

Publications

1. J.B. Ott, G.V. Cornett, C.E. Stouffer, B.F. Woodfield, C. Guanquan, and J.J. Christensen, "Excess Enthalpies for (Ethanol + Water) at 323.15, 333.15, 348.15, and 373.15 K and from 0.4 to 15 MPa.", *Journal of Chemical Thermodynamics* **18**, 867 (1986).
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15. B. F. Woodfield, "A Complete and Realistic Simulation of Inorganic Qualitative Analysis", Biennial Conference on Chemical Education, Ann Arbor, MI, 2000.
16. B. F. Woodfield, "The Specific Heat of Solids and Virtual Chemistry. Are They Connected?", Dalhousie University, December 2000.

17. B. F. Woodfield, "Better Ways of Teaching Students How to Think", Utah High School Chemistry Teachers Workshop, (University of Utah), April 2000.
18. B. F. Woodfield, "Virtual ChemLab Project: Virtual Chemistry Laboratories", Department of Chemistry Seminar, Brigham Young University, October 2000.
19. B. F. Woodfield, J. C. Lashley, J. Boerio-Goates, T. Darling, A. Migliori and D. Thoma, "Thermodynamic and Elastic Properties of the Single Crystal AuZn Near the Martensitic Transition", International Conference on Chemical Thermodynamics, Halifax, Nova Scotia, 2000.
20. B. F. Woodfield, J. C. Lashley, J. Boerio-Goates, J. L. Smith, J. Cooley and L. Thullen, "Thermodynamic Properties of the Charge Density Wave State in Uranium Metal", International Conference on Chemical Thermodynamics, Halifax, Nova Scotia, 2000.
21. M. B. Andrus and B. F. Woodfield, "Virtual ChemLab: Organic #2", Spring American Chemical Society Meeting, San Diego, CA, 2001.
22. J. Boerio-Goates, B. F. Woodfield, B. E. Lang, J. Linford and R. Stevens, "Adiabatic Heat Capacity Measurements - a Useful Tool to Study Low Temperature Phenomena in Materials", 2nd International Symposium on the New Frontiers of Thermal Studies of Materials, Yokohama, Japan, November 2001.
23. B. E. Lang, R. Stevens, J. Boerio-Goates, B. F. Woodfield, J. Majzlan and A. Navrotsky, "Thermodynamics of the Fe-O-H System", Calorimetry Conference, Colorado Springs, CO, 2001.
24. J. C. Lashley, B. E. Lang, J. Boerio-Goates, B. F. Woodfield, T. W. Darling, F. Chu, A. Migliori and D. Thoma, "Critical Phenomena at the Martensitic Transition in the shape-Memory Alloy AuZn", Spring American Physical Society Meeting, Seattle, WA, 2001.
25. J. C. Lashley, B. E. Lang, J. Boerio-Goates, B. F. Woodfield, T. W. Darling, F. Chu, A. Migliori and D. Thoma, "Critical Phenomena at the Martensitic Transition in the shape-Memory Alloy AuZn", Spring American Physical Society Meeting, Seattle, WA, 2001.
26. J. Majzlan, A. Navrotsky, B. E. Lang, R. Stevens, B. F. Woodfield and J. Boerio-Goates, "Thermodynamics of the Fe-O-H System", Goldschmidt Conference, Homestead, VA, 2001.
27. R. Stevens, J. Boerio-Goates, B. F. Woodfield and M. Crawford, "Thermodynamic and Structural Studies of Frustrated Antiferromagnetic Zinc Chromite", Calorimetry Conference, Colorado Springs, CO, 2001.
28. B. F. Woodfield and M. B. Andrus, "Virtual ChemLab: Organic #1", Spring American Chemical Society Meeting, San Diego, CA, 2001.
29. B. F. Woodfield, B. E. Lang, R. Stevens, J. Boerio-Goates, M. E. Davis and A. Navrotsky, "Heat Capacity Measurements below $T = 30$ K on Pure SiO_2 Zeolites",

Calorimetry Conference, Colorado Springs, CO, 2001.

30. V. Allred, B. F. Woodfield, B. E. Lang, J. Boerio-Goates, R. L. Putnam, K. B. Helean and A. Navrotsky, "Heat Capacity Measurements and Thermodynamic Functions of $Gd_2Ti_2O_7$.", Northwest Regional American Chemical Society Meeting, Spokane, WA, 2002.
31. M. C. Asplund, B. F. Woodfield and M. B. Andrus, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", Biennial Conference on Chemical Education, Bellingham, WA, 2002.
32. J. Boerio-Goates, R. Stevens, H. R. Catlin and B. F. Woodfield, "Specific Heat Measurements of Nanophase and Bulk Phases of TiO_2 ", Calorimetry Conference, New Brunswick, NJ, 2002.
33. J. Boerio-Goates, R. Stevens, B. E. Lang and B. F. Woodfield, "Heat Capacity Calorimetry: Low Resolution Spectrometry with no Selection Rules", Northwest Regional American Chemical Society Meeting, Spokane, WA, 2002.
34. H. R. Catlin, R. Stevens, J. Linford, M. R. Francis, B. F. Woodfield and J. Boerio-Goates, "Heat Capacity Measurements of Negative Thermal Expansion Materials: ZrW_2O_8 and ZrM_2O_8 ", Northwest Regional American Chemical Society Meeting, Spokane, WA, 2002.
35. M. K. Crawford, R. L. Harlow, E. M. McCarron, R. Flippen, P. L. Lee, Y.-G. Zhang, J. Hormadaly, B. F. Woodfield, R. Stevens, J. Boerio-Goates, Q. Huang and J. W. Lynn, "Structural and Magnetic Studies of Spinels", American Physical Society, Seattle, WA, 2002.
36. M. K. Crawford, R. L. Harlow, E. M. McCarron, R. Flippen, P. L. Lee, Y.-G. Zhang, J. Hormadaly, B. F. Woodfield, R. Stevens, J. Boerio-Goates, Q. Huang and J. W. Lynn, "Superconductivity and Magnetism in Transition Metal Oxides", The National Institute of Advanced Industrial Science and Technology (Japan), Tsukuba, Japan, June 2002.
37. B. E. Lang, J. A. Holzhauser, J. Boerio-Goates, B. F. Woodfield, J. C. Lashley, J. Cooley, M. Manley, D. Thoma, W. L. Hults and J. L. Smith, "Specific Heat Measurements, Third-Law Entropy, and Lattice Strain in α -Uranium", Northwest Regional American Chemical Society Meeting, Spokane, WA, 2002.
38. J. C. Lashley, B. E. Lang, J. Boerio-Goates, B. F. Woodfield, T. W. Darling, F. Chu, A. Migliori and D. Thoma, "Critical Phenomena at the Martensitic Transition in the Shape-Memory Alloy $AuZn$ ", Spring Minerals, Metals, and Materials (TMS) Meeting, Seattle, WA, 2002.

