Curriculum Vitae John H. Penn

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PRESENT POSITION(S):

1. Professor, Department of Chemistry, West Virginia University, Morgantown, WV, 8/09-present
2. Manager, Horizon Learning Solutions, 1534 Point Marion Road, Morgantown, WV, 4/99-present.

PREVIOUS POSITION(S):

1. Associate Professor, Department of Chemistry, West Virginia University, Morgantown, WV, 8/89-7/09
2. Associate Director, Institute for Microscale Chemistry, Department of Chemistry, West Virginia University, 11/89-8/95
3. Assistant Professor, Department of Chemistry, West Virginia University, Morgantown, WV, 8/83-7/89
4. Guest Professor, University of Cologne, Department of Physical Chemistry, 1/93-6/93

EDUCATION:

1. NIH Fellowship for Post-Doctoral Research, University of Utah, Salt Lake City, UT, 9/81-8/83, Studied with Professor Josef Michl
2. Ph.D., University of Wisconsin, Madison, WI, 9/81, Studied with Professor Howard Zimmerman
3. B.S., Chemistry, West Virginia Wesleyan College, Buckhannon, WV, 5/74.

HONORS:

1. WV Healthcare Association Volunteer of the Year, May 2011
2. Morgantown Elks Lodge #411 Elk of the Year, March 2009.
3. Madison Nursing Home and Rehabilitation Center Volunteer of the Year, April 2009.
4. WVU Foundation Award for Outstanding Teaching, 1997
5. Eberly College of Arts and Sciences Outstanding Teacher Award, 1996-97

6. Finalist, Eberly College of Arts and Sciences Outstanding Teacher Award, 1995-96
7. Finalist, Eberly College of Arts and Sciences Outstanding Teacher Award, 1994-95
8. NIH Post-doctoral Fellow (1981-1983)
9. Sigma Xi
10. Omicron Delta Kappa (WVWC equivalent to Phi Beta Kappa)

RESEARCH INTERESTS:

- Development of New Techniques for Internet-based Teaching Methods
- Chemistry of electron-transfer organic molecular complexes
- Determination of unusual reaction mechanisms
- Microscale chemical techniques
- Excited state behavior
- Environmental chemistry.

REFEREED PUBLICATIONS:

1. Enrique J. Lopez, Kiruthiga Nandagopal, Richard J. Shavelson, Evan Szu, and John H Penn, "Factors Contributing to Problem-Solving Performance in First Semester Organic Chemistry, *Journal of Chemical Education*, submitted.
2. Enrique J. Lopez, Kiruthiga Nandagopal, Richard J. Shavelson, Evan Szu, and John H Penn, "Self-Regulated Learning Study Strategies and Academic Performance in Undergraduate Organic Chemistry: An Investigation Examining Ethnically Diverse Students", Journal of Research in Science Teaching, **2013**, *50 (6)*, 660-676.
3. Enrique Lopez, Jennifer Kim, Kiruthiga Nandagopal, Nate Cardin, Richard J. Shavelson, and John H. Penn, "Validating the use of concept-mapping as a diagnostic assessment tool in organic chemistry: implications for teaching", *Chemistry Education Research and Practice*, **2011**, *12(2)*, 133-141.
4. Evan Szu, Kiruthiga Nandagopal, Richard J. Shavelson, Enrique J. Lopez, John H. Penn, Maureen Scharberg, and Geannine W. Hill. "Understanding Academic Performance in Organic Chemistry", *Journal of Chemical Education*, **2011**, 88, 1238-1242.
5. Svetlana A. Borisova, Sanjeeva R. Guppi, Hak Joong Kim, Bulan Wu, John H. Penn, Hung-wen Liu, and George A. O'Doherty "A De Novo Approach to the Synthesis of Glycosylated Methymycin Analogues with Structural and Stereochemical Diversity", *Organic Letters*, **2010**, *12(22)*, 5150-53.
6. Yalan Xing, John H. Penn, and George A. O'Doherty, "Structure Investigations of (*ent*)-Cladospolide D by De Novo Synthesis and Kinetic and Thermodynamic Isomerization**",** *Synthesis*, **2009**, *17*, 2847-2854.
7. John H. Penn and Abdulrahman Al-Shammari, "Use and Evaluation of Computerized Prelab Experiments (CPLEX) for Organic Chemistry", *The Chemical Educator*, in press.
8. John H. Penn and Abdulrahman Al-Shammari, "Teaching Reaction Mechanisms Using the CAN Method", *Journal of Chemical Education*, **2008**, *85 (9)*, 1291-1295.
9. Inci Morgil, John H. Penn, Nilgun Secken and Ozge Ozyalcin Oskay, "Introduction to Complexation and Masking Within a Computer-Enriched Module for Analytical Chemistry", *Turkish Online Journal of Distance Education*, **2006**, *7 (2)*, 109-123.

