## **TECHNICAL TALKS/PRESENTATIONS**

## (1) Invited talks

- 36. Phase Equilibria of High T<sub>c</sub> Superconductor Systems for Wire/Tape Applications, Applied Superconductivity Conference, Houston, TX, August 5, 2002.
- 35. Crystallographic Studies of compounds in the Alkaline-Earth Tantalate and Niobate Systems, American Crystallographic Association annual meeting, May 26, San Antonio, Texas, 2002.
- Phase Equilibria and Processing of High T<sub>c</sub> Superconductors, Symposium on Experiment, Theory and Applications of Phase Equilibria in Ceramic Systems, The PAC RIM IV meeting, American Ceramic Society, Maui, Hawaii, Nov. 4-8, 2001.
- 33. Phase Relations in the Ba-Y-Cu-F-O-H System, Material Research Society Fall Meeting, Nov. 26-30, 2001, Boston, MA.
- 32. Phase Equilibria of High T<sub>c</sub> Superconductors, U.S. Department of Energy Ninth Quarterly Program Performance and Results Briefing on Wire and Equipment Research, Development, and Demonstration; Department of Energy, Washington D.C., Dec. 12, 2001.
- 31. Phase equilibria of the Ba-Nd-Cu-O and Ba-Nd-Yb-Cu-O systems. MRS Fall meeting, Boston, MA, Nov. 27-Dec. 1, 2000,
- 30. Crystal Chemistry and Phase Equilibria of Selected AO-R<sub>2</sub>O<sub>3</sub>-CuO Systems (A = Ba and Sr, R=Lanthanides), Physics Department, University of Geneva, Geneva, Switzerland, July 12, 2001.
- Crystal chemistry, crystallography and phase equilibria of the BaO-Nd<sub>2</sub>O<sub>3</sub>-Yb<sub>2</sub>O<sub>3</sub>-CuO system, THERMEC 2000, International Conference on Processing & Manufacturing of Advanced Materials, Las Vegas, Dec. 4-8, 2000.
- 28. Phase equilibria and crystal chemistry of the BaO-(Nd, Yb)-CuO system, MRS Fall meeting, Boston, MA, Nov. 27–Dec. 1, 2000.
- 27. Crystal chemistry and phase equilibria of the SrO-R<sub>2</sub>O<sub>3</sub>-CuO systems, International Conference on Electronic Materials & European Materials Research Society Spring Meeting, Strasbourg, France, May 30-June 2, 2000.
- 26. Roles of melting equilibria in the processing of high T<sub>c</sub> superconductors in the BSCCO system, 9<sup>th</sup> Japan-U.S. Workshop on High T<sub>c</sub> Superconductors, Yamanashi, Japan, Oct. 13, 1999.
- 25. Structural/property investigations of microwave titanate ceramics, American Ceramic Society annual meeting, Indianapolis, IN, April 25, 1999.
- 24. Phase equilibria and crystal chemistry of the high T<sub>c</sub> Bi-Pb-Sr-Ca-Cu-O system, Howard University, Chemistry Department, Washington, DC, March 19, 1999.
- 23. Roles of melting equilibria in the processing of high T<sub>c</sub> phases in the BSCCO system, The Minerals, Metals & Mater. Soc. annual meeting, San Diego, CA, March 1, 1999.
- 22. Phase equilibria of the high T<sub>c</sub> superconductors in the (Bi,Pb)-Sr-Ca-Cu-O system, The Fifth NATO Supported International Workshop, High Temperature Superconductors and Novel Inorganic Materials Engineering (MSU HTSC-V), Moscow State University, Russia, March 25, 1998.
- 21. Phase equilibria of the high T<sub>c</sub> superconductors in the (Bi,Pb)-Sr-Ca-Cu-O system, 8<sup>th</sup> U.S.-Japan Workshop, High Temperature Superconductors, National High Magnetic Field Laboratory, Tallahassee, FL., December 2, 1997.
- 20. The development of a standard for single crystal diffractometer alignment and certification of ruby spheres as a standard reference material, ACA annual meeting, St. Louis, MO., July 22, 1997 (invited poster).

