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Emeritus Distinguished Professor of Ceramics
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Education

- Alfred University Ceramic Engineering B.S., 1973
- University of Florida Materials Science and Engineering, Ph.D., 1977

Professional Experience

- Research Scientist, Battelle Columbus Laboratories, Columbus, Ohio (1978-80)
- Assistant Professor of Ceramic Science and Engineering, Penn State (1980-85)
- Associate Professor of Ceramic Science and Engineering, Penn State (1985-89)
- Research Fellow, Curtin University of Technology, Perth, Australia (1988)
- Professor of Ceramic Science and Engineering, Penn State (1989-)
- Founding Director, NSF-I/UCRC Particulate Materials Center, Penn State (1991-97)
- Visiting Professor, with Jacques Livage, University of Paris (1993)
- Director, Materials Research Laboratory, Penn State University (1997-01)
- Head, Department of Materials Science and Engineering (2001- 2015)
- Distinguished Professor of Ceramics (2002 - 2020)
- Visiting Professor, ETH- Zurich, Switzerland with L. Gauckler (2006)
- Invited Professor Chimie ParisTech, Laboratoire de Chimie de la Matière Condensée École Nationale Supérieure de Chimie de Paris with Michel Mortier (2011)
- Appointed as Visiting Professor for 2011-2012 at the Shanghai Institute of Ceramics Chinese Academy of Sciences (SICCAS)
- BAM, Berlin with Jens Guenster (May 13 – August 11 through 26, 2016)
- Helmholtz International Fellow, Karlsruhe Institute of Technology w. M. Hoffman (2017)
- BAM, Berlin Jens Guenster (May 13 – June 5, 2019)
- Emeritus Distinguished Professor of Ceramics (2020)

Honors

- Fellow, American Ceramic Society (1990)
- Wilson Research Award, Penn State University (1992)
- Richard M. Fulrath Pacific Award (1993)
- Board of Trustees ACerS (1996-99)
- Elected to the International Academy of Ceramics (now World Academy of Ceramics) (2000)
- Robert B. Sosman Memorial Award-ACerS (2000)

- Kreidl Memorial Lecture (2000)
- University of Florida Distinguished Alumni Award (2002)
- Named Distinguished Professor of Ceramic Science and Engineering, Penn State (2002)
- European Ceramics Society International Award (now named the R. E. Brook Award) (2003)
- Named by ISI as one of the most “Highly Cited Researchers” in Materials (2003)
- Ceramics Education Council - Outstanding Educator Award (2005)
- John Jeppson Award of the American Ceramic Society for “Distinguished scientific and engineering achievements as well as outstanding leadership and service in the field of ceramic processing science”
- Hsun Lee Award, Institute of Materials Research, Shenyang, China
- Fellow, Materials Research Society “In recognition of seminal contributions to ceramic science and engineering and a distinguished record of leadership and service in the materials research community” (2010)
- Edward Orton Jr. Memorial Award, American Ceramic Society (2011)
- Distinguished Life Member, American Ceramic Society (2013)
- W. D. Kingery Award of the American Ceramic Society (2015)
- International Fellow, European Ceramic Society (2017)

Professional Societies

- American Ceramic Society
- American Association for the Advancement of Science
- European Ceramic Society
- International Ceramic Federation
- Materials Research Society
- World Academy of Ceramics

Editorial activities

- Editor-in-Chief, *Journal of the Materials Research Society* (2009 -)
- Editor-in-Chief, *Ceramics International* (2001-2009)
- Principal Editor of *Materials Letters* (2003 - 2009)
- Editor, *Journal of Ceramic Processing Research* (1999 - 2009)
- Editor, *Journal of the American Ceramic Society* (1992-98)
- Member Editorial Board, *Journal of Sol Gel Science and Technology* (1993-2006)
- Member Editorial Board of *Interface* (2004-2006)