10. Inci Morgil, John H. Penn, Nilgun Secken and Ozge Ozyalcin Oskay, "Introduction to Precipitation and Solubility Within A Computer-Enriched Module for Analytical Chemistry", *The Chemical Educator*, **2006**, *11*, 348-54.
11. John H. Penn, Vincent M. Nedeff, and Gloria Gozdzik, "Organic Chemistry and the Internet: A New Approach to Homework and Testing Using the WE_LEARN System", *Journal of Chemical Education*, **2000**, *77 (2)*, 227-31.
12. J.H. Penn, "Microscale Chemistry in the U.S.A.", *Educacion Quimica*, **1999**, 107-113.
13. John H. Penn, Robert C. Plants, and An Liu, "Geometric Requirements in the Ferriin Oxidation of Benzylic Diols, *Journal of the Chemical Society, Chemical Communications*, **1999**, (23), 2359-60.
14. S.V. Makarov, C. Mundoma, J.H. Penn, J.L. Petersen, S.A. Svarovsky, and R.H. Simoyi, "Structure and Stability of Aminoiminomethanesulfonic Acid", *Inorganica Chimica Acta*, **1999**, *286* (2), 149-54.
15. Makarov, Sergei V.; Mundoma, Claudius; Penn, John H.; Svarovsky, Serge A.; Simoyi, Reuben H. "New and Surprising Experimental Results from the Oxidation of Sulfinic and Sulfonic Acids." *Journal of Physical Chemistry A*, **1998**, *102* (34), 6786-6792.
16. J.H. Penn, D.-L. Deng, T.Q. Chang, "Catalytic Dechlorination of Polycyclic Chloroaromatics with Dicyclopentadienyl Yttrium Chloride. II" *Chinese Chemical Letters*, **1996**, *7*, 845-6.
17. J.J. Renton, Y.-T. Yu, and J.H. Penn, "FTIR Microspectroscopy of Particular Liptinite, Lopinite Rich Late Permian Coals from South China", *International Journal of Coal Geology*, Elsevier Sciences, **1996**, *29*, 187-97.
18. J.H. Penn and F. Liu, "Generation of Acyl Radicals From 2-Naphthyl Thioesters", *Journal of Organic Chemistry*, **1994**, *59*, 2608-12.
19. J.H. Penn, C. Zhu, D.-L. Deng, and J.L. Petersen, "Adduct Formation in the Quinone Induced Benzylic Ether Reaction", *Journal of Organic Chemistry*, **1994**, *59*, 3037-39.
20. D.L. Deng, C.T. Qian, and J.H. Penn, "Catalytic Dechlorination of Aromatic Chlorides by Dicyclopentadienyl Lanthanide Chlorides", *Chinese Chemical Letters*, **1994**, *5*, 303-4.
21. J.H. Penn and J.-H. Wang, "Bond Cleavage Reactions of Naphthyl-Containing Coal Model Compounds", *Energy and Fuels*, **1994**, *8*, 421-5.
22. J.H. Penn and J.-H. Wang, "Iron(III) Perchlorate: A Reagent for the Dehydrogenation of Hydroaromatic Compounds", *Preprint Paper - American Chemical Society Fuel Division*, **1994**, 39(3), 321-2.
23. J.H. Penn, "Mikroskalen Chemie in den U.S.A.", "An der Wandel im Lehren und Lernen", Schriftenreihe der Pädagogischen Hochschule Heidelberg, L. Jäkel, M. Schallies, J. Venter, and U. Zimmermann, eds., Deutscher Studien Verlag, **1994**, 267-72.
24. J.H. Penn, W.H. Owens, J.L. Petersen, H.O. Finklea, D.A Snider, "Physical Properties of Mixed Anhydrides: Insights from Structural Determinations", *Journal of Organic Chemistry*, **1993**, *58*, 2128-33.
25. J.H. Penn and J.H. Duncan, "Electron Transfer Rate Determinations: Facile ET from 1,1,2,2-Tetrakis(4-Methoxyphenyl)ethanediol", *Journal of Organic Chemistry*, **1993**, *58*, 2003-08.
26. J.H. Penn and W.H. Owens, "The Photochemistry of Mixed Anhydrides: A Search for Selectivity in Photochemically Initiated Bond Cleavage Reactions", *Journal of the American Chemical Society*, **1993**, *115*, 82-86.

27. J.H. Penn, J.-H. Wang, and Y.-Q. Liu, "Alternative Radical Cation Bond Cleavage Mechanisms", *Preprint Paper - American Chemical Society Fuel Division*, **1992**, *37*(4), 1650-4.
28. J.H. Penn and W.H. Owens, "Carboxylic Acid Reductions: Insights from Mixed Anhydrides and Thiol Esters", *Tetrahedron Letters*, **1992**, *33*, 3737-40.
29. J.H. Penn, D.-L. Deng, "-Acceptor Induced Reactions: Radicals *vs.* Ions in Thermally Induced Ether Cleavage Reactions", *Tetrahedron*, **1992**, *48*, 4823-30.
30. J.H. Penn and E. Cox, "A Guide to Experimental Photochemistry", *Pure and Applied Chemistry*, **1992**, *64*, 1345-6.
31. J.H. Penn and E. Cox, "pH Decrease Due to Photoproduction of a Carboxylic Acid", *Pure and Applied Chemistry*, **1992**, *64*, 1365.
32. J.H. Penn and E. Cox, "The Photodimerization of Anthracene", *Pure and Applied Chemistry*, **1992**, *64*, 1367-8.
33. J.H. Penn and E. Cox, "Photopolymerization of Acrylamide", *Pure and Applied Chemistry*, **1992**, *64*, 1369-70.
34. K. Yoshihara, H. Petek, Y. Fujiwara, J.H. Penn, and J.H. Frederick, "Vibrational Mode Dynamics of Photocyclization in *cis*-Stilbene and Its Related Compounds", *Springer Proceedings in Physics*, **1992**, *68*, 194-197.
35. J.H. Penn, Y.-Q. Liu, and P. Yassini, "Dihydroquinones for Enhancing Coal Liquid Yields", *Preprint Paper - American Chemical Society Fuel Division*, **1991**, *36(2)*, 605-8.
36. J.H. Penn, W.H. Owens, and L.J. Shadle, "Ultrarapid Flashlamp Pyrolysis: Thermal vs. Photochemical Reaction Pathways", *Energy and Fuels*, **1991**, *5*, 436-40.
37. J.H. Frederick, Y. Fujiwara, J.H. Penn, K. Yoshihara, H. Petek, "Models for Stilbene Photoisomerization: Experimental and Theoretical Studies of the Excited State Dynamics of 1,2-Diphenylcycloalkenes", *Journal of Physical Chemistry*, **1991**, *95*, 2845-58.
38. J.H. Penn, Z. Lin, and D.-L. Deng, "Tetrarylethanediols: Surprisingly Low Energy Requirements for Electron Transfer in Solution and in the Gas Phase", *Journal of the American Chemical Society*, **1991**, *113*, 1001-7.
39. H. Petek, K. Yoshihara, Y. Fujiwara, J.H. Penn, Z. Lin, and J.H. Frederick, "Is the non-Radiative Decay of S_1 *cis*-Stilbene Due to the Dihydrophenanthrene Isomerization Channel? Suggestive Evidence from Photophysical Measurements of 1,2-Diphenylcycloalkenes." *Journal of Physical Chemistry*, **1990**, *94*, 7539-43.
40. J.H. Penn and Z. Lin, "π-Acceptor Induced Reactions: Substituent Effects on the Bond Cleavage Reaction", *Journal of Organic Chemistry*, **1990**, *55*, 1554-59.
41. L.J. Shadle, A.P. Lui, G.E. Trapp, Y.-H. C. Wang, and J.H. Penn, "Model Prediction of Energy Distribution and Extent of Reactions for Oil Shale Pyrolysis in a Flash Lamp Reactor", Proceedings of the 1989 Eastern Oil Shale Symposium, **1989**, pp. 1-12.
42. J.H. Penn, L.-X. Gan, P.D. Loesel, and G. Hohlneicher, "Steric Inhibition of Photochemical Reactions: the [2+2]-Cycloaddition Reaction", *J. Org. Chem.*, **1989**, *54*, 601.
43. J.H. Penn and R.D. Orr, "A Microscale Immersion Well for Photochemical Reactions", *Journal of Chemical Education*, **1989**, *66*, 86.
44. J.H. Penn, D.-L. Deng, and K.-J. Chai, "Pinacol Cleavage Using Traditional Outer Sphere Electron Transfer Reagents: Fe(III)(1,10-Phenanthroline)3 Complexes", *Tetrahedron Letters*, **1988**, *29*, 3635.

