrocyclic Crownophanes Derived from 1,3,5-Triarylbenzenes.” F. Christopher Pigge, Angela V. Schmitt, and Nigam P. Rath, *J. Inclusion Phenom. Macrocycl. Chem.* **2008**, *62*, 105-110.
- 42 “Mono-, Bis-, and Tris(crown ether)s Assembled Around 1,3,5-Triarylbenzene Scaffolds.” F. Christopher Pigge, Mayuri K. Dighe, and Jon C. D. Houtman, *J. Org. Chem.* **2008**, *73*, 2760-2767.
- 41 “Monolayers of Triarylbenzene Derivatives.” Mayuri K. Dighe, Frank J. Dover, Keith J. Stine, and F. Christopher Pigge, *Thin Solid Films* **2008**, *516*, 3227-3238.
- 40 “Morita-Baylis-Hillman Cyclizations of Arene-Ruthenium Functionalized Acrylamides.” F. Christopher Pigge, R. Dhanya, and Erik R. Hoefgen, *Angew. Chem. Int. Ed.* **2007**, *46*, 2887-2890.
- 39 “Self-Assembly of Sticky TAB’s: Inclusion Complexes and Hydrates from 1,3,5-Tris(4-hydroxybenzoyl)benzene.” F. Christopher Pigge, Mayuri K. Dighe, and Nigam P. Rath, *Cryst. Growth Des.* **2006**, *6*, 2732-2738.
- 38 “Relative Importance of X···O=C versus X···X Halogen Bonding as Structural Determinants in 4-Halotriarylbenzenes.” F. Christopher Pigge, Venu R. Vangala, and Dale C. Swenson, *Chem. Commun.* **2006**, 2123-2125.
- 37 “Exploiting Phosphonate Chemistry in Metal-Mediated Dearomatization: Stereoselective Construction of Functionalized Spirolactams from Arene Ruthenium Complexes.” F. Christopher Pigge, John J. Coniglio, and Rashmi Dalvi, *J. Am. Chem. Soc.* **2006**, *128*, 3498-3499.
- 36 “Lattice Inclusion Complexes Prepared From 1,3,5-Tris(3-nitrobenzoyl)benzene.” V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *Cryst. Growth & Des.* **2006**, *6*, 193-196.
- 35 “Influence of Halide Ion and Lewis Acid in the Demetalation of an Electron-rich Cyclohexadienyl Ruthenium Complex.” F. Christopher Pigge, John J. Coniglio, and Nigam P. Rath, *Organometallics* **2005**, *24*, 5424-5430.

- 34 "Modular Synthesis of Triaroylbenzene-Derived Crownphanes." F. Christopher Pigge, Fatemeh Ghasedi, Angela V. Schmitt, Mayuri K. Dighe, and Nigam P. Rath, *Tetrahedron* **2005**, *61*, 5363-5371.
- 33 "Matching of Host and Guest Symmetry in Crystalline Lattice Inclusion Complexes of the Triaroylbenzene Derivative 1,3,5-Tris(3-methoxybenzoyl)benzene." V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *CrystEngComm* **2004**, *6*, 531-534.
- 32 "Polymorphism and Pseudopolymorphism in the Triaroylbenzene Derivative 1,3,5-Tris(4-cyanobenzoyl)benzene." V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *Cryst. Growth & Des.* **2004**, *4*, 1217-1222.
- 31 "Interpenetration of Distinct 2D and 3D Organic Networks in the Crystal Structure of 1,3,5-Tris(4-methylbenzoyl)benzene." V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *New J. Chem.* **2004**, *28*, 1192-1194.
- 30 "C-H...O Hydrogen Bonding Induced Guest Inclusion and Supramolecular Isomerism in 1,3,5-Tris(4-cyanobenzoyl)benzene." V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *Cryst. Growth & Des.* **2004**, *4*, 651-653.
- 29 "Polymorphism in 1,3,5-Triaroylbenzenes: Structural Characterization of Concomitant Polymorphs Obtained from 1,3,5-Tris(4-chlorobenzoyl)benzene." V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *CrystEngComm* **2004**, *6*, 102-105.
- 28 "Functionalized Spiro- and Fused-Ring Heterocycles via Oxidative Demetalation of Cyclohexadienyl Ruthenium Complexes." F. Christopher Pigge, John J. Coniglio, and Nigam P. Rath, *J. Org. Chem.* **2004**, *69*, 1161-1168.
- 27 "Concomitant Polymorphism and Supramolecular Isomerism in 1,3,5-Tris(4-cyanobenzoyl)benzene." V. S. Senthil Kumar, F. Christopher Pigge, and Nigam P. Rath, *New J. Chem.* **2003**, *27*, 1554-1556.
- 26 "Oxidative Demetalation of Cyclohexadienyl Ruthenium(II) Complexes: A Net Ru-Mediated Dearomatization." F. Christopher Pigge, John J. Coniglio, and Nigam P. Rath, *Org. Lett.* **2003**, *5*, 2011-2014.
- 25 "Hydrogen Bond Patterns in Aromatic and Aliphatic Dioximes." Eric A. Bruton, Lee Brammer, F. Christopher Pigge, Christer B. Aakeröy, and Destin S. Leinen, *New J. Chem.* **2003**, *27*, 1084-1094.
- 24 "1,3,5-Triaroylbenzenes as Ligands: Synthesis and Characterization of Three New Coordination Polymers from the Tritopic Ligand 1,3,5-Tris(4,4',4''-tricyanobenzoyl)benzene and Ag(I)X (X = OSO₂CF₃, BF₄, or PF₆)." F. Christopher Pigge, Michael D. Burgard, and Nigam P. Rath, *Cryst. Growth & Des.* **2003**, *3*, 331-337.