Professional Activities

- U.S. rep to the International Advisory Board of the European Ceramics Society (2017-)
- Elected to four year term as Member-at-Large of the Industrial Science and Technology (Section P) of AAAS (2017-2021)
- President of the Advisory Board, World Academy of Ceramics (2014-2018)
- President, International Ceramics Federation (ICF) (2010-2012)
- Secretary/Treasurer, International Ceramics Federation (2006-2008)

- Vice-President of World Academy of Ceramics (2010)
- Chair, University Materials Council (2005-2006).
- President, American Ceramic Society (2002-2003)
- Chair, Nominating Committee, World Academy of Ceramics (2008-2010)
- Chair, International Ceramic Prize Committee, World Academy of Ceramics (2003)
- Member, ACerS Board of Trustees (1996-1999, 2000-2004)
- ACerS Executive Committee (1997-99, 2001-2004)
- Chair, ACerS Nominating Committee (2003-2004)
- ACerS Strategic Planning Committee (1997-98)
- Chair, Gordon Research Conference on Solid State Studies in Ceramics (1998)
- Chair, W. D. Kingery Award Selection Committee (1998-99) (helped to establish the award)
- Member, Fellows Selection Committee, American Ceramic Society (1993-96)
- Chair, Sosman Lecture Committee (1991-92)
- Chair, Fellows Nomination Committee (Basic Science Division) (1991-92)
- Associate Editor, *Journal of the American Ceramic Society* (1988-92)
- Chair, Basic Science Division (1990-1991)
- Chair Elect, Basic Science Division (1989-90)
- Member, Editorial Advisory Board (1985-1987)
- Program Chair, Basic Science Division (1988-1989)
- Chairman, Ceramographic Exhibit of the American Ceramic Society (1982-85) (Established the Roland B. Snow Award when I was Chairman)

Meeting Organization

- Co-Organizer of ACerS Symposium on "Forming of Ceramics," April 25, 1983, with J. Mangels
- Co-Organizer of 21st University Conference on Ceramic Science, "Tailoring Multiphase and Composite Ceramics," University Park, PA, July 17-19, 1985, with R. E. Tressler, C. G. Pantano and R. E. Newnham
- Co-Organizer of ACerS Topical Meeting "Ceramic Powder Science and Technology-Synthesis, Processing and Characterization," Boston, MA, August 3-6, 1986, with K. Mazdiyasi, J. McCauley and R. Haber
- Co-Organizer and Co-founder of the 1st International Conference on Ceramic Powder Processing Science, Orlando, FL, November 1-4, 1987, with E. R. Fuller, Jr. and H. Hausner
- Co-Organizer 2nd International Conference on Ceramic Powder Processing Science, Berchtesgaden, West Germany, October 12-14, 1988, with H. Hausner
- Co-Organizer 3rd International Conference on Ceramic Powder Processing Science, San Diego, Feb. 2-5, 1990, with H. Hausner and S. Hirano
- Co-Organizer 4th International Conference on Ceramic Powder Processing Science, Nagoya, Japan, March 12-15, 1991, with S. Hirano and H. Hausner
- Co-Organizer 5th International Conference on Ceramic Processing Science and Technology, Friedrichshafen, Sept. 11-15, 1994, with H. Hausner and S. Hirano
- Co-Organizer, Sintering '95, University Park, PA, Sept 17-22, 1995, with R. German.