- 19. Melt evolution in the Bi-Pb-Sr-Ca-Cu-O system, high temperature superconductor phase diagrams workshop, Santa Fe, NM, Nov. 12, 1996.
- 18. Phase equilibria of the Bi-Sr-Ca-Cu-O system, Chong-Won National University, Chong-Won, Korea, Oct. 23, 1996.
- 17. Phase equilibria of the Bi-Sr-Ca-Cu-O system, Korea Maritime University, Pusan, Korea, Oct. 21, 1996.
- 16. Phase equilibria of the high T<sub>c</sub> phases in the Bi-Pb-Sr-Ca-Cu-O system, Oak Ridge National Laboratory, Sept. 18, 1996.
- 15. Phase equilibria of the 2212 and Pb-2223 superconductors, Santa Fe High T<sub>c</sub> workshop, Nov. 1995.
- 14. Melting Equilibria of the Ba-Y-Cu-O System, TMS Annual meetings, San Francisco, Feb. 1994.
- Melting Equilibria of the Ba-Y-Cu-O System, workshop on High T<sub>c</sub> Phase Equilibria, Santa Fe, NM June 2-4, 1993.
- 12. Phase Equilibria and Crystal Chemistry of the Systems A-R-Cu-O(A=Ba,Sr,Ca; R=Y and lanthanides), workshop on High T<sub>c</sub> Phase Equilibria, Santa Fe, NM June 2-4, 1993.
- 11. Molecular Orbital calculations of the water enhanced crack growth process, Chemistry Colloquium, Catholic University, Washington DC., April 12, 1991.
- 10. Molecular Orbital calculations of the Environmentally Enhanced Crack Growth Process, University of Missouri, Physics Dept., October, 1991.
- 9. Oxidation/Reduction equilibria in the Ba-Y-Cu-O system, 2nd International Congress of Science and Technology Meetings, Orlando, Florida, Nov., 1990.
- 8. Crystal Chemistry and Phase Equilibria of the BaO(BaCO<sub>3</sub>)-½Nd<sub>2</sub>O<sub>3</sub>-CuO system. American Ceramic Society Annual meeting, Dallas, Texas, April, 1990.
- 7. Crystal Chemistry and Phase Equilibria of high T<sub>c</sub> Superconductor Oxides. The American Chemical Engineering Society Annual Meeting, San Francisco, Nov. 1989.
- 6. X-ray Crystallographic Studies of Thermomechanically Detwinned Single Crystals of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub>, 1989 ACA Annual Meetings, July 24, Seattle, Washington.
- 5. Angle Calibrations Using Internal Standards, Denver X-ray Conference, Steamboat Springs, August, 1988.
- 4. Structural Phase Transformation Studies of the High  $T_c$  Superconductor materials  $Ba_2RCu_3O_{6+x}$  (R = Sm, Gd, Y, Er), American Crystallographic Association (ACA) meetings at Philadelphia, Pennsylvania, June, 1988.
- 3. X-Ray Powder Characterization and Standards, The Northern Regional Meeting of the American Ceramics Society, Cleveland, Ohio, March 1987.
- Standard Reference Materials for X-Ray Diffraction, Denver X-Ray Conference, Denver, Colorado, 1986.
- 1. The JCPDS Data Base Past, Present and Future, Denver X-Ray Conference, Denver, Colorado, 1982.

## (b) Contributed Talks/poster presentations

- 1. Crystal and Molecular Structure of a Nitronylnitroxide Free radical and its Diamagnetic Analog, American Chemical Society Meeting, El Paso, Texas, 1973.
- 2. False Molecular Images In Direct and Heavy Atom Phase Determinations. International Union of Crystallographic Meeting at Ottawa, Canada, July, 1981.
- 3. The Triplet Monoclinic and Co-Crystallizing Triclinic Polymorphs of the Quasi-Racemates of (-) Pedopetaline and (-) Ormosanine, American Crystallographic Association meeting at Snow Mass,

Colorado, 1983.