45. J.H. Penn, D.-L. Deng, and S.K. Aleshire, "π-Acceptor Induced Reactions: Unusual Selectivity in Bond Cleavage Reactions through the Use of Photochemical Excitation", *Journal of Organic Chemistry*, **1988**, *53*, 3572.
46. G. Hohlneicher, M. Mueller, M. Demmer, J. Lex, J.H. Penn, L.-X. Gan, and P.D. Loesel, "1,2-Diphenylcycloalkenes: Electronic and Geometric Structures in the Gas Phase, Solution, and the Solid State", *Journal of the American Chemical Society*, **1988**, *110*, 4483.
47. J.H. Penn, T.A. Eaton, E.Y. Chan, L.-X. Gan, Z. Lin "Photochemical Reactions of Model *cis*-Stilbenes: The [2+2]-Cycloaddition Reaction", *Journal of Organic Chemistry*, **1988**, *53*, 1519.
48. J.J. Fisher, J.H. Penn, D. Doehnert, and J. Michl, "Polarized IR Spectroscopy of a Triplet 1,3-Biradical: The Structure of a Methylene-Bridged 1,8-Naphthoquinodimethane", *Journal of the American Chemical Society*, **1986**, *108*, 1715.
49. J.H. Penn and R.S. Smith, "π-Acceptor Induced Thermal Reactions: Bond Cleavage Reactions", *Tetrahedron Letters*, **1986**, *27*, 3475-78.
50. J.H. Penn and E.D. Cox, "A New and Convenient Method for Radical Anion Lifetime Determination", *Journal of Organic Chemistry*, **1986**, *51*, 4447.
51. J. Gebicki and J.H. Penn, "Solvent Isotope Effect on the Quenching of Anthracene Fluorescence by Triethylamine", *Bulletin of the Polish Academy of Sciences*, **1986**, *34*, 459.
52. H.E. Zimmerman, J.H. Penn, and C.W. Carpenter, "Evaluation of Single Photon Counting Measurements of Excited State Lifetimes", *Proceedings of the National Academy of Sciences., USA*, **1982**, *79*, 2128-32.
53. H.E. Zimmerman, J.H. Penn, and M.S. Johnson, "New Reactions and Theory in Organic Chemistry: The 1,3-Vinyl Migration and its Relevance to Exchange Integral Control", *Proceedings of the National Academy of Sciences, USA*, **1981**, *78*, 2021-26.

UNREFEREED PUBLICATIONS

1. "Tools for performing organic reaction mechanisms over the web", John H. Penn, Christoph Steinbeck, and Ada Casares, CONFCHEM On-Line Conference, Spring **2006**, (Invited Research Report).
2. "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", John H. Penn, Gloria Gozdzik, Susan Saunders, Akmed Alshemari, Martin Carpenter, Tamara Mackey, Andrew Higgenbotham, Ryan Krause, John Valeri, and Ryan Whetstone, CONFCHEM On-Line Conference, Fall, **2001** (Invited Research Report).
3. J.H. Penn, "Josef Michl Wins the 1993 IAPS Award", Inter-American Photochemical Society Newsletter, **1993**.
4. J.H. Penn, "Laboratory Manual for One Semester Organic Chemistry Course", **1990**.
5. J.H. Penn, "Microscale Boileezers", Smaller is Better, Microscale Newsletter, June **1989**.
6. J.H. Penn, "Aluminum Heating Blocks in the Organic Laboratory", Smaller is Better Microscale Newsletter, June **1990**.
7. J.H. Penn and E. Cox, "A Guide to Experimental Organic Photochemistry," Ace Glass, Inc., **1986**.

8. J.H. Penn, "Thermal Activation of Chemical Reactivity in Molecular Complexes", Proceedings of the Xth IUPAC Symposium on Photochemistry, Presses Polytechniques Romandes, **1984**.

INVITED LECTURES:

1. Lecture, “Active learning in organic chemistry: Cell phones as classroom response systems”, John H Penn, McGraw-Hill Symposium on Organic Chemistry, Dubuque, IA October 19, 2012
2. Lecture, “Linking Lecture, Lab, and Layout for New Pharmaceuticals”, Al-Imam Muhammad Bin Saud Islamic University, Riyadh, Saudi Arabia, November 22, 2011.
3. Lecture, “WE_LEARN: Practice Makes Perfect in Organic Chemistry”, 4th International Chemistry Conference, Riyadh, Saudia Arabia, November 19-21, 2011.
4. Lecture, “Does “Practice Make Perfect” in Chemistry”, Portland State University, Portland, OR, May 27, 2011.
5. Lecture, “WE_LEARN: Practice Makes Perfect in Organic Chemistry”, Pittsburgh Science of Learning Center, Pittsburgh, PA, December 14, 2009
6. Lecture, “WE_LEARN: Practice Makes Perfect in Organic Chemistry”, Stanford University School of Education, Palo Alto, CA, December 4, 2009.
7. Lecture, "Teaching Reaction Mechanisms Using the Curved Arrow Neglect (CAN) Method", Symposium on Web-based Applications in Chemical Education, Biennial Conference on Chemical Education, Bloomington, IN, July 28, 2008
8. Lecture, "Web-based Computer Pre-Laboratory Experiments", Pennsylvania Organic Chemistry Curriculum Development Conference, May 29, 2008, California, PA
9. Lecture, "Internet Methods to Teaching Organic Chemistry", Pennsylvania Organic Chemistry Curriculum Development Conference, May 28, 2008, California, PA
10. Lecture, “Practice Makes Perfect, Even in Organic Chemistry”, Wiley Faculty Network, Fort Lauderdale, FL, March 15, 2008.
11. Lecture, “Improving Student Performance Through Practice Makes Perfect Strategies”, Marshall University Department of Chemistry, Huntington, WV, February 12, 2008
12. Lecture, "Practice Makes Perfect, Even in Chemistry", 2YC3 Annual Meeting, Bergen County Community College, NJ, 2007.
13. Lecture, "Lessons Learned in Web Delivery of Organic Chemistry", Biennial Conference on Chemical Education, West Lafayette, IN, August 2, 2006.
14. Keynote Address, "Practice Makes Perfect, Even in Chemistry", 2YC3 Meeting, Bucks County Community College, Philadelphia, PA, October 15, 2005.
15. Plenary Lecture, "On-Line Organic Structure Generation and Computer Grading: Memorization?", Michlfest 2004 (a celebration for Josef Michl's 65th birthday), University of Utah, Salt Lake City, UT, October 23, 2004.
16. Lecture, "A New Element on the Periodic Table – IT – Using the Element of Information Technology (i.e., Computer-assisted Learning) in the Chemistry Classroom", 35th Central Regional Meeting of the American Chemical Society, Pittsburgh, PA, October 19, 2003.
17. Plenary Lecture, "A New Element on the Periodic Table - IT - Using the Element of Information Technology (i.e., Computer-assisted Learning) in the Chemistry Classroom", Second International Conference on Chemistry, Santa Clara, Cuba, June 3-6, 2003.