39. J. C. Lashley, B. E. Lang, J. Boerio-Goates, B. F. Woodfield, G. M. Schmiedeshoff, E. C. Gay, C. C. McPheeters, D. J. Thoma, W. L. Hults, J. C. Cooley, R. J. Hanrahan Jr. and J. L. Smith, "Interaction of the CDW State with Magnetic Fields in α -Uranium", Spring American Physical Society Meeting, Indianapolis, IN, 2002.
40. J. C. Lashley, B. E. Lang, A. G. Lewis, J. Boerio-Goates, B. F. Woodfield, J. Cooley, M. Manley, D. Thoma, W. L. Hults and J. L. Smith, "Solid-State Physics and Thermodynamics of the UNb System", Spring American Physical Society Meeting, Indianapolis, IN, 2002.
- A. G. Lewis, J. Boerio-Goates, B. E. Lang, B. F. Woodfield, J. C. Lashley, J. Cooley, M. Manley, D. Thoma, W. L. Hults and J. L. Smith, "Thermodynamic and Structural Studies of Uranium-Niobium Alloys at Low Temperatures", Northwest Regional American Chemical Society Meeting, Spokane, WA, 2002.
41. J. Majzlan, A. Navrotsky, R. Stevens, B. E. Lang, J. Boerio-Goates and B. F. Woodfield, "Thermodynamics of Nanocrystalline and Poorly Crystalline Iron Oxides", Calorimetry Conference, New Brunswick, NJ, 2002.
42. R. Stevens, J. Boerio-Goates, B. F. Woodfield, M. K. Crawford, R. L. Harlow, E. M. McCarron, R. Flippen, P. L. Lee, Y. Zhang, J. Hormadaly, Q. Huang and J. W. Lynn, "Thermodynamic and Structural Studies of Geometrically Frustrated Antiferromagnets", Northwest Regional American Chemical Society Meeting, Spokane, WA, 2002.
43. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", International Conference on Teaching and Learning, Jacksonville, FL, 2002.
44. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Distance Learning Courses", Spring American Chemical Society Conference, Orlando, FL, 2002.
45. B. F. Woodfield, "What Specific Heat Can Do For You (Stig Sunner Award Lecture)", Calorimetry Conference, New Brunswick, NJ, 2002.
46. B. F. Woodfield, "The Virtual ChemLab Project", Prentice Hall National Sales Meeting, Baltimore, MD, August 2002.
47. B. F. Woodfield, "Getting Your Project Published", FIPSE Project Directors' Meeting, Washington, DC, 2002.
48. B. F. Woodfield and M. C. Asplund, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", Canadian Society for Chemistry National Meeting, Vancouver, British Columbia, June 2002.

49. B. F. Woodfield and M. C. Asplund, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", Spring American Chemical Society Conference, Orlando, FL, 2002.
50. B. F. Woodfield and M. C. Asplund, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Chemistry and Physics", Department of Physics Seminar, Brigham Young University, May 2002.
51. B. F. Woodfield, M. C. Asplund and M. B. Andrus, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", 158th Two Year College Chemistry Conference, Jacksonville, FL, 2002.
52. B. F. Woodfield, A. Lewis, B. E. Lang, J. Boerio-Goates and J. C. Lashley, "The Specific Heat of Uranium Single-and Poly-Crystals", Calorimetry Conference, New Brunswick, NJ, 2002.
53. B. F. Woodfield, M. Moore and G. Waddoups, "Virtual ChemLab Project: Assessment and Evaluation", Spring American Chemical Society Conference, Orlando, FL, 2002.
54. B. F. Woodfield, R. Stevens, B. E. Lang and J. Boerio-Goates, "Similarities in the Phonon Density of States of Negative Thermal Expansion Compounds and Zeolites as Measured by Low-Temperature Specific Heat", Los Alamos National Laboratory, January 2002.
55. B. F. Woodfield, R. Stevens, B. E. Lang and J. Boerio-Goates, "Low Temperature Specific Heat and the Vibrational Phonon Spectrum of SiO₂ Zeolites", University of California, San Diego, February 2002.
56. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", Dialogues in Networked Teaching and Learning Conference, Provo, UT, February 2003.
57. B. F. Woodfield, "Sophisticated and Realistic Simulations of High School Chemistry and Physics", National Science Teachers Association, Philadelphia, PA, March 2003.
58. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", City College of New York, New York, NY, March 2003.
59. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", Rochester Institute of Technology, Rochester, NY, April 2003.

60. B. F. Woodfield, "Virtual ChemLab Project: Implementing Simulations in the Curriculum", Rochester Institute of Technology, Rochester, NY, April 2003.
61. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", University of Miami, Oxford, OH, June 2003.
62. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Freshman and Sophomore Level Chemistry", Fall American Chemical Society Conference, New York, NY, 2003.
63. B. F. Woodfield, "Teaching Science to Non-Science Majors", FIPSE Project Directors' Meeting, Denver, CO, 2003.
64. B. F. Woodfield and M. B. Andrus, "Virtual ChemLab Project: Sophisticated and Realistic Laboratory Simulations for Organic Synthesis and Organic Qualitative Analysis", Fall American Chemical Society Conference, New York, NY, 2003.
65. B. F. Woodfield, B. E. Lang, M. Dolnaldson, V. E. Lamberti, D. A. Carpenter, Z. W. Bell and A. Burger, "The Heat Capacity of TiB_2 ", Calorimetry Conference, Laea, HI, 2003.
66. B. F. Woodfield and G. L. Waddoups, "Virtual ChemLab Project: Assessment and Evaluation of Student Opinion and Pedagogical Utility", Fall American Chemical Society Conference, New York, NY, 2003.
67. S. Haderlie and B. F. Woodfield, "Virtual ChemLab Project: Using Technology in the High School Classroom", Biennial Conference on Chemical Education, Ammes, IA, 2004.
68. S. Haderlie and B. F. Woodfield, "Virtual ChemLab Project: Innovative Online Teaching", Biennial Conference on Chemical Education, Ammes, IA, 2004.
69. B. E. Lang, B. F. Woodfield and J. Boerio-Goates, "Construction of a Small Size Adiabatic Calorimeter", Calorimetry Conference, Santa Fe, NM, 2004.
70. B. F. Woodfield, "Virtual ChemLab Project", Gordon Research Conference: Chemical Education Research and Practice, Ventura, CA, 2004.
71. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Simulations for Freshman and Sophomore Level Chemistry", Solano Community College Workshop on Teaching Science, Fairfield, CA, 2004.
72. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Simulations for Freshman and Sophomore Level Chemistry", Oregon State University Extended

Campus, Corvallis, OR, 2004.