- 4. X-Ray Diffraction Study of the BaO-Y<sub>2</sub>O<sub>3</sub>-CuO<sub>x</sub> System. Denver X-ray Conference, Denver, Colorado, August, 1987.
- 5. Applications of Double-Crystal Diffractometry to the Understanding of Ceramic Fracture, International meeting of processing science, Orlando, Florida, Nov., 1987.
- 6. Structural Phase Transformation Studies of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub>, American Ceramics Society Meetings, Cincinnati, Ohio, May, 1988.
- 7. X-ray Line Profile Studies of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub>, American Ceramics Society meetings, Cincinnati, Ohio, May, 1988.
- 8. Structural Phase Transformation Studies of Ba<sub>2</sub>RCu<sub>3</sub>O<sub>6+x</sub>, Materials Research Society meeting, Boston, Nov. 1988.
- Residual Strain and Crystallite Size Studies of Ba<sub>2</sub>RCu<sub>3</sub>O<sub>6+x</sub>, Materials Research Society Meetings, Boston, Nov. 1988.
- 10. Crystal Chemistry and Phase Equilibria Studies of the BaO-R<sub>2</sub>O<sub>3</sub>-CuO Systems, 1989 Annual meeting of the American Ceramic Society Meetings, Indianapolis, Indiana, April, 1989.
- 11. Phase Formation in the BaO-R<sub>2</sub>O<sub>3</sub>-CuO Systems, 1989 American Crystallographic Society Meetings, Seattle, Washington, July, 1989.
- 12. Crystal Chemistry and Phase Equilibria Studies of the BaO-R<sub>2</sub>O<sub>3</sub>-CuOSystems, Denver X-ray Conference, Denver, Colorado, August, 1989.
- 13. Phase Formation and Crystal Chemistry in the BaO-Nd<sub>2</sub>O<sub>3</sub>-CuO system, Bordeaux, France, IUCr meetings, July, 1990.
- 14. X-ray characterization of the PZT Thin films, Bordeaux, France, IUCr meetings, July 1990.
- 15. Crystallographic Studies of Compounds found in the BaO(BaCO<sub>3</sub>)-R<sub>2</sub>O<sub>3</sub> System, R=Lanthanides, MRS annual meeting, Boston, Ma, Nov. 1990.
- 16. Molecular Orbital Study of Water Enhanced Crack Growth Process, MRS meetings, Boston, Ma, Nov. 1990.
- 17. Molecular Orbital Study of Water Enhanced Crack Growth Process, American Ceramic. Soc. annual meetings, Cincinnati, OH, April, 1990.
- REDOX Melting Reactions in the Processing of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub> Ceramics. MRS meetings, Boston, Ma, Nov. 1990.
- 19. Crystal chemistry of the system BaO-R<sub>2</sub>O<sub>3</sub>, MRS meeting, Boston, Ma. Nov. 1990.
- 20. Quantitative Melting Relationships in the System BaO-Y<sub>2</sub>O<sub>3</sub>-Cu-O, Annual Meting of the Amer. Ceram. Soc., Cincinnati, OH, April, 1991.
- 21. Characterization of the Bi-Pb-Sr-Ca-Cu Oxide Thin Films Prepared by Using the Laser Deposition Technique, Annual Meting of the Amer. Ceram. Soc., Cincinnati, OH, April, 1991.
- 22. Magnetic Properties of the "Brown Phase" Solid Solutions Ba<sub>2+2x</sub>R<sub>4-2x</sub>Cu<sub>2-x</sub>O<sub>10-2x</sub>. Annual Meeting of the Amer. Ceram. Soc., Cincinnati, OH, April, 1991.
- 23. Quantitative Melting Relations in the BaO-R<sub>2</sub>O<sub>3</sub>-CuO system, NIST Superconductor Review Program, NIST, Gaithersburg, March, 1991.
- 24. X-ray Powder Analysis of the Melt Process in the BaO-Y<sub>2</sub>O<sub>3</sub>-CuO System, PIXCAM International X-ray Meeting, Aug. 1991, Big Island, Hawaii.
- 25. X-ray Powder Characterization of the Laser Deposited Thin Films, PIXCAM International X-ray Meeting, Hawaii, Aug. 1991
- 26. Phase equilibria of melting in the system BaO-Y<sub>2</sub>O<sub>3</sub>-Cu-O, MRS Boston meeting, 1991.
- 27. Single crystal structure investigation of CaBi<sub>2</sub>O<sub>4</sub> by X-ray diffraction, MRS Boston meeting, 1991
- 28. Crystallographic aspects of ferroelectric thin films prepared by laser deposition technique, MRS

meeting, Boston, Dec. 1991.