18. Plenary Lecture, "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", SCI 2002, the Sixth World Conference on Systemics, Cybernetics, and Informatics, Orlando, FL, July 14-18, 2002
19. Plenary Lecture, "Computgestützter Unterricht für das Grundstudium in Organischer Chemie", 17. Fortbildungs- und Vortragstagung der GDCh-Fachgruppe Chemieunterricht, September 7-9, 2000, Cologne, Germany.
20. Lecture, "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", Educational Psychology Doctoral Program Seminar, EDP 494, West Virginia University, October 25, 1999.
21. Plenary lecture, "Chemical Education, Past, Present, and Future", Nicholas Hyma Scholarship Breakfast, West Virginia Wesleyan College, Buckhannon, WV, October 17, 1999.
22. Plenary lecture, "Non-Outer Sphere Oxidations of Benzylic Diols by Ferriin", International Workshop on Reactive Intermediates, Szyryk, Poland, August 23-27, 1999.
23. Plenary lecture, "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", American Chemical Society Regional Meeting, Columbus, OH, June 21-23, 1999.
24. Plenary lecture, "Microscale Chemistry in the U.S.A.", Symposium on Microscale Chemistry at the 5th North American Chemical Congress, Cancun, Mexico, November 15, 1997
25. Plenary lecture, " Insights into Oxidation of Pinacols by Feriin", Spring Meeting of the Institute for Physical Chemistry, Köln, Germany, April 26, 1997
26. Plenary lecture, "Microscale Chemistry in the USA", as part of a symposium on microscale chemistry held at the Canadian Chemical Society Annual Meeting, St. John's, Newfoundland, Canada, June 24, 1996
27. Plenary lecture, "Microscale Revisited", Middle Atlantic Association of Liberal Arts Chemistry Teachers, Susquehanna University, Selinsgrove, Pennsylvania, November 10, 1995
28. Plenary lecture, "Mikrochemie in den U.S.A.", Symposium on "Der Wandel im Lehren und Lernen von Mathematik und Naturwissenschaft", Pädagogische Hochschule Heidelberg, Germany, October 6, 1994.
29. Session Chair, Symposium on "Der Wandel im Lehren und Lernen von Mathematik und Naturwissenschaft", Pädagogische Hochschule Heidelberg, Germany, October 5, 1994.
30. Plenary lecture, "Iron (III) Perchlorate: A Reagent for the Dehydrogenation of Hydroaromatic Compounds", Symposium on "Hydrogen Transfer in Hydrocarbon Processing", National ACS Meeting, Washington, DC, August 23, 1994.
31. Participant in Panel Discussion on the Future of Microscale Chemistry, 12th Biennial Conference on Chemical Education, Davis, California, August 4, 1992.
32. Plenary lecture, "Microscale Chemistry in the High School Laboratory", Summer Science Program, Longwood College, Farmville, Virginia, June 22, 1992
33. Plenary lecture, "Microscale Chemistry in the High School Laboratory", Pittsburgh Spectroscopy Society, Duquesne University, April 25, 1992.
34. Plenary lecture, "Microscale Chemistry, A New Way of Doing Chemistry", XVI Congress of Scientific Research", San Juan, Puerto Rico, February 13-14, 1992.
35. Plenary lecture, "Photochemical Insights into Bond Cleavage Reactions", Gordon Conference on Organic Photochemistry, Andover, NH, July 15-19, 1991.

36. Plenary lecture, "Dihydroquinones for Liquefying Coal", Symposium on Coal Liquefaction, 201st National Meeting of the American Chemical Society, Atlanta, GA, April 21-26, 1991.
37. Plenary lecture, "Conversion of a Laboratory Program to Microscale", 11th Biennial Conference on Chemical Education, Atlanta, GA, August 6-10, 1990.
38. Lecture series, "Practica en Microescala en el Laboratorio de Quimica Organica", Universidad Complutense, Madrid, Spain, July 10-12, 1990.
39. Plenary lecture, "Electron Transfer Reaction Rates: Unusual Selectivity in Generation and Reactivity of Radical Cations", 3rd USA-Japan-China Trilateral Conference on Organometallic Chemistry, Chengdu, PRC, June 7-11, 1989.
40. Plenary lecture, "New Insights into Bond Cleavage Reactions", Symposium on Structure and Reactivity, Austin, TX, March 9, 1989.
41. Middle Atlantic Association of Liberal Arts Chemistry Teachers, Gettysburg College, October 16, 1987.
42. Marie Sklodowska-Curie Lecturer, Technical University of Lodz, Lodz, Poland, July 30-August 8, 1984.

GENERAL LECTURES:

Lectures at over 40 institutions, including, but not limited to: Abbott Laboratories, Albright College, Beijing Institute of Photographic Sciences, Bloomsburg State College, Bowling Green State University, Brigham Young University, Central Institute for Organic Chemistry (Berlin, East Germany), Cleveland State University, Complutense University (Madrid, Spain), Technische Universität Dresden (Germany), University of Köln (Germany), Exxon Corporation, Fairmont State College, Franklin and Marshall College, Freiburg Universität (Germany), Georgetown University, Goucher College, University of Kansas, Marietta College, Marshall University, University of Maryland, Max-Planck Institute fur Strahlenchemie (Mülheim, West Germany), Millersville State College, Okazaki Institute for Molecular Science, Saint Joseph's University, Searle Corporation, Shanghai Institute of Organic Chemistry, Shippensburg State University, Virginia Polytechnical Institute, West Virginia Wesleyan College, Worcester Polytechnical University, United States Naval Academy, University of Georgia, University of Nevada-Las Vegas, University of Wisconsin, University of Wyoming, 3 M Corporation, Westfälischen Wilhelms-Universität (Münster, Germany)

RESEARCH REPORTS:

1. “Active learning in organic chemistry: Cell phones as classroom response systems”, John H Penn, 245th National American Chemical Society Meeting, New Orleans, LA, April 7-11, 2013.
2. “Use and evaluation of computerized prelaboratory experiments (CPLEX) for the organic chemistry laboratory”, John H Penn and Abdulrahman Al-Shammari, 245th National American Chemical Society Meeting, New Orleans, LA, April 7-11, 2013.
3. “WE_LEARN Organic Chemistry: Best Practices for Performing Exams”, John H Penn, Biennial Conference on Chemical Education, State College, PA, July 31, 2012.