73. B. F. Woodfield, "Virtual ChemLab Project: New Ideas for Teaching Freshman Chemistry", Biennial Conference on Chemical Education, Ammes, IA, 2004.
74. B. F. Woodfield, "Virtual ChemLab Project: Improving the Instruction of Inorganic Chemistry in the Laboratory", Biennial Conference on Chemical Education, Ammes, IA, 2004.
75. B. F. Woodfield, "Virtual ChemLab Project: Teaching Quantum Mechanics How? When? Where?", Biennial Conference on Chemical Education, Ammes, IA, 2004.
76. B. F. Woodfield, "What Specific Heat Can Do For You", Department of Chemical Engineering, Brigham Young University, Provo, UT, November 2004.
77. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Simulations for Freshman and Sophomore Level Chemistry", Department of Chemistry, Brigham Young University, Provo, UT, September 2004.
78. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", NSTA, Seattle, WA, November 2004.
79. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", Youngstown State University Workshop, Youngstown, OH, December 2004.
80. B. F. Woodfield and J. Boerio-Goates, "The Effect of Particle Size on the Heat Capacity of TiO_2 Nanoparticles", The Third International Symposium on the New Frontiers of Thermal Studies of Materials, Tsukuba, Japan, November 2004.
81. B. F. Woodfield, B. E. Lang, J. C. Lashley and J. Boerio-Goates, "Microstrain and the Electronic Specific Heat of α -Uranium", Tokyo Institute of Technology, Yokohama, Japan, December 2004.
82. B. F. Woodfield, R. Stevens, S. Doot, T. F. Walker, G. Li, A. Navrotsky and J. Boerio-Goates, "The Effect of Particle Size on the Heat Capacity of TiO_2 Nanoparticles", Calorimetry Conference, Santa Fe, NM, 2004.
83. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", USTA (Utah Science Teachers Association), Layton, UT, February 2005.
84. B. F. Woodfield, "Virtual ChemLab Project: Realistic and Sophisticated Simulations for Freshman and Sophomore Level Chemistry", American Chemical Society, San Diego, CA, March 2005.

85. B. F. Woodfield, "Virtual ChemLab Project: Using Realistic Simulations of Quantum, Calorimetry, and Gas Experiments to Connect Theory with Experiment", American Chemical Society, San Diego, CA, March 2005.
86. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", NSTA National Meeting, Dallas, TX, March 2005.
87. B. F. Woodfield, "Virtual ChemLab Project: Sophisticated and Realistic Simulations for Freshman and Sophomore Chemistry", Gordon Research Conference, New London, CT, June 2005.
88. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", Scottsdale and Phoenix School Districts, Scottsdale, AZ, September 2005.
89. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", NSTA Regional Meeting, Hartford, CT, September 2005.
90. B. F. Woodfield, "Increasing Access to Laboratory Instruction in the High School Environment", NSTA Regional Meeting, Hartford, CT, September 2005.
91. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", Archdiocese of Philadelphia, Philadelphia, PA, November 2005.
92. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", NSTA Regional Meeting, Chicago, IL, November 2005.
93. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for High School Chemistry", NSTA Regional Meeting, Nashville, TN, December 2005.
94. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory Simulations for Freshman and Sophomore Level Chemistry", Pacificchem, Honolulu, HI, December 2005.
95. B. F. Woodfield, "Creative versus Structured Learning: What Type of Learner are You?", BYU Honors Seminar, Provo, UT, October 2005.
96. B. F. Woodfield and J. Boerio-Goates, "Surface water effects on well-defined rutile and anatase TiO₂ nanoparticles", Pacificchem, Honolulu, HI, December 2005.
97. B. F. Woodfield, "Virtual ChemLab Project: Powerful and Engaging Laboratory

- Simulations for High School Chemistry", USTA State Meeting, Cedar City, UT, February 2006.
98. B. F. Woodfield, "Virtual ChemLab Project: Realistic and Sophisticated Simulations for Freshman and Sophomore Chemistry", University of Washington, Seattle, CA, February 2006.
 99. B. F. Woodfield, "Virtual ChemLab Project: Realistic Simulations for High School Chemistry", NSTA National Meeting, Anaheim, CA, April 2006.
 100. B. F. Woodfield, "Virtual Physical Science: New Simulations for Teaching Physical Science at the Middle School and High School Level", NSTA National Meeting, Anaheim, CA, April 2006.
 101. B. F. Woodfield, "Virtual ChemLab Project: Realistic Simulations for High School Chemistry and Physics", TMSEI Conference, Ephraim, UT, April 2006.
 102. B. F. Woodfield, "The Virtual ChemLab Project: Sophisticated and Realistic Simulations for Freshman and Sophomore Level Chemistry", 61st Northwest Regional ACS Meeting, Reno, NV, June 2006.
 103. B. F. Woodfield, "Virtual ChemLab Project: Realistic Simulations for High School Chemistry and Physics", Clark County School District, Las Vegas, NV, October 2006.
 104. B. F. Woodfield, "Virtual ChemLab and Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School and High School", NSTA Regional Meeting, Omaha, NE, October 2006.
 105. B. F. Woodfield, "Virtual ChemLab and Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School and High School", California Science Teachers Association, San Francisco, CA, October 2006.
 106. B. F. Woodfield, "Virtual ChemLab and Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School and High School", NSTA Regional Meeting, Baltimore, MD, November 2006.
 107. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for Distance Education", Western Governors University Directors Meeting, Provo, UT, November 2006.
 108. B. F. Woodfield, "Virtual ChemLab and Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School and High School", NSTA Regional Meeting, Salt Lake City, UT, December 2006.
 109. B. F. Woodfield and M. C. Asplund, "Virtual ChemLab Project: Using the quantum laboratory simulation to teach quantum concepts and ideas", Fall ACS Meeting, San

Francisco, CA, September 2006.