- 23 "Ruthenium-Coordinated Spirolactams via Intramolecular Nucleophilic Addition to η^6 -Arene Metal Complexes." F. Christopher Pigge, John J. Coniglio, and Shiyue Fang, *Organometallics* **2002**, *21*, 4505-4512.
- 22 "An Enaminone-Directed Benzannulation/Macrocyclization Approach to Cyclophane Ring Systems." F. Christopher Pigge, Fatemeh Ghasedi, and Nigam P. Rath, *J. Org. Chem.* **2002**, *67*, 4547-4552.
- 21 "The Preparation of 1,3,5-Tris(1,1'-binaphthoyl)benzene via Amine-Catalyzed Alkyne Trimerization." F. Christopher Pigge and Zhanmiao Zheng, *Tetrahedron Lett.* **2001**, *42*, 8259-8261.
- 20 "Stoichiometric Applications of η^6 -Arene Ruthenium(II) Complexes in Organic Synthesis." F. Christopher Pigge and John J. Coniglio, *Curr. Org. Chem.* **2001**, *5*, 757-784.
- 19 "Intramolecular Nucleophilic Aromatic Substitution Reactions of (η^6 -Arene)ruthenium Complexes: Preparation of Substituted 2-Tetralones." F. Christopher Pigge and Shiyue Fang, *Tetrahedron Lett.* **2001**, *42*, 17-20.
- 18 "Structural Characterization of Crystalline Inclusion Complexes Formed From 1,3,5-Triaroylbenzene Derivatives – A New Family of Inclusion Hosts." F. Christopher Pigge, Fatemeh Ghasedi, Zhanmiao Zheng, Nigam P. Rath, Gary Nichols, and James S. Chickos, *J. Chem. Soc., Perkin Trans. 2* **2000**, 2458-2464.
- 17 "Combining Hydrogen Bonds with Coordination Chemistry or Organometallic π -Arene Chemistry: Strategies for Inorganic Crystal Engineering." Lee Brammer, Juan C. Mareque-Rivas, Reinaldo Atencio, Shiyue Fang, and F. Christopher Pigge, *J. Chem. Soc., Dalton Trans.* **2000**, 3855-3867.
- 16 "Synthesis of Linked 1,3,5-Triaroylbenzenes via Enamine-Directed Alkyne Cyclotrimerization." F. Christopher Pigge and Fatemeh Ghasedi, *Tetrahedron Lett.* **2000**, *41*, 6545-6549.
- 15 "1,3,5-Triaroylbenzenes as Versatile Inclusion Hosts via C-H...O Hydrogen Bonding." F. Christopher Pigge, Zhanmiao Zheng, and Nigam P. Rath, *New J. Chem.* **2000**, *24*, 183-185.
- 14 "Intramolecular Addition of Stabilized Enolates to (η^6 -Arene)ruthenium Complexes: Synthesis of Ru-Coordinated Azaspirocycles." F. Christopher Pigge, Shiyue Fang, and Nigam P. Rath, *Org. Lett.* **1999**, *1*, 1851-1854.
- 13 "A New Inclusion Host: An Inclusion Complex Between a 1,3,5-Triaroylbenzene Host and a Benzene Guest Stabilized by Aromatic C-H...O Hydrogen Bonds." F. Christopher Pigge, Fatemeh Ghasedi, and Nigam P. Rath, *Tetrahedron Lett.* **1999**, *40*, 8045-8048.