4. “Active learning in organic chemistry: Cell phones as classroom response systems”, John H Penn, Biennial Conference on Chemical Education, State College, PA, July 30, 2012.
5. CHED 1537 - “Active learning in organic chemistry: Cell phones as classroom response systems”, John H Penn, 243rd National American Chemical Society Meeting, San Diego, CA, March 25-29, 2012.
6. “WE_LEARN Organic Chemistry: Best Practices for Performing Exams”, 241st National American Chemical Society Meeting, Anaheim, CA, March 29, 2011.
7. “P784 WE_LEARN organic chemistry: Does practice make perfect?” John H. Penn, 21st Biennial Conference on Chemical Education, Denton, TX, August 1-5, 2010
8. CHED 1575 - “Studies of student effort toward learning Organic Chemistry”, John H. Penn and Patrick Herbert, 239th ACS National Meeting, San Francisco, CA, March 21-25, 2010.
9. “CHED 343 Toward grading organic reaction mechanisms online”, John H. Penn, 238th ACS National Meeting, Washington, DC, August 16-20, 2009
10. “CHED 343 Toward grading organic reaction mechanisms online”, John H. Penn, 238th ACS National Meeting, Washington, DC, Contributed Poster with acceptance for presentation for SCI-Mix presentation, August 16-20, 2009
11. “Practice Makes Perfect in Organic Chemistry”, John H. Penn, Abdulrahman Al-Shammari, Gloria Gozdik, and Asmaa Al-shuifan, Gordon Conference on Chemical Education Research and Practice, Colby College, Waterville, ME, June 21-26, 2009
12. “CHED 1171 Does practice really make perfect?”, John H. Penn and Abdulrahman Al-Shammari, 237th National American Chemical Society Meeting, Salt Lake City, UT, March 22-26, 2009
13. "CHED 368 Use and evaluation of computerized prelaboratory experiments (CPLEX) for the organic chemistry laboratory", John H. Penn and Abdulrahman Al-Shammari, 236th National American Chemical Society Meeting, Philadelphia, PA, August 17-21, 2008
14. "CHED 364 Teaching reaction mechanisms using the curved arrow neglect (CAN) method, John H. Penn and Abdulrahman Al-Shammari, 236th National American Chemical Society Meeting, Philadelphia, PA, August 17-21, 2008
15. "CHED 368 Use and evaluation of computerized prelaboratory experiments (CPLEX) for the organic chemistry laboratory", John H. Penn and Abdulrahman Al-Shammari, 236th National American Chemical Society Meeting, Philadelphia, PA, Contributed Poster with acceptance for SCI-MIX presentation, August 17-21, 2008
16. "Use and Evaluation of Computerized Pre-Laboratory Experiments for the Organic Chemistry Laboratory", Technology in the Classroom: Web-based Technologies/Probeware, John H. Penn and Abdulrahman Al-Shammari, Biennial Conference on Chemical Education, Bloomington, IN, July 29, 2008.
17. "ORGN 490 - Practice makes perfect in organic chemistry: The WE_LEARN System for Organic Chemistry", John H. Penn, 234th National American Chemical Society Meeting, Boston, MA, Aug 19-23, 2007.
18. "CHED 411 - Teaching organic reaction mechanisms using CAI", John H. Penn and Abdulrahman Al-Shammari, 234th National American Chemical Society Meeting, Boston, MA, Aug 19-23, 2007.
19. "Picture is worth a thousand words: Web-based prelabs", John H. Penn and Abdulrahman Al-Shammari, Biennial Conference on Chemical Education, West Lafayette, IN, August 1, 2006.

20. "Early predictors of performance in organic chemistry: Who will survive and who will not survive", John H. Penn and Byron Bennett, Biennial Conference on Chemical Education, West Lafayette, IN, July 31, 2006.
21. "Tools for performing organic reaction mechanisms over the web", John H. Penn and Christoph Steinbeck, Biennial Conference on Chemical Education, West Lafayette, IN, July 31, 2006.
22. "Identifying who the difficult students are " John H. Penn and Byron Bennett, 230th American Chemical Society National Meeting, Washington, DC, September 1, 2005.
23. "Extending SMIRKS to include electron arrow pushing formulae" John H. Penn and Christoph Steinbeck, 230th American Chemical Society National Meeting, Washington, DC, August 29, 2005.
24. "Practice Makes Perfect, Even in Education", John H. Penn, Questionmark Users Group Meeting, New Orleans, LA, March 2005
25. "On-Line Organic Structure Generation and Computer Grading: Memorization?" John H. Penn and Ada Casares, 228th American Chemical Society National Meeting, Philadelphia, PA, August 23, 2004
26. "On-Line Organic Structure Generation and Computer Grading: Student Results", John H. Penn, Ada Casares, Abdulrahman Al-Shammari, Leah Merritt, and Peter Zehr, 18th Biennial Conference on Chemical Education, Ames, IA, July 18-22, 2004.
27. "On-Line Organic Structure Generation and Computer Grading: Student Results", John H. Penn, Ada Casares, Abdulrahman Al-Shammari, Leah Merritt, and Peter Zehr, 227th American Chemical Society National Meeting, Anaheim, CA March 28-April 1, 2004.
28. "Chemical Solutions: Practice and Drill Service for Learning Chemistry: Advantages and Hands-on Demonstration", John H. Penn, 2003 WV Science Teacher's Association Annual Meeting, October 11, 2003
29. "Chemical Solutions: Practice and Drill Service for Learning Chemistry: Advantages and Hands-on Demonstration", John H. Penn, 2003 Science Educator′s Conference, Rochester, NY, September 25, 2003.
30. "How Helpful are Practice Tests in the Learning Process?", John H. Penn, John Valari, and Gloria Gozdzik, 225th American Chemical Society National Meeting, New Orleans, LA, March 23-27, 2003.
31. "How Helpful are Practice Tests in the Learning Process?", John H. Penn and John Valari, 17th Biennial Conference on Chemical Education, Bellingham, WA, July 28 - August 1, 2002.
32. "The Ways of the ′Chalk′ and Those of ′High Tech′", Ada Casares and John H. Penn, ASPIRA Conference on Technology Tools for Teaching and Learning Conference, San Juan, Puerto Rico, December 9-12, 2001.
33. "The WE_LEARN System for Organic Chemistry", Gordon Conference on Innovations in College Chemistry Teaching, Ventura, California, January 6-11, 2001.
34. "Building ′Fluency′ in the Language of Chemistry: The WE_LEARN System", John H. Penn, Gloria Gozdzik, Jimmy Mali, Michael Mastromichalis, Zeshan Rana, Paul Rashid, Susan Saunders, Imran Dar, 220th American Chemical Society National Meeting, Washington, DC, August 20-25, 2000.
35. "Toward the Goal of Learning about Individual Student Learning Patterns: The We Learn System for Organic Chemistry", John H. Penn, Gloria Gozdzik, Susan Saunders, Jimmy

Mali, Matthew Gibson, Michael Mastromachaelis, and Zeshan Rana, 16th Biennial Conference on Chemical Education, Ann Arbor, MI, July 30-August 3, 2000.