110. B. F. Woodfield, J. Boerio-Goates and L. Astle, "Synthesis and Properties of Metal Oxide and Mixed Metal Oxide Nanoparticles.", Ceramatec, Inc., Salt Lake City, UT, August 2006.
111. B. F. Woodfield, B. E. Lang, G. Li, S. Liu, T. F. Walker, R. Stevens, J. Boerio-Goates and A. Navrotsky, "Particle Size vs Sample Quality as Factors Determining Magnetic Properties in Nanoparticles", International Conference on Chemical Thermodynamics, Boulder, CO, August 2006.
112. B. F. Woodfield, "Heisenberg's Uncertainty Principle", BYU Honors Seminar, Provo, UT, October 2007.
113. B. F. Woodfield, "Virtual ChemLab and Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School and High School Curriculums", Southern Nevada Science Teachers Association, Las Vegas, NV, January 2007.
114. B. F. Woodfield, "Virtual Physical Science: Sophisticated and Realistic Simulations to Reinforce the Georgia Science Standards", Georgia Science Teachers Association, Athens, GA, February 2007.
115. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Chemistry", Tampa School District, Tampa, FL, October 2007.
116. B. F. Woodfield, "Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School Science Curriculums", NSTA National Meeting, St. Louis, MI, February 2007.
117. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Chemistry", NSTA National Meeting, St. Louis, MI, February 2007.
118. B. F. Woodfield, "Virtual ChemLab and Virtual Physical Science: Sophisticated and Realistic Laboratory Simulations for Middle School and High School Science Curriculums", Maryland Science Supervisor Association, Greenbelt, MD, May 2007.
119. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Chemistry", Montgomery County School District, Greenbelt, MD, June 2007.
120. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Chemistry", NSTA Regional Meeting, Detroit, MI, October 2007.
121. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Chemistry", NSTA Regional Meeting, Denver, CO, October 2007.
122. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High

- School Chemistry", NSTA Regional Meeting, Birmingham, AL, December 2007.
123. B. F. Woodfield, "Inquiry Based Learning Using Virtual ChemLab", New York City School District, New York, NY, December 2007.
 124. J. Manwaring, J. Boerio-Goates, R. E. Olsen and B. F. Woodfield, "Synthesis and analysis of metal and metal oxide nanoparticles", Northwest and Rocky Mountain Regional ACS Meeting, Park City, UT, June 2008.
 125. S. J. Smith, Q. Liu, B. F. Woodfield and J. Boerio-Goates, "The Mechanism behind a Novel Two-Step Solid-State Method for Synthesizing Metal Oxide Nanoparticles.", Northwest and Rocky Mountain Regional ACS Meeting, Park City, UT, June 2008.
 126. B. F. Woodfield, "Inquiry Based Learning Using Realistic and Sophisticated Virtual Environments", Southern Nevada Educators Conference, Las Vegas, NV, February 2008.
 127. B. F. Woodfield, "Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School Curriculums", NSTA National Meeting, Boston, MA, March 2008.
 128. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Curriculums", NSTA National Meeting, Boston, MA, March 2008.
 129. B. F. Woodfield, "Y Science Laboratories: Sophisticated and Realistic Simulations for Middle and High School Curriculums", Long Island Science Teacher Workshop, Long Island, NY, April 2008.
 130. B. F. Woodfield, "Creating Engaging Learning Environments", TMSEI, Emphraim, UT, April 2008.
 131. B. F. Woodfield, "Synthesis and Properties of Metal Oxide and Mixed Metal Oxide Nanoparticles", Rohm and Haas Seminar, Marlborough, MA, June 2008.
 132. B. F. Woodfield, "A Novel Method for the Production of a Vast Array of Metal, Metal Oxide, and Mixed-Metal Oxide Nanoparticles", Nanotech 2008, Boston, MA, June 2008.
 133. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for the Classroom and Laboratory", Devry University, Chicago, IL, September 2008.
 134. B. F. Woodfield, "Y Science Laboratories: Sophisticated and Realistic Simulations for the Classroom and Laboratory", Brigham Young University, Provo, UT, September 2008.
 135. B. F. Woodfield, "Y Science Laboratories: Sophisticated and Realistic Simulations for the Classroom and Laboratory", New Jersey Science Teacher's Association,

Somerset, NJ, October 2008.

136. B. F. Woodfield, "Y Science Laboratories: Sophisticated and Realistic Simulations for the Classroom and Laboratory", New York City Department of Education, New York, NY, October 2008.
137. B. F. Woodfield, "Virtual Laboratories: Sophisticated and Realistic Simulations for High School Chemistry", NSTA Regional Meeting, Charlotte, NC, October 2008.
138. B. F. Woodfield, "Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School Science Curriculums", NSTA Regional Meeting, Charlotte, NC, October 2008.
139. B. F. Woodfield, "Virtual Laboratories: Sophisticated and Realistic Simulations for High School Chemistry", NSTA Regional Meeting, Portland, OR, November 2008.
140. B. F. Woodfield, "Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School Science Curriculums", NSTA Regional Meeting, Portland, OR, November 2008.
141. B. F. Woodfield, "Virtual ChemLab: Sophisticated and Realistic Simulations for High School Chemistry", NSTA Regional Meeting, Portland, OR, November 2008.
142. B. F. Woodfield, "Virtual Physical Science: Sophisticated and Realistic Simulations for Middle School Science Curriculums", NSTA Regional Meeting, Cincinnati, OH, December 2008.
143. B. F. Woodfield, "Virtual Laboratories: Sophisticated and Realistic Simulations for High School Science Curriculums", NSTA Regional Meeting, Cincinnati, OH, December 2008.
144. B. F. Woodfield, "Engaging Learning Environments Using Sophisticated Virtual Laboratories", Florida Science Teacher Association, Orlando, FL, January 2008.
145. R. E. Olsen, J. Boerio-Goates, S. Liu, S. J. Smith and B. F. Woodfield, "Universal, green, two-step synthesis for producing nanoparticles of metal oxides and metals", North American Solid State Chemistry Conference, Columbus, OH, March 2009.
146. S. J. Smith, R. E. Olsen, Q. Liu, S. Liu, B. F. Woodfield and J. Boerio-Goates, "Mechanism behind a novel green, two-step, general method for synthesizing metal and metal oxide nanoparticles.", North American Solid State Chemistry Conference, Columbus, OH, March 2009.
147. B. F. Woodfield, "Virtual Biology, Virtual Physics, Virtual Physical Science, Virtual ChemLab: Realistic and Sophisticated Simulations for High School Science Curriculums", Southern Nevada Math and Science Conference, Las Vegas, NV,

January 2009.