- 29. Microstructural effect on the corrosion of tungsten in SF<sub>6</sub>. Conference "Accuracy in Powder Diffraction", NIST, May, 1992.
- 30. Melting sequence in the BaO-Y<sub>2</sub>O<sub>3</sub>-Cu-O system, American Ceramics Society annual meeting, Minneapolis, MN., Apr., 1992.
- 31. Single crystal X-ray diffraction structural studies of CaBi<sub>2</sub>O<sub>4</sub> and SrBi<sub>2</sub>O<sub>4</sub>, American Ceramics Society annual meeting, Minneapolis, MN., Apr., 1992.
- 32. A comprehensive review of the coverage of X-ray diffraction patterns of the A-R-Cu-O systems (A=Ba, Sr and Ca) in the Powder Diffraction File (PDF), American Ceramics Society annual meeting, Minneapolis, MN., Apr., 1992.
- 33. Single crystal structural studies of BaR<sub>2</sub>CuO<sub>5</sub> (R=Nd"brown phase" and R=Dy "green phase"), American Ceramics Society annual meeting, Minneapolis, MN., Apr., 1992.
- 34. Crystallography of the Ruddelston-Popper series  $Ba_{n+1}M_nS_{3n+1}$ , where M=Zr and Hf and n=1 to 5. American Crystallographic Association Annual meeting, Pittsburg, Aug. 11-15, 1992.
- 35. Melting Relations in the Ba-Y-Cu-O systems in air. American Crystallographic Association Annual meeting, Pittsburg, Aug. 11-15, 1992.
- 36. Structural investigation of Zn<sub>2</sub>SiO<sub>4</sub> and Zn<sub>2</sub>(Si,Cr)O<sub>4</sub> by single crystal X-ray diffraction techniques, Fall MRS Boston meeting, Nov. 28-Dec. 4, 1992.
- 37. Effect of oxygen partial pressure on melting in the system Ba-Y-Cu-O, Fall MRS Boston meeting, Nov. 28 Dec. 4, 1992.
- 38. Molecular orbital study of the environmentally enhanced crack growth process in brittle materials, Fall MRS Boston meeting, Nov. 28-Dec. 4, 1992.
- 39. Effect of oxygen partial pressure on Melting Equilibria in the System BaO-Y<sub>2</sub>O<sub>3</sub>-Cu-O. Amer. Ceram. Soc. Annual Meetings, Ohio, April, 1993.
- 40. Crystallography and X-Ray Patterns of Compounds in the Sr-Nd-Cu-O System. Amer. Ceram. Soc. Annual Meetings, Ohio, April, 1993.
- 41. Investigation of the Environmental Influence on the Crack Process of Silicon by Molecular Orbital Calculations. Amer. Ceram. Soc. Annual Meetings, Ohio, April, 1993.
- 42. Single Crystal Structural Investigation of three Ba-Zn-Ti-O Compounds by X-Ray Diffraction. Amer. Ceram. Soc. Annual Meetings, Ohio, April, 1993.
- 43. Effect of oxygen Partial Pressure on Melting Equilibria in the System BaO-Y<sub>2</sub>O<sub>3</sub>-Cu-O, American Crystallographic Society Meetings, Alberqueque, NM, May 24-28, 1993.
- 44. Melting Equilibria in the system Ba-Y-Cu-O : Effect of Oxygen Partial Pressure, MRS Falls meeting, Boston, November, 1993.
- 45. A review of the Crystal Chemistry and Crystallography of compounds in the Ba-Cu-O System, MRS Falls meeting, Boston, November, 1993.
- 46. Development of Crystallinity in Amorphous BaTiO<sub>3</sub> Films, MRS Falls meeting, Boston, November, 1993.
- 47. Melting Equilibria in the Ba-Y-Cu-O System, TMS Annual meeting, San Francisco, Calif., Feb. 1994
- 48. Wigner-Seitz Local Environment Study of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub>, American Crystallographic Association Annual meeting, June, Atlanta, 1994
- 49. A Summary of the Melting Equilibrium Studies in the Ba-Y-Cu-O System, American Ceramics Society Annual Meeting, Indianapolis, April 1994
- 50. Melting Equilibrium Study of the 2212-Bi-Sr-Ca-Cu-O Superconductor, American Ceramics Society Annual Meeting, Indianapolis, April 1994