36. "Using WebCT to Create a Virtual Classroom", WVU Computing and Technology Fair, Morgantown, WV, April 11-12, 2000.
37. "Web-based Homework", WVU Computing and Technology Fair, Morgantown, WV, April 11-12, 2000.
38. "Toward the Goal of Learning about Individual Student Learning Patterns: The We Learn System for Organic Chemistry", John H. Penn, Gloria Gozdzik, Susan Saunders, Jimmy Mali, Matthew Gibson, Michael Mastromachaelis, and Zeshan Rana, 219th American Chemical Society National Meeting, San Francisco, CA, March 26-30, 2000.
39. "Lernen von Begriffen oder Erinnerungsvermögen in dem WE_LEARN System für organische Chemie", John H. Penn, G. Gozdzik, A. Aleshemari, M. Carpenter, A. Higginbotham, R. Krause, and R. Whetstone, 16. Fortbildungs- und Vortragstagung der Gesselshaft Deutscher Chemiker Fachgruppe Chemieunterricht, Heidelberg, Germany, September 9-11, 1999.
40. "Novel Syloxyacetal Glucosides as Selective pH-Dependent Antitumor Prodrugs", S. Svarovsky, and J.H. Penn, 218th American Chemical Society National Meeting, New Orleans, LA, August 1999.
41. "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", J.H. Penn, G. Gozdzik, A. Aleshemari, M. Carpenter, A. Higginbotham, R. Krause, and R. Whetstone, American Chemical Society Regional Meeting, Columbus, OH, June 1999.
42. "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", J.H. Penn, G. Gozdzik, A. Aleshemari, M. Carpenter, A. Higginbotham, R. Krause, and R. Whetstone, NAU/web.99 Integration, Interaction, and Innovation, Flagstaff, Arizona, May 15-17, 1999.
43. "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", J.H. Penn, G. Gozdzik, A. Aleshemari, M. Carpenter, A. Higginbotham, R. Krause, and R. Whetstone, West Virginia University Technology Fair, Morgantown, WV, April 6-7, 1999.
44. "Ferriin Oxidation Of D,L-(4,4′-Dicyano-1,2-Diphenyl)-1,2-Ethanediol: Influence Of Base And Kinetic Analysis", A. Liu, J.H. Penn, S. S. Svarovsky, R.H. Simoyi, 217th American Chemical Society National Meeting, Anaheim, CA, March 21 - 25, 1999.
45. "Concept Learning or Memorization in the WE_LEARN System for Organic Chemistry", J.H. Penn, G. Gozdzik, A. Aleshemari, M. Carpenter, A. Higginbotham, R. Krause, and R. Whetstone, 217th American Chemical Society National Meeting, Anaheim, CA, March 21 - 25, 1999.
46. "Organic Chemistry and the Internet: A New Approach to Homework and Testing Using the WE_LEARN System", J.H. Penn, G. Gozdzik, V.M. Nedeff, Syllabus Press Regional Meeting, Washington, DC, November 5-6, 1998.
47. "Organic Chemistry and the Internet: A New Approach to Homework and Testing Using the WE_LEARN System", J.H. Penn, G. Gozdzik, V.M. Nedeff, Biennial Meeting on Chemical Education, Waterloo, Canada, August 9-13, 1998.
48. "Organic Chemistry and the Internet: A New Approach to Homework and Testing Using the WE_LEARN System", J.H. Penn, G. Gozdzik, V.M. Nedeff, 30th Central Regional Meeting of the American Chemical Society, Cleveland, OH, May 27-29, 1998.

49. "Oxidation of Pinacols with Trisphenanthroline Iron (III): Geometric Requirements for the Reaction", John H. Penn, An Liu, and Robert Plants, Canadian Chemical Society Annual Meeting, St. John′s, Newfoundland, Canada, June 24, 1996.
50. "Oxidation of Pinacols with Trisphenanthroline Iron (III): The Role of Complexes in the Reaction", John H. Penn and Sergei Svarovsky, Canadian Chemical Society Annual Meeting, St. John′s, Newfoundland, Canada, June 24, 1996.
51. "Oxidation of 2-Methoxy-1,2-Diphenylethanol with Iron(III) Complexes" by John H. Penn and A. Liu, 27th American Chemical Society Central Regional Meeting, Akron, Ohio, May 31-June 2, 1995
52. "New Insights into the Role of Pyridines during the Oxidative Cleavage of Aromatic 1,2-Diols" by John H. Penn and S. Svarovsky, 27th American Chemical Society Central Regional Meeting, Akron, Ohio, May 31-June 2, 1995
53. J.H. Penn, J.H. Wang, and Y.-Q. Liu, "Alternative Mechanisms for Radical Cation Bond Cleavage", poster presentation during Sci-Mix at the 204th National American Chemical Society Meeting, Washington, DC, August 23-28, 1992.
54. J.H. Penn, J.H. Wang, and Y.-Q. Liu, "Alternative Mechanisms for Radical Cation Bond Cleavage", podium presentation at the 204th National American Chemical Society Meeting, Washington, DC, August 23-28, 1992.
55. J.H. Penn, C. Zhu, and D.L. Deng, "π-Acceptor-induced Bond Cleavage Reactions of Benzyl Ether Derivatives", 204th National American Chemical Society Meeting, Washington, DC, August 23-28, 1992.
56. J.H. Penn and J.H. Duncan, "Electron Transfer Rate Determinations: tetra-p-Anisylpinacol", 204th National American Chemical Society Meeting, Washington, DC, August 23-28, 1992.
57. J.H. Penn and W.H. Owens, "Acyl Anion Generation from Thiol Esters", 204th National American Chemical Society Meeting, Washington, DC, August 23-28, 1992.
58. J.H. Penn, W.H. Owens, J.L. Petersen, H.O. Finklea, and D.A. Snider, "Mixed Anhydrides: Physical Properties Influenced by Molecular Structure", 204th National American Chemical Society Meeting, Washington, DC, August 23-28, 1992.
59. J.H. Penn, J.-H. Wang, and Y.-Q. Liu, "Alternative Radical Cation Bond Cleavage Mechanisms", 6th Annual Consortium for Fossil Fuel Liquefaction Science Technical Meeting, Oglebay Park, WV, July 29, 1992.
60. J.H. Penn, Y.Q. Liu, P. Yassini, "Dihydroquinone Induced Liquefaction: Coal and Model Compound Studies", CFFLS Annual Technical Meeting, Lexington, KY, August 14, 1991.
61. J.H. Penn, Z. Lin, D.-L. Deng, F. Camou, "Unusual Change in Mechanism for Electron Transfer Mechanisms: 2,3-Diphenyl-2,3-Butanediol", 201st National Meeting of the American Chemical Society, Atlanta, GA, April 21-26, 1991.
62. J.H. Penn and W.H. Owens, "Ultrarapid Flashlamp Pyrolysis: Thermal vs. Photochemical Reaction Pathways", 200th National Meeting of the American Chemical Society, Washington D.C., Aug. 26-31, 1990.
63. J.H. Penn, D.-L. Deng, and Z. Lin, "Measurements of Electron Transfer Activation Parameters: Surprisingly Low Oxidation Potentials for Tetrarylethanediols", 200th National Meeting of the American Chemical Society, Washington D.C., Aug. 26-31, 1990.