148. B. F. Woodfield, "WOW! Virtual Labs that Really Work in the Classroom", Utah Science Teachers Association, Salt Lake City, UT, February 2009.
149. B. F. Woodfield, "Virtual ChemLab: Bringing the Student Lab Experience to a New Level. No Goggles Required.", NSTA National Meeting, New Orleans, LA, March 2009.
150. B. F. Woodfield, "Wow! Realistic Middle School Laboratory Simulations You Have to See to Believe.", NSTA National Meeting, New Orleans, LA, March 2009.
151. B. F. Woodfield, "Wow! Realistic High School Laboratory Simulations You Have to See to Believe.", NSTA National Meeting, New Orleans, LA, March 2009.
152. B. F. Woodfield, "Using Virtual ChemLab in the High School Classroom", ACS National Spring Meeting, Salt Lake City, UT, March 2009.
153. B. F. Woodfield, "Using Virtual Laboratories from Middle School to High School", Louisiana STEM Conference (Two Day Workshop), Lafayette, LA, July 2009.
154. B. F. Woodfield, "Sophisticated Virtual Labs for any Topic and for Students of All Levels", Ohio State Science Teacher Symposium, Columbus, OH, October 2009.
155. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", New Jersey Science Teacher Association Conference, Somerset, NJ, October 2009.
156. B. F. Woodfield, "Wow! Realistic Laboratory Simulations for the Entire High School Science Curriculum You Have to See to Believe.", NSTA Regional Meeting, Minneapolis, MN, October 2009.
157. B. F. Woodfield, "A Novel, Generalized Method to Synthesize a Nearly Unlimited Array of Metal and Mixed Metal Oxide Nanoparticles", Geological Society of America National Meeting, Portland, OR, October 2009.
158. B. F. Woodfield, "Using Virtual Labs to Teach Difficult Chemistry Concepts", NSTA Regional Meeting, Minneapolis, MN, October 2009.
159. B. F. Woodfield, "Wow! Realistic Laboratory Simulations for the Entire High School Science Curriculum You Have to See to Believe.", NSTA Regional Meeting, Ft. Lauderdale, FL, November 2009.
160. B. F. Woodfield, "Wow! Realistic Laboratory Simulations for the Entire High School Science Curriculum You Have to See to Believe.", NSTA Regional Meeting, Phoenix, AZ, December 2009.

161. B. F. Woodfield, "Virtual Labs You Have to See to Believe for Chemistry, Physics, and Physical Science", New Jersey Science Teacher Association Conference, Somerset, NJ, October 2009.
162. B. F. Woodfield and E. Waterman, "Inquiry Based Learning Using Small-Scale and Virtual Laboratories", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2009.
163. B. Huang, C. H. Bartholomew, J. Boerio-Goates and B. F. Woodfield, "Facile synthesis of mesoporous γ -alumina catalyst supports", AIChE National Meeting, Salt Lake City, UT, November 2010.
164. B. Huang, D. Selck, B. F. Woodfield, C. H. Bartholomew and J. Boerio-Goates, "Novel mesoporous γ -alumina catalyst supports", ACS National Meeting, San Francisco, CA, March 2010.
165. R. E. Olsen, C. H. Bartholomew, J. Boerio-Goates and B. F. Woodfield, "Metal oxide nanoparticles: novel synthesis method and catalytic applications", ACS National Meeting, San Francisco, CA, March 2010.
166. R. E. Olsen, S. J. Smith, C. H. Bartholomew, J. Boerio-Goates and B. F. Woodfield, "Green, one-pot synthesis for preparation of titania supports", PacificChem, Honolulu, HI, December 2010.
167. R. E. Olsen, S. J. Smith, B. Huang, C. H. Bartholomew, J. Boerio-Goates and B. F. Woodfield, "Green, one-pot synthesis for the preparation of titania supports", AIChE National Meeting, Salt Lake City, UT, November 2010.
168. R. E. Olsen, B. F. Woodfield, C. H. Bartholomew and J. Boerio-Goates, "Green, one-pot synthesis for preparation of TiO_2 supports", ACS National Meeting, San Francisco, CA, March 2010.
169. D. A. Selck, C. H. Bartholomew, L. Astle, J. Boerio-Goates and B. F. Woodfield, "SEA Synthesis of $\text{Pt}/\text{Al}_2\text{O}_3$ and $\text{Pd}/\text{Al}_2\text{O}_3$ ", ACS National Meeting, San Francisco, CA, March 2010.
170. S. J. Smith, B. J. Campbell, C. H. Bartholomew, L. Astle, B. F. Woodfield and J. Boerio-Goates, "Structural characterization of alumina nanoparticle supports using TEM, XAFS, Rietveld, and PDF techniques", ACS National Meeting, San Francisco, CA, March 2010.
171. S. J. Smith, B. J. Campbell, B. Huang, C. H. Bartholomew, B. F. Woodfield and J. Boerio-Goates, "Phase progression of alumina nanoparticle catalyst supports as a function of synthetic temperature.", Annual Meeting of the American Crystallographic Association, Chicago, IL, July 2010.

172. S. J. Smith, K. Cook, R. E. Olsen, B. Huang, C. H. Bartholomew, B. F. Woodfield, J. Boerio-Goates and B. J. Campbell, "Novel synthesis of metal oxide-nanoparticle catalysts and catalyst supports and their structural characterization via combined PDF/EXAFS analysis.", PacificChem, Honolulu, HI, December 2010.
173. S. J. Smith, K. Cook, R. E. Olsen, B. Huang, C. H. Bartholomew, B. F. Woodfield, J. Boerio-Goates and B. J. Campbell, "Revised mechanism of La stabilization for La-doped alumina catalyst supports.", AIChE National Meeting, Salt Lake City, UT, November 2010.
174. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", New Jersey Science Teacher Association Conference, Somerset, NJ, October 2010.
175. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2010.
176. B. F. Woodfield, "Virtual Laboratory Simulations for the 6-12 Science Curriculum", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2010.
177. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", Utah Science Teacher Association Meeting, Sandy, UT, February 2010.
178. B. F. Woodfield, "The Next Generation of Physical Science Virtual Labs. No Clean Up Required!", NSTA National Meeting, Philadelphia, PA, March 2010.
179. B. F. Woodfield, "The Next Generation of Life Science Virtual Labs. No Clean Up Required!", NSTA National Meeting, Philadelphia, PA, March 2010.
180. B. F. Woodfield, "The Essential Elements of Measuring, Analyzing, and Interpreting Heat Capacity Data", 2-Day PPMS Workshop, University of California, Davis, May 2010.
181. B. F. Woodfield, "Sophisticated Virtual Laboratories for Online Learning", Group 4 Meeting, International Baccalaureate Cardiff, Wales, September 2010.
182. B. F. Woodfield, "Learning Outcomes from Using Virtual Laboratories in the Classroom", Group 4 Meeting, International Baccalaureate Cardiff, Wales, September 2010.
183. B. F. Woodfield, "Sophisticated Virtual Laboratories for Online Learning", University of Phoenix Phoenix, AZ, October 2010.