- 12 “ π -Bonded Organometallic Building Blocks for Supramolecular Chemistry.” Reinaldo Atencio, Lee Brammer, Shiyue Fang, and F. Christopher Pigge, *New J. Chem.* **1999**, *23*, 461-463.
- 11 “Alkylation of (η^6 -Arene) – Ru(II) Complexes: Construction of Benzylic Quaternary Centers.” F. Christopher Pigge, Shiyue Fang, and Nigam P. Rath, *Tetrahedron Lett.* **1999**, *40*, 2251-2254.
- 10 “*Exo*- and *Endo*-(η^6 -*cis*-4aH,9aH-N-Methyl-1,2,3,4,4a,9a-hexahydrocarbazole) Tricarbonyl Chromium(0).” F. Christopher Pigge, Nigam P. Rath, and Shiyue Fang, *Acta Crystallogr.* **1998**, *C54*, 1825-1827.
- 9 “Reduction of (η^6 -Indole)chromium Tricarbonyl Complexes.” F. Christopher Pigge, Shiyue Fang, and Nigam P. Rath, *J. Organomet. Chem.* **1998**, *559*, 131-141.
- 8 “[4 + 3] Cycloaddition Reactions.” James H. Rigby and F. Christopher Pigge, *Org. React.* **1997**, *51*, 351-478.
- 7 “Synthetic Applications of Chromium(0)-Promoted Higher-Order Cycloadditions. Efficient Construction of the 6-Azabicyclo[3.2.1]octane Ring System.” James H. Rigby and F. Christopher Pigge, *Synlett* **1996**, 631-633.
- 6 “A Novel Entry into the 6-Azabicyclo[3.2.1]octane System *via* Radical Rearrangement of a Tropane Derivative.” James H. Rigby and F. Christopher Pigge, *Tetrahedron Lett.* **1996**, *37*, 2201-2204.
- 5 “Asymmetric Induction in the Metal-Promoted [6 π + 2 π] Cycloaddition of Azepines. Application to the Construction of Tropane Alkaloids and the Total Synthesis of (+)-Ferruginine.” James H. Rigby and F. Christopher Pigge, *J. Org. Chem.* **1995**, *60*, 7392-7393.
- 4 “Transition Metal-Promoted Higher-Order Cycloaddition Reactions. [6 + 2] Cycloaddition Reaction of a Fischer Carbene Complex with Tricarbonyl(cycloheptatriene) Chromium(0).” James H. Rigby, F. Christopher Pigge, and Mark D. Ferguson, *Tetrahedron Lett.* **1994**, *35*, 8131-8132.
- 3 “Calixresorcinarenes as Ligands. Synthesis and Characterization of Transition Metal Cavitand Complexes.” Thomas N. Sorrell, F. Christopher Pigge, and Peter S. White, *Inorg. Chem.* **1994**, *33*, 632-635.
- 2 “Synthesis and Structural Characterization of a Cu(I) Dimer of a Tris(oxazoline) Ligand.” Thomas N. Sorrell, F. Christopher Pigge, and Peter S. White, *Inorg. Chim. Acta* **1993**, *210*, 87-90.
- 1 “A Convenient Synthesis of Functionalized Cavitands *via* Free Radical Bromination.” Thomas N. Sorrell and F. Christopher Pigge, *J. Org. Chem.* **1993**, *58*, 784-785.

Invited Presentations

- 17 "Dearomatization Approaches to Spirocyclic Building Blocks." Division of Medicinal and Natural Products Chemistry, College of Pharmacy, University of Iowa, Iowa City, IA; May 6, 2008.
- 16 "Arene Metal Complexes in Synthesis: New Routes to Complex Heterocycles." Department of Chemistry, Marquette University, Milwaukee, WI; October 7, 2005.
- 15 "Heterocyclic Building Blocks Constructed from Arene Ruthenium Complexes." 36th American Chemical Society Great Lakes Regional Meeting, Peoria, IL; October 17-20, 2004.
- 14 "Developing the Organic Chemistry of Arene Ruthenium Complexes – Approaches to Heterocyclic Building Blocks." Department of Chemistry, University of Iowa, Iowa City, IA; October 15, 2004.
- 13 "Arene Ruthenium Complexes in Synthesis." Department of Chemistry, University of Southern Indiana, Evansville, IN; November 13, 2003
- 12 "Synthetic Applications of Arene Ruthenium Complexes." Department of Chemistry & Biochemistry, Ohio University, Athens, OH; May 30, 2003.
- 11 "Arene Ruthenium Complexes in Synthesis: New Methods for the Construction of Heterocyclic Compounds." 16th Missouri Organic Day, Columbia, MO; April 26, 2003.
- 10 "New Synthetic Applications of Arene Ruthenium Complexes." Department of Chemistry, University of Alabama, Tuscaloosa, AL; November 11, 2002.
- 9 "Organoruthenium-Based Approaches to Spiro- and Fused-Ring Heterocycles." Department of Chemistry, Saint Louis University, St. Louis, MO; September 25, 2002.
- 8 "Ruthenium-Mediated Spirocyclizations." Department of Chemistry, University of Missouri – Columbia, Columbia, MO; October 29, 2001.
- 7 "Ruthenium-Mediated Arene Functionalization." Department of Chemistry, Wayne State University, Detroit, MI; October 17, 2001.
- 6 "Synthetic Applications of Arene Ruthenium Complexes." Department of Chemistry, Southern Illinois University – Edwardsville, Edwardsville, IL; September 26, 2001.
- 5 "Investigations in Synthetic Chemistry: From Azaspirocycles to Cyclophanes." Department of Chemistry, University of Missouri – St. Louis, St. Louis, MO; September 14, 2001.