- Structural Studies of the Ruddlesden-Popper Phases Ba<sub>n+1</sub>A<sub>n</sub>S<sub>3n+1</sub>, A=Hf and Zr, American Ceramics Society Annual Meeting, Indianapolis, April 1994
- 52. Crystal Chemistry and Crystallography of compounds in the Ba-Cu-O System, American Ceramics Society Annual Meeting, Indianapolis, April 1994
- 53. X-ray Characterization of Zn<sub>2</sub>SiO<sub>4</sub> and (Zn,Cr<sub>2</sub>SiO<sub>4</sub>), American Ceramics Society Annual Meeting, Indianapolis, April 1994
- 54. Molecular Orbital Investigation of Effects of Water and Ammonia on Crack Growth in Vitreous Silica and Silicon, American Ceramics Society Annual Meeting, Indianapolis, April 1994
- 55. Microstructural Effect on Corrosion, American Ceramics Society Annual Meeting, Indianapolis, April, 1994.
- 56. Melting equilibria of the 2212 Bi-Sr-Ca-Cu-O phase, DOE phase equilibria workshop, July, 1994, Virginia
- 57. X-ray Diffraction Study of BaNd<sub>2</sub>CuO<sub>5</sub> at High Pressures, Denver X-ray conference, Steamboat Springs, CO, August, 1994
- 58. X-ray Characterization of the Melting Equilibria of the 2212-Bi-Sr-Ca-Cu-O Superconductor, Denver X-ray conference, Steamboat Springs, CO, August, 1994
- 59. Melting Equilibria of the Bi-Sr-Ca-Cu-O System in air, High T<sub>c</sub> workshop, NIST, October, 1994
- 60. Molecular orbital Investigation of effects of environments on crack growth in vitreous silica and silicon, MRS Boston 1994 Falls meeting
- 61. Single crystal structural investigation of BaO<sub>2</sub>, MRS Boston 1994 Falls meeting
- 62. Evidence for liquid immiscibility in the system BaO-YO<sub>1.5</sub>-CuO<sub>x</sub> MRS Boston 1994 Falls meeting
- 63. Melting Investigation in the Bi-Sr-Ca-Cu-O System in air, MRS Boston 1994 Falls meeting.
- 64. Single crystal structural investigation of BaO<sub>2</sub>, ICDD March Meeting, Newtown Square, PA, 1995.
- 65. Melting Equilibria of the System Bi-Sr-Ca-Cu-O. American Ceramics Society annual meetings, April, 1995.
- 66. Phase relationships of high T<sub>c</sub> superconductors, DOE Annual Peer Review in Washington DC, July, 1995.
- 67. Superconducting Phase formation in Bi(Pb)-Sr-Ca-Cu-O Glasses. American Ceramics Society annual meetings, April, 1995.
- 68. High pressure Study of BaR<sub>2</sub>CuO<sub>5</sub>, R=Nd and Lu. American Ceramics Society annual meetings, April, 1995.
- 69. Phase Equilibria of the "Raveau phase" in the Bi-Sr-Ca-Cu-O System. American Ceramics Society annual meetings, April, 1995.
- 70. Molecular Orbital Calculations Comparing Water Enhanced Bond Breaking in SiO<sub>2</sub> and Si, American Ceramics Society annual meetings, April, 1995.
- 71. Ceramic Magnets: Structural Studies of Compounds in the BaO-Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> System, ACA annual meeting, Montreal, July, 1995
- 72. Ceramic Magnets: Structural Studies of Compounds in the BaO-Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> System, ICDD Oct. meeting, Technical Committee poster session, Newtown Square, PA, 1995.
- 73. Crystallization field investigation of the system Bi-Sr-Ca-Cu-O, ACA annual meeting, Montreal, July, 1995.
- 74. NIST-ACerS Phase Equilibria Diagrams Databases, Denver x-ray conference workshop, August, 1995.
- 75. X-ray characterization of the Melting Equilibria of High T<sub>c</sub> Phases in the Bi-Sr-Ca-Cu-O System, Denver x-ray conference, Colorado Springs, CO, August, 1995.
- 76. Non-stoichiometry of the BaCuO<sub>2+x</sub>, MRS Falls meeting, Boston, 1995.