184. B. F. Woodfield, "Virtual Biology Labs for Higher Ed", Department of Biology, University of Utah, Salt Lake City, UT, October 2010.
185. B. F. Woodfield, "The New Virtual Biology Simulation Environment", Pearson National Sales Meeting, Chicago, IL, January 2010.
186. B. F. Woodfield, "Sophisticated and Realistic Virtual Labs for Chemistry, Physics, and Biology", New Jersey Science Teacher Association Conference, Somerset, NJ, October 2010.
187. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Kansas City, MI, October 2010.
188. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Baltimore, MD, November 2010.
189. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Nashville, TN, December 2010.
190. B. F. Woodfield, J. Boerio-Goates and C. H. Bartholomew, "A New Approach to the Production of Oxide Nanoparticles and Catalyst Supports", Chemical Engineering Seminar, Brigham Young University, April 2010.
191. B. F. Woodfield, J. Boerio-Goates, Q. Shi and J. C. Lashley, "Accurate Heat Capacities On Powdered Samples Using a Quantum Design PPMS", ICCT, Tsukuba, Japan, August 2010.
192. B. F. Woodfield, J. Boerio-Goates and C. L. Snow, "Unique Surface and Magnetic Properties of Nanoscale Materials", ICCT, Tsukuba, Japan, August 2010.
193. B. Huang, R. E. Olsen, S. J. Smith, D. Selck, C. H. Bartholomew, J. Boerio-Goates and B. F. Woodfield, "Novel mesoporous γ -alumina catalyst supports", North American Catalysis Society Meeting, Detroit, MI, June 2011.
194. R. E. Olsen, C. H. Bartholomew, J. Boerio-Goates and B. F. Woodfield, "One-pot synthesis for preparation of titania supports", North American Catalysis Society Meeting, Detroit, MI, June 2011.
195. S. J. Smith, B. Huang, K. Cook, R. E. Olsen, C. H. Bartholomew, B. F. Woodfield, J. Boerio-Goates and B. J. Campbell, "Revised mechanism of La stabilization for La-doped alumina catalyst supports.", ACS National Meeting, Denver, CO, August 2011.
196. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2011.

197. B. F. Woodfield, "Virtual Labs vs. Real Labs. vs. Simulated Labs", Texas Community College Teacher Association, San Antonio, TX, January 2011.
198. B. F. Woodfield, "What Virtual Labs Can Do for You.", Delaware State University, Dover, DE, February 2011.
199. B. F. Woodfield, "Teaching Students How to Do Science Using Virtual Labs", University of Kentucky, Lexington, KY, February 2011.
200. B. F. Woodfield, "What Virtual Labs Can Do for You.", Cyber Learning Tools for STEM Education, Berkeley, CA, March 2011.
201. B. F. Woodfield, "Sophisticated and Immersive Virtual Environments for Chemistry, Physics, and Biology", Cyber Learning Tools for STEM Education, Berkeley, CA, March 2011.
202. B. F. Woodfield, "The Next Generation of Life Science Virtual Labs. No Clean Up Required!", NSTA National Meeting, San Francisco, CA, March 2011.
203. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA National Meeting, San Francisco, CA, March 2011.
204. B. F. Woodfield, "Virtual Labs for the International School", International Baccalaureate Conference of the Americas, San Antonio, TX, July 2011.
205. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", New Jersey Science Teachers Association, Somerset, NJ, October 2011.
206. B. F. Woodfield, "Virtual Labs You Have to See to Believe for Chemistry, Physics, Physical Science, and now Biology", New Jersey Science Teachers Association, Somerset, NJ, October 2011.
207. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Harford, CT, October 2011.
208. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, New Orleans, LA, November 2011.
209. B. F. Woodfield, "Keynote Address: Planting Seeds of Exploration and Innovation. You Can Make a Difference!", North Carolina Science Teacher Association, Greensboro, NC, November 2011.
210. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Seattle, WA, December 2011.

211. B. F. Woodfield, J. Boerio-Goates and Q. Shi, "Heat Capacity of Surface Water on Cassiterite Nanoparticles", Calorimetry Conference, Kahuku, HI, June 2011.
212. M. Khosravi and B. F. Woodfield, "Synthesis of aluminum hexoxide and aluminum phenoxide", ACS National Meeting, San Diego, CA, March 2012.
213. R. E. Olsen, C. H. Bartholomew and B. F. Woodfield, "Effects of synthetic variations on the dispersion of Pt catalysts supported on
214. aluminum-modified TiO₂", AIChE National Meeting, Pittsburgh, PA, October 2012.
215. R. E. Olsen, C. H. Bartholomew and B. F. Woodfield, "Effects of synthetic variations on the dispersion of Pt catalysts supported on
216. Al-modified TiO₂", ACS National Meeting, San Diego, CA, March 2012.
217. S. J. Smith, B. Huang, C. H. Bartholomew, B. F. Woodfield, J. Boerio-Goates and B. J. Campbell, "The role of a La dopant in inhibiting the gamma to alpha Al₂O₃ phase transition.", Annual Meeting of the American Crystallographic Association, Boston, MA, July 2012.
218. B. F. Woodfield, "Virtual Biology: Pearson's New and Exciting Sophisticated Virtual Environment for Biology", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2012.
219. B. F. Woodfield, "The New Virtual ChemLab", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2012.
220. B. F. Woodfield, "New Ideas for Innovative Online Revision and Review", Pamoja Capitol, Geneva, Switzerland, February 2012.
221. B. F. Woodfield, "Using Virtual Labs in Online Education", Pamoja Education, Oxford, England, February 2012.
222. B. F. Woodfield, "The Next Generation of Life Science Virtual Labs. No Clean Up Required!", NSTA National Meeting, Indianapolis, IN, March 2012.
223. B. F. Woodfield, "Energetics of Nanomaterials", Department of Energy PI Meeting, Annapolis, MD, April 2012.
224. B. F. Woodfield, "A Simple and Innovative Approach to the Synthesis of Metal, Alloy, Metal Oxide and Mixed-Metal Oxide Nanoparticles", NSF Grantees Conference, Baltimore, MD, May 2012.
225. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in Chemistry. You Can Make a Difference!", Elgin School District Workbook, Elgin, IL, October 2012.