64. J.H. Penn, L.-X. Gan, E.Y. Chan, P.D. Loesel, and G. Hohlneicher, "Steric Inhibition of Photochemical Reactions: The [2+2]-Cycloaddition Reaction", XIIth IUPAC Symposium on Photochemistry, Bologna, Italy, July 17-22, 1988.
65. J.H. Penn, D.-L. Deng, and K.J. Chai, "Endoergic Electron Transfer Rates: Anchimeric Assistance in the Electron Transfer Process", 195th National Meeting of the American Chemical Society, Toronto, Canada, June 5-10, 1988.
66. J.H. Penn and L.-X. Gan, "Steric Inhibition of Photochemical Reactions: The [2+2]-Cycloaddition Reaction", 195th National Meeting of the American Chemical Society, Toronto, Canada, June 5-10, 1988.
67. J.H. Penn and R.D. Orr, "A New Microscale Photochemical Immersion Well for the Teaching Laboratory", 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
68. J.H. Penn, D.-L. Deng, K.J. Chai, "Endergic Electron Transfer Reaction Rates: Importance of Entropy in Electron Transfer Processes", 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
69. J.H. Penn, L.-X. Gan, E.Y. Chan, P.D. Loesel, G. Hohlneicher, "New Insights into Breaking Bonds Using Photochemistry", 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
70. J.H. Penn and K.N. Nagaraja, "9,10-Dicyanoanthracene Induced Bond Cleavage Reactions", 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
71. J.H. Penn and D.-L. Deng, "Radical Pair Dynamics: Cage Escape vs Electron Transfer", 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
72. J.H. Penn and Z. Lin, "π-Acceptor Induced Bond Cleavage Reactions: Benzyl Phenyl Ethers", 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
73. J.H. Penn, "Is Microscale Glassware the Wave of the Future?", Middle Atlantic Association of Liberal Arts Chemistry Teachers, Gettysburg College, Gettysburg, PA, October 16, 1987.
74. J.H. Penn and K.J. Chai, "Endothermic Electron Transfer Rates in Solution: Bicumyl", Organic Reaction Mechanisms Conference, Halifax, Nova Scotia, August 2-7, 1987.
75. J.H. Penn and K.B. Chai, "Thermal Activation of Chemical Reactivity in Charge-Transfer Complexes: Reactions of cis-Stilbenes", 19th Central Regional Meeting of the American Chemical Society, Columbus, Ohio, June 24-26, 1987.
76. J.H. Penn and K.J. Chai, "Endothermic Electron Transfer Rates in Solution: Bicumyl", 19th Central Regional Meeting of the American Chemical Society, Columbus, Ohio, June 24-26, 1987.
77. J.H. Penn, D.-L. Deng, S.K. Aleshire, "π-Acceptor Induced Reactions: Unusual Selectivity in Bond Cleavage Reactions Through the Use of Photochemical Reactions", 19th Central Regional Meeting of the American Chemical Society, Columbus, Ohio, June 24-26, 1987.
78. J.H. Penn, L.-X. Gan, P.D. Loesel, and E.Y. Chan, "Steric Effects in Photochemical Reactions: The [2+2]-Cycloaddition Reaction", 19th Central Regional Meeting of the American Chemical Society, Columbus, Ohio, June 24-26, 1987.

79. J.H. Penn, E.D. Cox, and A. Singh, "Protonation of Radical Anions as an Important Mechanistic Pathway for Dechlorination of Chloroaromatics", 193rd ACS National Meeting, Denver, Colorado, April 5-10, 1987; ORGN 289.
80. J.H. Penn, D.-L. Deng, and S.K. Aleshire, "π-Acceptor Induced Reactions: Unusual Selectivity in Bond Cleavage Through the Use of Photochemical Reactions", 193rd ACS National Meeting, Denver, Colorado, April 5-10, 1987; ORGN 288.
81. J.J. Fisher, J.H. Penn, D. Döhnert, and J. Michl, "1,3-Perinaphthadiyl Biradical: Spectroscopy and Rearrangement Kinetics in Solid State. Site Effects and Heavy Atom Effects on Tunneling and Activated Decay", 193rd ACS National Meeting, Denver, Colorado, April 5-10, 1987.
82. J.H. Penn, E.Y. Chan, and R.S. Smith, "Triplet Excited State Chemistry of Model cis-Stilbenes", 18th ACS Central Regional Meeting, Bowling Green, Ohio, June 2-4, 1986.
83. J.H. Penn, D.-L. Deng, and S. Aleshire, "-Acceptor Induced Thermal Reactions: Radical vs. Ionic Reaction Pathways", 18th ACS Central Regional Meeting, Bowling Green, Ohio, June 2-4, 1986.
84. J.H. Penn and E. Cox, "A New Method for Radical Anion Lifetime Determination", 191st National ACS Meeting, New York, New York, April 13-18, 1986.
85. J.H. Penn, D.-L. Deng, and S.K. Aleshire, "π-Acceptor Induced Thermal Reactions: Radical vs. Ionic Reaction Pathways", 191st National ACS Meeting, New York, New York, April 13-18, 1986.
86. J.H. Penn, T.A. Eaton, and E.Y. Chan, "Photochemical Reactions of Cis-Stilbenes: The [2+2]-Cycloaddition Reaction", Gordon Conference on Organic Photochemistry, Andover, NH, July 14-19, 1985.
87. J.H. Penn and R.S. Smith, "-Acceptor Induced Thermal Reactions: Breakage of Interaryl Linking Groups", 189th National ACS Meeting, Miami Beach, Florida, April 28-May 3, 1985.
88. J.H. Penn, "Thermal Activation of Chemical Reactivity in Molecular Complexes", 188th National ACS Meeting, Philadelphia, Pennsylvania, August 26-31, 1984.
89. J.H. Penn, "Thermal Activation of Chemical Reactivity in Molecular Complexes", Xth IUPAC Symposium on Photochemistry, Interlaken, Switzerland, July 22-27, 1984.
90. J.H. Penn, J.J. Fisher, P. Tropp, and J. Michl, "Reactions of Triplet Biradicals to Singlet Products", 185th National ACS Meeting, Seattle, Washington, March 20-25, 1983.
91. J.H. Penn, D. Döhnert, and J. Michl, "Low Temperature Chemistry of a 1,3-Biradical", 184th National ACS Meeting, Kansas City, Missouri, September 12-17, 1982.
92. J.H. Penn, D. Döhnert, and J. Michl, "Low Temperature Chemistry of a 1,3-Biradical", IXth IUPAC Symposium of Photochemistry, Pau, France, July 25-30, 1982.
93. J.H. Penn, D. Döhnert, and J. Michl, "Low Temperature Chemistry of a 1,3-Biradical", XVth Informal Conference on Photochemistry, Stanford, California, June 27-July 1, 1982.
94. J.H. Penn, D. Döhnert, and J. Michl, "Low Temperature Chemistry of a 1,3-Biradical", XIXth Reaction Mechanisms Conference, Salt Lake City, Utah, June 21-24, 1982.

PROFESSIONAL SERVICE:

1. International

a) Editorial Board, Journal of Education, Hacettepe University, Ankara, Turkey.