- 4 “New Synthetic Applications of Arene Ruthenium(II) Complexes.” Department of Chemistry, University of Missouri – Kansas City, Kansas City, MO; April 26, 2001.
- 3 “Synthesis of Spiro- and Fused-Ring Bicyclic Materials from Arene-Ru(II) Complexes.” Department of Chemistry, Washington University, St. Louis, MO; November 9, 2000.
- 2 “Construction of Spiro- and Fused-Ring Bicyclic Materials From Arene-Ru(II) Complexes.” Organometallic Chemistry in Organic Synthesis Symposium, 35th American Chemical Society Midwest Regional Meeting, St. Louis, MO; October 27, 2000.
- 1 “Synthetic Applications of Arene Metal Complexes.” Department of Chemistry, Southwest Missouri State University, Springfield, MO; April 17, 2000.

Active Collaborations

- Michael K. Schultz, UI Depts. Of Radiology and Radiation Oncology
- Yusing Kim, UI Department of Radiation Oncology
- Frederick Domann, UI Department of Free Radical and Radiation Biology
- Alexei Tivanski, UI Department of Chemistry
- Jonas Baltrusaitis, UI Department of Chemistry and UI Central Microscopy Facility

Ph.D. Dissertations Supervised

- 7 Sharavathi G. Parameswarappa, “Part A: Bifunctional Cyclooctynes in Copper-Free Click Chemistry for Applications in Radionuclide Chemistry. Part B: 4-Alkylpyridine Derivatives in Intramolecular Dearomatization and Heterocycle Synthesis.” University of Iowa, December, 2011.
- 6 Pradeep P. Kapadia, “Tetraphenylethylene: A Versatile Supramolecular Framework.” University of Iowa, December, 2011.
- 5 Mayuri K. Dighe, “Host – Guest Chemistry of Triaroylbenzene Derivatives.” University of Iowa, May, 2008.
- 4 Rashmi Dalvi, “Dearomatization Strategies for the Synthesis of Azaspirocycles.” University of Iowa, May 2008.
- 3 John J. Coniglio, “Spirolactam Ruthenium Complexes.” University of Missouri – St. Louis, May 2003.
- 2 Fatemeh Ghasedi Nichols, “Synthesis and Applications of 1,3,5-Triaroylbenzenes.” University of Missouri – St. Louis, May 2002.
- 1 Shiyue Fang, “(Arene)Transition Metal Complexes in Organic Synthesis.” University of Missouri – St. Louis, December, 2000.

M.S. Theses Supervised

- 2 Erik R. Hoefgen, "Applications of Arene Ruthenium Complexes in the Synthesis of Heterocyclic Building Blocks." University of Missouri – St. Louis, December, 2004.
- 1 Angela V. Schmitt, "Cation binding Ability and Solid State Structures of Novel Crownphanes." University of Missouri – St. Louis, December, 2003.