- 77. NIST-ACerS Phase Equilibria Diagrams Databases, Denver x-ray conference workshop, August, 1995.
- 78. Phase Equilibria of High T<sub>c</sub> Compounds in the Bi(Pb)-Sr-Ca-Cu-O System, AcerS Annual Meeting, Cincinnati, Ohio, April, 1996.
- 79. Melting Characterization of the 2223 Phase in the Bi(Pb)-Sr-Ca-Cu-OSystem. AcerS Annual Meeting, Cincinnati, Ohio, April, 1996.
- 80. ICDD/PDF Superconductor MiniFile. ACerS Annual Meeting, Cincinnati, Ohio, April, 1996.
- 81. X-ray Diffraction Study of  $Ba_2HgCuO_{4+\delta}$  at High Pressures. ACerS Annual Meeting, Cincinnati, Ohio, April, 1996.
- 82. Subsolidus Phase Relationships of the Pb-Sr-Ca-O System at 840-850 °C, ACerS Annual Meeting, Cincinnati, Ohio, April, 1996.
- 83. Phase Equilibria of 1223 Melting in the System (Tl-Pb-Ba-Sr-Ca-Cu-O), ACerS Annual Meeting, Cincinnati, Ohio, April, 1996.
- 84. X-Ray Diffraction Study of Selected High T<sub>c</sub> Superconductors and related Phases at High Pressure. Denver X-ray Conference, Denver, Aug. 1996.
- 85. X-ray Rietveld Refinements and Reference Patterns of BaSrRCu<sub>3</sub>O<sub>x</sub> (R=lanthanides). Denver X-ray Conference, Denver, Aug. 1996.
- 86. The ICDD/PDF Superconductor MiniFile. Denver X-ray Conference, Denver, Aug. 1996.
- Crystallization Field Investigation of the (Bi, Pb)-Sr-Ca-Cu-O System. IUCr meeting, Seattle, Aug. 1996.
- 88. Structural Investigation of Microwave Titanates. IUCr meeting, Seattle, Aug. 1996.
- 89. High Temperature X-Ray Diffraction Study of the Melting Sequence of the 2223 Phase in the Bi-Sr-Ca-Cu-O System. IUCr meeting, Seattle, Aug. 1996.
- Structural Characterization of the Bi<sub>16</sub>(Sr,Ca)<sub>14</sub>O<sub>x</sub> Solid Solution, MRS Annual meeting, Boston, Nov. 1995.
- 91. Phase relationships of high T<sub>c</sub> superconductors, DOE Annual Peer Review in Washington DC, July, 1996.
- 92. Phase Equilibria of three Pb-Containing Ternary Oxide Systems: Bi<sub>2</sub>O<sub>3</sub>-PbO<sub>x</sub>-CuO, PbO<sub>x</sub>-CaO-CuO, and PbO<sub>x</sub>-CaO-SrO, Boston MRS Falls meeting, Dec. 1996.
- 93. Crystallographic Investigation of Ceramic Magnets in the BaO-Fe<sub>2</sub>O<sub>3</sub>-TiO<sub>2</sub> System, Boston MRS Falls meeting, Dec. 1996.
- 94. Melting Equilibria of Phase Assemblage Containing Pb-Substituted 2223 and 2212 BSCCO Superconductors, Boston MRS Falls meeting, Dec. 1996.
- 95. X-Ray Diffraction Study of High T<sub>c</sub> Superconductors and related Phases at High Pressure. ICDD Annual meeting, Newtown Square, PA, March 1997.
- 96. Preliminary melting Data on Pb-2223 ([Bi:Pb]-Sr-Ca-Cu) Phase Under 7.5% O<sub>2</sub>, Am. Ceram. Soc. Meeting, April, Cincinnati, Ohio (1997).
- 97. Phase relationships of high T<sub>c</sub> superconductors, DOE Annual Peer Review in Washington DC, July, 1997.
- 98. Melt Evolution in the BSCCO System, Am. Ceram. Soc. Meeting, Cincinnati, Ohio, May, 1997.
- 99. Phase Equilibria of the Pb-2223 (Bi:Pb:Sr:Ca:Cu:O) Phase. Am. Crystallogr. Assoc. meeting, July, St. Louis, 1997.
- 100. ICDD/PDF Data base of Engineering Materials. Denver x-ray meeting, Aug. 1997.
- 101. Structural Investigation of (Sr, Ca)<sub>4</sub>PtO<sub>6</sub> via Rietveld Refinement. Denver x-ray meeting, Aug. 1997.
- 102. Crystal Structure and Standard X-Ray Pattern of Ba<sub>4</sub>Ti<sub>10</sub>Al<sub>2</sub>O<sub>27</sub>. Denver x-ray meeting, Aug. 1997.