226. B. F. Woodfield, "The New Virtual ChemLab: Sophisticated Simulations for High School and AP Chemistry", New Jersey Science Teachers Association, Princeton, NJ, October 2012.
227. B. F. Woodfield, "Teaching Students How To Think Like a Scientist Using Pearson Education Virtual Laboratories", New Jersey Science Teachers Association, Princeton, NJ, October 2012.
228. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", Pearson Virtual Conference, Boston, MA, October 2012.
229. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Atlanta, GA, November 2012.
230. B. F. Woodfield, "An Update on Innovative Online Revision and Review", Pamoja Capitol, Geneva, Switzerland, December 2012.
231. B. F. Woodfield, "The Next Generation of Virtual Labs. No Clean Up Required!", NSTA Regional Meeting, Phoenix, AZ, December 2012.
232. B. F. Woodfield, "Energetics of Nanomaterials", BYU Physics Department, Provo, UT, December 2012.
233. B. F. Woodfield and J. Boerio-Goates, "The Virtual ChemLab Project: Calorimetry and Chemical Thermodynamics", ICCT, Buzios, Brazil, August 2012.
234. B. F. Woodfield and J. Boerio-Goates, "Unique Lattice and Magnetic Properties of Materials at the Nanoscale", ICCT, Buzios, Brazil, August 2012.
235. B. F. Woodfield, "The New Virtual ChemLab", Southern Nevada Math and Science Conference, Las Vegas, NV, January 2013.
236. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in the Classroom", The Ohio St. University, Columbus, OH, February 2013.
237. B. F. Woodfield, "Lessons Learned from Using Virtual ChemLab in the Classroom and in the Instructional Laboratory", ACS National Meeting, New Orleans, LA, April 2013.
238. B. F. Woodfield, "A Novel Synthetic Pathway to Produce Highly Active Fisher-Tropsche Catalysts", ACS National Meeting, New Orleans, LA, April 2013.
239. B. F. Woodfield, "Development of a Novel Synthetic Pathway to Produce Highly Active Fisher-Tropsche Catalysts", ACS National Meeting, New Orleans, LA, April 2013.

240. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in the Science Classroom", NSTA National Meeting, San Antonio, TX, April 2013.
241. B. F. Woodfield, "Using a Set of Virtual Laboratories to Enhance the Teaching of Chemistry and Chemical Thermodynamics", Asian Thermophysical Property Conference, Jeju, Korea, October 2013.
242. B. F. Woodfield, "Sophisticated Virtual Laboratories for Chemistry, Physics, Physical Chemistry, and Biology", New Jersey Science Teachers Association, Princeton, NJ, October 2013.
243. B. F. Woodfield, "Teaching Chemistry Students How to Understand Modern Atomic Theory", New Jersey Science Teachers Association, Princeton, NJ, October 2013.
244. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in the Science Classroom", Algonquin, IL School District, Algonquin, IL, October 2013.
245. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in the Science Classroom", Elgin, IL School District, Elgin, IL, October 2013.
246. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in the Science Classroom", Eastwood High School, El Paso, TX, November 2013.
247. B. F. Woodfield, "Planting Seeds of Exploration and Innovation in the Science Classroom", Montwood High School, El Paso, TX, November 2013.
248. B. F. Woodfield, B. Huang, R. E. Olsen and M. Khosravi, "Unprecedented thermal stability, pore volumes, and control of pore structures for alumina and titania catalyst supports", Energy Materials and Nanotechnology, Orlando, FL, October 2013.
249. B. F. Woodfield, C. L. Snow, K. Brunner, C. H. Bartholomew and W. E. Hecker, "Synthesis and Thermodynamic Properties of Ferrihydrite for Use as a Fisher-Tropsch Catalyst", Asian Thermophysical Property Conference, Jeju, Korea, October 2013.
250. B. F. Woodfield, "Ideas on Implementing NGSS Using Pearson's Sophisticated Virtual Laboratory Program", Tinsey Heights School District, Tinsey Heights, IL, March 2014.
251. B. F. Woodfield, "Ideas on Implementing NGSS Using Pearson's Sophisticated Virtual Laboratory Program", Algonquin, IL School District, Algonquin, IL, March 2014.
252. B. F. Woodfield, "Implementing NGSS Using Pearson's Sophisticated Virtual Laboratory Technologies", NSTA National Meeting, Boston, MA, March 2014.

253. B. F. Woodfield, "Implementing NGSS into the Science Curriculum Using Sophisticated Virtual Laboratories", New Jersey Science Teachers Association, Princeton, NJ, October 2014.
254. B. F. Woodfield, "Using a Set of Virtual Laboratories to Enhance the Teaching of Chemistry and Chemical Thermodynamics", International Conference of Chemical Thermodynamics, Durban, South Africa, August 2014.
255. B. F. Woodfield and J. Schliesser, "Origin of the Linear Term and Gapped Debye Term in the Low Temperature Specific Heat of Non-Conducting Solids", International Conference on Chemical Thermodynamics, Durban, South Africa, August 2014.
256. B. F. Woodfield and J. Schliesser, "Origin of the Linear Term and Gapped Debye Term in the Low Temperature Specific Heat of Non-Conducting Solids", International Symposium on Structural Thermodynamics, Osaka, Japan, September 2014.
257. B. F. Woodfield and J. Schliesser, "Plenary Lecture: The Power of Low Temperature Specific Heat to Do It All", Japanese Conference on Calorimetry and Thermal Analysis, Osaka, Japan, September 2014.
258. B. F. Woodfield, C. L. Snow, K. Brunner, C. H. Bartholomew and W. E. Hecker, "Synthesis and Thermodynamic Properties of Ferrihydrite for Use as a Fisher-Tropsch Catalyst", International Conference on Chemical Thermodynamics, Durban, South Africa, August 2014.
259. B. F. Woodfield, "Thermally Stable and Active Fisher Tropsch Catalysts for Commercial Applications", Sinopec Engineering, Beijing, China, February 2015.
260. B. F. Woodfield, "Using the Pearson Virtual Laboratories to Implement NGSS", Pearson Virtual Conference, U.S.A., March 2015.
261. B. F. Woodfield, "The Origin of Ideas", Provo Police Training, Provo, UT, February 2015.
262. B. F. Woodfield, "Using the Pearson Virtual Laboratories to Satisfy NGSS", New Jersey Science Teachers Association, Princeton, NJ, October 2015.
263. B. F. Woodfield and J. Schliesser, "Lattice Vacancies Responsible for the Linear Dependence on the Low Temperature Heat Capacity of Insulating Materials", Calorimetry Conference, Baltimore, MD, July 2015.
264. B. F. Woodfield and J. Schliesser, "Development of a Debye Heat Capacity model for Vibrational Modes with a Gap in the Density of States", Calorimetry Conference, Baltimore, MD, July 2015.
265. B. F. Woodfield and J. Schliesser, "Synthesis of a Wide Array of Catalyst Supports,

Catalysts, and Fisher Tropsch Catalysts", NATO Advanced Research Workshop: Security Through Nanomaterials, Odessa, Ukraine, September 2015.