IV. Teaching

Courses Taught at the University of Iowa

Chem. 226: Organic Reactions*
Chem. 123: Organic Chemistry I for Majors
Chem. 121: Organic Chemistry I for Non-Majors
Chem. 142: Organic Chemistry Laboratory for Majors

Courses Taught at the University of Missouri – St. Louis

Chem. 261: Organic Chemistry I
Chem. 262: Organic Chemistry II
Chem. 263: Techniques in Organic Chemistry
Chem. 361: Advanced Organic Chemistry*
Chem. 468: Problem Seminar in Organic Chemistry*
Chem. 469: Special Topics in Organic Chemistry – Organometallics*

*Denotes graduate-level course

V. Service

Departmental Service

University of Iowa

- Chair – Ph.D. Dissertation Committee – P. Kapadia Fall 2011
- Chair – Ph.D. Dissertation Committee – S. Parameswarappa Fall 2011
- Colloquium Committee Fall, 2011-present
- Departmental Website Committee Fall, 2011-present
- Graduate Admissions & Recruiting Fall, 2005 – Fall, 2010
- Chair – Project Assistant Search Committee Fall 2010
- P&S Review Committee (E. Erbe) Spring 2010
- Chair – Ph.D. Dissertation Committee – R. Dalvi Spring 2008
- Chair – Ph.D. Dissertation Committee – M. Dighe Spring 2008
- Chair-Org/Inorg Faculty Search Committee Fall 2008
- Probationary Faculty Review (Rohde) Spring 2008

- Inorganic Faculty Search Committee Fall 2007
- Inorg./Org. Faculty Search Committee Fall 2006
- Dir. Undergraduate Labs. Search Comm. Summer 2006
- P&S Review Committee (K. Meade) Spring 2006
- Salary Committee Spring 2006
- Probationary Faculty Review (Bowden) 2006 – 2007
- Probationary Faculty Review (Bowden) 2005 – 2006
- Equipment Purchases 2005 – 2006
- Comp. Exam & Dissertation committees Ongoing

University of Missouri – St. Louis

- Director of Graduate Studies: Fall, 2001 – Spring, 2005
- X-Ray Committee: Fall, 2001 – Spring, 2005
1996 – 1998
- Executive Committee: Fall, 2001 – Spring, 2005
1997 - 1998
- Graduate Studies Committee: Fall, 2000 – Spring, 2005
- Organic Faculty Search Committee: Summer and Fall, 2000
- Senior Organic Faculty Search Committee: 1999
- Undergraduate Studies Committee: 1998 – 2000
- NMR Committee: 1996 – 1998

University Service

University of Iowa

- Reviewer – Women in Science & Engineering (WISE) travel grants Spring 2011
- Member, IREU proposal review panel: Fall 2006 – Spring 2008
- Judge, Jakobsen Graduate Conference: Spring 2008

University of Missouri – St. Louis

- Rules and Regulations Committee, Graduate School 2001 – 2002
- Faculty Council: 1996 – 1998
- Chancellor's Committee on Review: 1997

Professional Service

Grant Reviewer

- National Science Foundation
- ACS Petroleum Research Fund

- Louisiana Board of Regents
- Science and Engineering Research Council of Singapore
- University of Missouri Research Board
- Civilian Research and Development Foundation
- Oklahoma State University Presidential Challenge

Journal Referee (last three years)

- 2012 Chemical Communications (1); Chemistry of Materials (1); CrystEngComm (3); Inorganic Chemistry (1); Organic Letters (1); Synthesis (1).
- 2011 Chemical Communications (1); Crystal Growth & Design (8); CrystEngComm (5); ISRN Organic Chemistry (4); Journal of the American Chemical Society (1); Journal of Organic Chemistry (3); Organic Letters (1); Synlett (1); Synthetic Communications (1); Tetrahedron (1).
- 2010 Applied Organometallic Chemistry (1); Chemical Communications (3); Crystal Growth & Design (5); CrystEngComm (3); Inorganica Chimica Acta (1); Journal of Combinatorial Chemistry (1); Journal of Molecular Structure (1); Journal of Organic Chemistry (4); Journal of Physical Chemistry (1); Letters in Organic Chemistry (1); Organic and Biomolecular Chemistry (1); Organic Letters (3); Organometallics (1).

Other Service

- Chemistry Booth Demonstrator – iExplore STEM Festival, Coralville, IA, 9/2011
- Member of the Editorial Advisory Board – *ISRN Organic Chemistry*, 2010-Present
- Steering Committee, ACS Midwest Regional Meeting, 2007-Present
- Judge, Research Poster Session, NOBCChe Midwest Regional Conference, Iowa City, IA, 11/2010
- Co-Organizer (with L. MacGillivray): Supramolecular Chemistry Symposium for ACS Midwest Regional Meeting, October 2009
- Judge, Undergraduate Research Symposium, 44th American Chemical Society Midwest Regional Meeting, Iowa City, IA, 10/2009.
- Technical Session Presider, 232nd American Chemical Society National Meeting, San Francisco, CA; Sept. 10-14, 2006

VI. Professional Affiliations

- American Chemical Society (ACS); ACS Organic Division