- 103. Neutron Diffraction Studies of  $BaR_2ZnO_5$  (R = La, Nd, Dy, Ho, and Y). Denver x-ray conference, Aug. 1997.
- 104. Phase formation of the High T<sub>c</sub> Pb-2223 in air and in 7.5% O<sub>2</sub>, 1997 MRS Falls meeting in Boston, MA, Dec.
- 105. Structural Studies of the 3221/451 Phase in the Bi-Pb-Sr-Ca-Cu-O System. 1997 MRS Falls meeting in Boston, MA, Dec.
- 106. ICDD/PDF Data base of Engineering Materials, Denver x-ray Conference, Aug. 1997.
- 107. Crystal Structure and Standard X-Ray Pattern of Ba<sub>4</sub>Ti<sub>10</sub>Al<sub>2</sub>O<sub>27</sub>. Denver x-ray meeting, Aug. 1997.
- Melting Equilibria of Phase Assemblage Containing Pb-Substituted 2223 and 2212 BSCCO Superconductors, 1997 MRS Falls meeting in Boston, MA, Dec.
- 109. Three-Phase boundaries of the BSCCO 2212 Primary Liquidus volumes Phase formation of the High T<sub>c</sub> Pb-2223 in Air and in 7.5% O<sub>2</sub>, 1997 MRS Falls meeting in Boston, MA, Dec.
- Structural Investigation of (Sr, Ca)<sub>4</sub>PtO<sub>6</sub> via Rietveld Refinement. ICDD March annual meeting, March 17-18, 98. Newtown Square, PA.
- 111. Phase relationships of high T<sub>c</sub> superconductors, DOE Annual Peer Review in Washington DC, July, 1998.
- 112. Interaction of Pb-BSCCO oxides with Ag at various oxygen pressures, ACerS 1998 annual meeting, Cincinnati, Ohio, May, 1998.
- 113. Effect of Ag on the Primary Crystallization Field of the Pb-2223 High T<sub>c</sub> Superconductors, Acers annual meeting, Cincinnati, Ohio, May 1998.
- 114. Melting of Sr<sub>14</sub>Cu<sub>24</sub>O<sub>41</sub> at Oxygen Pressures of 0.0075, 0.0021 and 0.1MPa, ACers annualing meeting, Cincinnati, Ohio, May 1998.
- 115. Rietveld Refinements of BaR<sub>2</sub>ZnO<sub>5</sub> (R=La,Nd, Sm, Eu, Gd, Dy, Ho, Y, and Er), American Crystallographic Assoc. annual meeting, Arlington, VA, July 18-23, 1998.
- 116. The Determination of the Crystallization Fields of the 2212 and Pb-2223 High T<sub>c</sub> Superconductor Phases in the (Bi:Pb)-Sr-Ca-Cu) System. American Crystallographic Assoc. annual meeting, Arlington, VA, July 18-23, 1998.
- 117. X-Ray Diffraction Studies of the PbO-SrO System, Denver X-ray Conference, Colorado Springs, CO, Aug. 3-7, 1998.
- 118. Phase Formation of the Pb-2223 High Temperature Superconductor in the (Bi,Pb)-Sr-Ca-Cu-O System, Denver X-ray Conference, Colorado Springs, CO, Aug. 3-7, 1998.

119. Effect of Ag on the primary crystallization field of the Pb-2223 high T<sub>c</sub> superconductor, MRS Boston Fall annual meeting, Boston, MA, 1998.

- 120. Phase equilibria of the PbO-SrO system, MRS Boston Fall annual meeting, Boston, MA, 1998.
- 121. Melting equilibria of the Pb-2223 high T<sub>c</sub> superconductor as a function of oxygen partial pressure, ACerS annual meeting, Indianapolis, IN, April 26-28, 1999.
- 122. Structural/Property relationships of titanate ceramics in the BaO:Fe<sub>2</sub>O<sub>3</sub>:TiO<sub>2</sub> system, ACA annual meeting, Buffalo, May, 1999.
- 123. Phase equilibrium relations of high T<sub>c</sub> phases, DOE peer review, Washington DC, July 26, 1999.
- 124. Crystallographic studies of the SrR<sub>2</sub>CuO<sub>5</sub> series (R=lanthanides) by Rietveld refinements, Denver Xray conference, August, 1999, Steamboat Spring, CO.
- 125. Powder X-ray Study of Sr<sub>2</sub>RGaCu<sub>2</sub>O<sub>7</sub> (R=Pr, Nd, Sm, Eu, Gd, Dy, Ho, Er, Tm, Yb and Y) by Rietveld refinement technique, Denver X-ray conference, August, 1999, Steamboat Spring, CO.
- 126. Crystallographic study of the low-temperature form of Bi<sub>2</sub>(Sr,Ca)<sub>4</sub>O<sub>x</sub>, MRS annual Fall meeting, Boston, MA, Nov. 1999.
- 127. Phase equilibria and crystal chemistry of the SrO-R<sub>2</sub>O<sub>3</sub>-CuO systems, R=lanthanides, MRS annual

Fall meeting, Boston, MA, Nov. 1999.