2. Regional and National

a) Webmaster, Northern WV Section of the American Chemical Society, July 2009 – 12/31/2013
b) Symposium Co-organizer with Robert Belford, "Online Resources for Chemical Education", Biennial Conference on Chemical Education, State College, PA July 29-August 1, 2012.
c) Symposium Co-organizer with Robert Belford, "Online Resources for Chemical Education", 237th American Chemical Society National Meeting, Salt Lake City, UT, March 22-26, 2009.
d) ACS Division of Chemical Education International Activities Committee, January 1, 2008 – December 2010
e) Webmaster, CONFCHEM (*i.e.*CONFerences on CHEMistry, an on-line chemistry conference service), July 1, 2006 – May 2010
f) Webmaster, Committee on Computers in Chemical Education, July 1, 2006 – May 2010.
g) Treasurer, Northern West Virginia Section, American Chemical Society, December 2005 – December 2013.
h) Member, Committee on Computers in Chemical Education, January 2005-2014.
i) Symposium Organizer, "On-Line Teaching Methods", Fall 2001, CONFCHEM On-line Conference.
j) Symposium Co-organizer with Marcy Hamby Towns, "Teachers, Students, and Technology: Are We Hitting the Target?" for the 31st Central Regional Meeting of the American Chemical Society, Columbus, OH, June 21-23, 1999.
k) Advisor, American Chemical Society Student Affiliates Chapter at West Virginia University, September 1993-June 1999.
l) Past-Chairman, Northern West Virginia Chapter, American Chemical Society, May 1995-April 1996.
m) Chairman, Northern West Virginia Chapter, American Chemical Society, May 1994-April 1995.
n) Chairman-Elect, Northern West Virginia Chapter, American Chemical Society, May 1993-April 1994.
o) Symposium Organizer, "Microscale Glassware, A Look to the Future" for the 20th Central Regional Meeting of the American Chemical Society, Morgantown, WV, June 1-3, 1988.
p) Exhibit Committee Chairman, 20th ACS Central Regional Meeting, Morgantown, WV, June 1-3, 1988.
q) Finance Committee Chairman, 20th ACS Central Regional Meeting, Morgantown, WV, June 1-3, 1988.
r) Chairman, Northern West Virginia Chapter, American Chemical Society, April 1985-June 1987.
s) Chairman-Elect, Northern West Virginia Chapter, American Chemical Society, April 1984-March 1985.
t) Auditor, Northern West Virginia Chapter, American Chemical Society, 1983.

3. West Virginia University, University Level Service

    a) Search Committee for the Director of the Instructional Technology Resource Center, November 2001 - January 2002
    b) Outstanding Teacher Award Selection Committee, March 1998-May 1998

4. West Virginia University, Eberly College of Arts and Sciences

    a) Member, Promotion and Tenure Committee, September 2013 – May 2015.
    b) Technology Task Force September 2006 - May 2007
    c) Chair, Promotion and Tenure Committee, September 2002-May 2003
    d) Outstanding Teacher Award Selection Committee, September 1997 - June 1999
    e) Academic Standards Committee, September 1991 - 92.
    f) Chair, Promotion and Tenure Committee, September 1991 - May 1992.
    g) Promotion and Tenure Committee, September 1990 - May 1991.

5. West Virginia University, Department of Chemistry

    a) Teaching Professor Search Committee, September 2013 – May 2014.
    b) Teaching Professor Search Committee, September 2011 – May 2012.
    c) Departmental Promotion and Tenure Committee, September 2010 – May 2012.
    d) Chair, Search Committee, Teaching Assistant Professor, November 2008 – June 2009.
    e) Departmental Awards and Honors Committee, September 2006 - present
    f) Departmental Undergraduate Studies Committee, September 2006 - present
    g) Chem 110 Retention, September 2008 – May 2013.
    h) Departmental Webmaster, September 2002 – 2004
    i) Departmental Awards Committee Chair, September 2001 - May 2002.
    j) Assistant Professor Search Committee, September 2001 - May 2002
    k) Promotion and Tenure Committee, December 1997 - June 2000
    l) Assistant Professor Search Committee, September 1996 - May 1997
    m) Ad-hoc Committee on By-Laws Revision, January 1997 - June 1998
    n) Graduate Admissions Committee, September 1989 - August 1995.
    o) Organic Chemistry Faculty Search Committee, January 1995-May 1995.
    p) Organic Chemistry Faculty Search Committee, January 1994-May 1994.
    q) Graduate Student Recruiting Committee, Chair, September 1986 - May 1989.

CONSULTING

1. Expert Witness Testimony

    a) State of West Virginia vs. Henry Buzzard, Circuit Court of Preston County, Kingwood, WV, October 1993
    b) State of West Virginia vs. Thomas White, Circuit Court of Preston County, Kingwood, WV, August 1993
    c) United States vs. John Doe, District Court, Wheeling, WV, October 1991

2. Corporate

    a) Rothwell, Ernst, Kurz, and Figg, 1998-present
    b) Stepan Corporation, August 1996-1998
    c) Horizon Research Consultants, Inc., 1991-present
    d) Ace Glass, Inc., August 1989-July 1994

3. Personal

    a) Morgantown Elks Lodge
        a. Secretary, Morgantown Elks Lodge 411, April 2008 – present
        b. Volunteer, Christmas Food Baskets, December 2003 – present
        c. Scholarship Committee Chair, April 2003 – present
        d. ENF Chair, April 2005 - present
        e. Club Manager, Morgantown Elks Lodge, January 2010 – June 2011
        f. Acting Treasurer, Morgantown Elks Lodge 411, January 2010 – June 2011
        g. Elk of the Year, 2010-11
        h. Elk of the Year, 2008-9
        i. Exalted Ruler, Morgantown, Elks Lodge 411, April 2003 – March 2006
        j. Acting Treasurer, Morgantown Elks Lodge 411, April 2003 – July 2005
        k. Treasurer, Morgantown Elks Lodge 411, April 2000 – April 2003
        l. Memorial Day Service Organizer, April 2008 – present
        m. Chair, Hoop Shoot Committee, 2010-11
        n. Member, Hoop Shoot Committee, 2008-10, 2012-2013
        o. Newsletter Editor, 2012-2013
    b) WV Elks Association
        a. Chair, Adopt-a-Veteran Committee, May 2011 – present
        b. District Deputy Grand Exalted Ruler, July 2010 – June 2011
        c. District Deputy Esquire, July 2009 – June 2010
        d. Secretary/Treasurer of the Past Exalted Ruler's Association, May 2008 – present
        e. Member, National Foundation Committee, May 2004 - present
        f. Member, Scholarship Committee, May 2004 - present
    c) Madison Nursing Home and Rehabilitation Center
        a. Volunteer (averaging 35-40 hours/month) June 2007 – October 2011. Honored as the WV Healthcare Association Volunteer of the Year in May 2011. Honored as Volunteer of the Year in April 2009. Work with veterans, elderly, etc to provide quality healthcare
    d) Suncrest United Methodist Church
        a. Community Usher, June 2011 – present
        b. Community Usher, April 2004 - May 2008