266. B. F. Woodfield and J. Schliesser, "Origin of the Linear Term and Development of a Gapped Debye Model for the Low Temperature Specific Heat", NATO Advanced Research Workshop: Security Through Nanomaterials, Odessa, Ukraine, September 2015.
267. B. F. Woodfield and J. Schliesser, "The Location and Role of Al in Al-Modified TiO₂ Nanoparticles Using Low-Temperature Heat Capacity, EELS, and XRD", Calorimetry Conference, Baltimore, MD, July 2015.
268. B. F. Woodfield, "Using a Set of Virtual Laboratories to Enhance the Teaching of Chemistry and Chemical Thermodynamics", International Conference of Chemical Thermodynamics, Guilin, China, August 2016.
269. B. F. Woodfield, "Using the Pearson Virtual Laboratories to Satisfy NGSS", New Jersey Science Teachers Association, Princeton, NJ, October 2016.
270. B. F. Woodfield, "Alumina Supports with High Purity, Tunable Pore Properties, and High Thermal Stability", Osaka University, Osaka, Japan, November 2016.
271. B. F. Woodfield, "Seeing Things As They Really Are", Provo Police Training, Provo, UT, October 2016.
272. B. F. Woodfield, "Using the Pearson Virtual Laboratories to Implement NGSS", National Science Teacher Association, Nashville, TN, March 2016.
273. B. F. Woodfield, "Alumina Supports with High Purity, Tunable Pore Properties, and High Thermal Stability", Saint-Gobain, Akron, OH, May 2016.
274. B. F. Woodfield, "Alumina Supports with High Purity, Tunable Pore Properties, and High Thermal Stability", Umicore, Tulsa, OK, September 2016.
275. B. F. Woodfield, "Alumina Supports with High Purity, Tunable Pore Properties, and High Thermal Stability", Clairiant, Louisville, KY, July 2016.
276. B. F. Woodfield, "Seeing Things As They Really Are", Provo Police Training, Provo, UT, February 2016.
277. B. F. Woodfield, "A Citizens Advisor Board: Involving Citizens in Research", International Association of Chiefs of Police, San Diego, CA, October 2016.
278. B. F. Woodfield, "The Creation and Management of a Citizens Advisor Board", International Association of Chiefs of Police, San Diego, CA, October 2016.

279. B. F. Woodfield, "Alumina Supports with High Purity, Tunable Pore Properties, and High Thermal Stability", Johnson Matthey, Wayne, PA, October 2016.
280. B. F. Woodfield, "Using the Pearson Virtual Laboratories to Implement NGSS", Pearson Virtual Conference, U.S.A., March 2016.
281. B. F. Woodfield and C. Graham, "The Effective Use of Technology in Teaching and Learning", LDS Priesthood Department Teaching and Learning Workshop, Salt Lake City, UT, April 2016.
282. B. F. Woodfield and W. E. Hecker, "Alumina Supports with High Purity, Tunable Pore Properties, and High Thermal Stability", BASF, Iselin, NJ, February 2016.
283. B. F. Woodfield and J. Schliesser, "Heat Capacities, Excess Entropies, and Magnetic Properties of Bulk and Nano $\text{Fe}_3\text{O}_4\text{-Co}_3\text{O}_4$ AND $\text{Fe}_3\text{O}_4\text{-Mn}_3\text{O}_4$ Spinel Solid Solutions", Calorimetry Conference, Oahu, HI, July 2016.
284. B. F. Woodfield and J. Schliesser, "Origin of the Linear Term and Development of a Gapped Debye Model for the Low Temperature Specific Heat", International Conference on Chemical Thermodynamics, Guilin, China, August 2016.
285. B. F. Woodfield and J. Schliesser, "Heat Capacities, Excess Entropies, and Magnetic Properties of Bulk and Nano $\text{Fe}_3\text{O}_4\text{-Co}_3\text{O}_4$ AND $\text{Fe}_3\text{O}_4\text{-Mn}_3\text{O}_4$ Spinel Solid Solutions", Keynote Address: Japanese Society of Calorimetry and Thermal Analysis, Osaka, Japan, November 2016.
286. B. F. Woodfield, "Modern Measurements, Curve Fitting, and Analysis of Heat Capacity Data", Russian Conference on Chemical Thermodynamics, Novosibirsk, Russia, June 2017.
287. B. F. Woodfield, "Evaluation of Labster Virtual Laboratories", GEMS Education, London, England, January 2017.
288. B. F. Woodfield, "In-depth Analysis of the Y Science Laboratories", UsTwo, London, England, June 2017.
289. B. F. Woodfield, "20 Years of Developing Virtual Labs", Labster, Copenhagen, Denmark, January 2017.
290. B. F. Woodfield and J. Schliesser, "Heat Capacities, Excess Entropies, and Magnetic Properties of Bulk and Nano $\text{Fe}_3\text{O}_4\text{-Co}_3\text{O}_4$ AND $\text{Fe}_3\text{O}_4\text{-Mn}_3\text{O}_4$ Spinel Solid Solutions", European Conference on Thermophysical Properties, Graz, Austria, September 2017.
291. B. F. Woodfield and J. Schliesser, "Heat Capacities, Excess Entropies, and Magnetic Properties of Bulk and Nano $\text{Fe}_3\text{O}_4\text{-Co}_3\text{O}_4$ AND $\text{Fe}_3\text{O}_4\text{-Mn}_3\text{O}_4$ Spinel Solid

Solutions", Keynote Address: Russian Conference on Chemical Thermodynamics, Novosibirsk, Russia, June 2017.