- 128. Crystal chemistry, structure and property investigation of the high T<sub>c</sub> superconductor solid solution phase, Ba<sub>2-x</sub>(Nd,Yb)<sub>1+x</sub>Cu<sub>3</sub>O<sub>6+z</sub>, ACerS 102 Annual meeting, St. Louis, MO, April 29-May3, 2000.
- 129. Phase equilibria and crystal chemistry of the SrO-R<sub>2</sub>O<sub>3</sub>-CuO systems, R=lanthanides, ACerS 102 Annual meeting, St. Louis, MO, April 29-May3, 2000.
- 130. Phase relationships of High T<sub>c</sub> superconductors, DOE Annual Peer Review in Washington DC, July, 2000.
- 131. X-Ray and neutron Rietveld refinements of compounds in the Sr-R-Cu-O system (R= lanthanides), Denver x-ray conference, Denver, CO, July 31-Aug. 4, 2000.
- 132. Standard reference material; (SRM1990) for single crystal diffractometer alignment, Denver x-ray conference, Denver, CO, July 31-Aug. 4, 2000.
- 133. W. Wong-Ng, L.P. Cook, B. Toby, J. Kaduk, J. Dillingham, R. Coutts, and J. Suh, Crystal chemistry, structure and property investigation of the high T<sub>c</sub> superocnductor solid solution phase, Ba<sub>2-x</sub>(Nd,Yb)<sub>1+x</sub>Cu<sub>3</sub>O<sub>6+z</sub> in Air and 0.1% O<sub>2</sub>, Applied Supercond. Conference, Virginia Beech, VA, Sept. 18-22, 2000.
- 134. Structure and properties of the tetragonal tungsten bronze related phases in the systems, ACerS Fall meeting, Clemson University, Clemson, SC, Oct. 9-11, 2000.
- 135. Crystal Structure Studies of Compounds in the Alkaline-earth Tantalate and Niobate Systems, ACerS Annual meeting, Indianapolis, April 23-25, 2001.
- 136. Phase Equilibria and Crystal Chemistry of Compounds in the BaO-R<sub>2</sub>O<sub>3</sub>-CuO<sub>x</sub> Systems (R=Y and
- Nd) in 0.1% O<sub>2</sub> and Purified Air, ACerS Annual meeting, Indianapolis, April 23-25, 2001.
- 137. Phase relationships of high T<sub>c</sub> superconductors, DOE Annual Peer Review in Washington DC, Aug., 2001.
- 138. High Temperature X-ray Study of Phase formation of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>x</sub> Films Using the BaF<sub>2</sub> Process, Symposium on High-T<sub>c</sub> Superconductors – Novel Processing and Applications in the New Millennium, PAC RIM IV meeting, American Ceramic Society, Maui, Hawaii, Nov. 4-8, 2001.
- 139. Phase Relations in the Ba-Y-Cu-F-O-H System, Material Research Society Fall Meeting, Nov.
- 26- 30, 2001, Boston, MA.
- 140. Phase relationships of high T<sub>c</sub> superconductors, annual Department of Energy Peer Review in Washington DC, July 19, 2002.
- 141. Phase equilibria of the Ba-Y-Cu-F-O-H system, 104<sup>th</sup> Annual Meeting of ACerS, April 29-May 1, 2002, St. Louis, MO.
- 142. Phase equilibria and crystal chemistry of compounds in the BaO-R<sub>2</sub>O<sub>3</sub>-CuO<sub>x</sub> system (R=Nd, Sm, Gd, Y) under 0.1%O<sub>2</sub>, 104<sup>th</sup> Annual Meeting of ACerS, April 29-May 1, 2002, St. Louis, MO.
- 143. X-ray and neutron refinements of BaR<sub>2</sub>ZnO<sub>5</sub> and Ba<sub>5</sub>R<sub>8</sub>Zn<sub>4</sub>O<sub>21</sub>, The 51<sup>th</sup> Annual Denver X-ray Conference, July 29- Aug. 2, 2002, Colorado Springs, CO.
- 144. High-temperature x-ray study of phase evolution of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub> films using BaF<sub>2</sub> process, 51<sup>th</sup> Annual Denver X-ray Conference, July 29- Aug. 2, 2002, Colorado Springs, CO.
- 145. X-Ray Diffraction Studeis of the Superconductor MoRuP Prepared at High Pressure, International Union of Crystallography Congress, Geneva, Switzerland, Aug. 5-15, 2002.
- 146. The Structure and Electronic Properties of the Orthorhombic MoRuP Superconductor, High Temperature Superconductor Symposium, Materials Research Society Fall Meeting, Boston, MA, Dec 2, 2002.
- 147. Phase Formation of Ba<sub>2</sub>YCu<sub>3</sub>O<sub>6+x</sub> in the Ba-Y-Cu-F-O-OH System, High Temperature Superconductor Symposium, Materials Research Society Fall Meeting, Boston, MA, Dec 2,

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- 148. Phase Relations in the Ba-R-Cu-O and Ba-Y-Cu-O-F Systems, High Temperature Superconductor Symposium, Materials Research Society Fall Meeting, Boston, MA, Dec 2, 2002.
- 149. Crystal Chemistry of Compounds in the Alkaline-earth Tantlate and Niobate Systems, symposium on Functional Ceramics, the 27<sup>th</sup> Annual Cocoa Beach Conference & Exposition on Advanced Ceramics & Composites, Jan. 26-31, 2003, Cocoa Beach, FL.