- Co-Organizer 6th International Conference on Ceramic Processing Science and Technology, Santa Barbara, CA Sept. 7-10, 1997, with F. Lange and S. Hirano
- Chair, Gordon Research Conference on Studies in Solid State Ceramics, Meriden, NH, August 2-6, 1998
- Co-Organizer, Sintering '99, University Park, PA, Nov 1-3, 1999, with R. German.
- Co-Organizer 7th International Conference on Ceramic Processing Science and Technology, Nagoya, Japan, May 15-17, 2000, with S. Hirano and N. Claussen
- Co-chaired (with R. M. German) International Conference on Sintering – 2003, University Park, PA
- Organizer 9th International Conference on Ceramic Processing Science and Technology, Coral Springs, Fla, Jan 8-11, 2006, with S. Hirano and L. Gauckler.
- Organizer 10th International Conference on Ceramic Processing Science and Technology, Inuyama, Japan, May 25-28, 2008, with S. Hirano and L. Gauckler.
- Organizer 11th International Conference on Ceramic Processing Science, Zurich, Switzerland, Sept 5-9, 2010, with L. Gauckler and K. Kuomoto.
- Organizer 12th International Conference on Ceramic Processing Science, Portland, OR, Aug 4-7, 2013, with J. Lewis, K. Kuomoto and L. Bergstrom.
- Organizer 13th International Conference on Ceramic Processing Science, Nara, Japan, May 8-11, 2016, with K. Kuomoto, K. Kato, J. Lewis and L. Bergstrom.

International Service

- Raised money for 11 Students and Young Faculty to travel and attend the 8th European Ceramic Society Conference, Istanbul, Turkey, June 29-July 3, 2003
- Student Travel Support to attend the 5th International Meeting of Pacific Rim Ceramic Societies, Nagoya, Japan, September 29-October 2, 2003
- Student Travel Support to attend the 10th International Conference and Exhibition of the European Ceramic Society; Berlin, Germany, June 17-21, 2007 (9 students and 2 faculty)
- Student Travel Support to attend the 3rd International Congress on Ceramics, November 14 - 18, 2010 Osaka, Japan.
- Student Travel Support to attend the 2019 ECerS Summer School and ECerS Conference in Torino. Italy

Teaching Activities

- Processing of Ceramics – Principles of ceramic processing, including powder preparation, characterization, colloid science, forming operations, sintering and the basic phenomena underlying these operations. (undergraduate)
- Ceramic Processing Lab (undergraduate)
- Surface Behavior of Ceramic Materials – The physical chemistry of solid-solid, solid-liquid, and solid-vapor interfaces related to ceramic applications (graduate)
- Sintering of Ceramics – Design and interpretation of ceramic microstructures through an understanding of the physics and chemistry of sintering and grain growth (graduate)

Summary of graduate student advising and research mentoring

- Advised >50 Undergraduate students (senior thesis, WISER, URF, IIM)
- Advised 35 Ph.D. Graduates in Materials Science and Engineering
- Advised 24 Masters of Science Graduates in Ceramic Science
- >35 Visiting Faculty, Scientists and Post-doctoral students

Books and special journal issues

1. J. Mangels and G. L. Messing, Eds., Forming of Ceramics, American Ceramic Society, Columbus, OH, 278p (1984).
2. R. E. Tressler, G. L. Messing, C. G. Pantano, and R. E. Newnham, eds., Tailoring Multiphase and Composite Ceramics, Plenum Press, New York, 790 p (1986).
3. G. L. Messing, K. S. Mazdidasni, J. W. McCauley and R. A. Haber, eds., Ceramic Powder Science, American Ceramic Society, Columbus, OH, 825 p (1987).
4. G. L. Messing, E. R. Fuller, Jr. and H. Hausner, Eds., Ceramic Powder Science - II, American Ceramic Society, Columbus, OH 1207 p (1988).
5. H. Hausner, G. L. Messing and S. Hirano, Eds, Ceramic Powder Processing Science, Deutsche Keramische Gesellschaft, Cologne 960 p (1989).
6. G. L. Messing, S. Hirano and H. Hausner, Eds., Ceramic Powder Science-III (eds), American Ceramic Society, Westerville, OH, 995 p (1990).
7. S. Hirano, G. L. Messing and H. Hausner, Eds., Ceramic Powder Science-IV (eds), American Ceramic Society, Westerville, OH, 758 p (1991).
8. H. Hausner, G. L. Messing and S. Hirano, eds., Ceramic Processing Science and Technology, American Ceramic Society, Westerville, OH, 820 p (1995).
9. R. M. German, G. L. Messing and R. Cornwall, eds, Sintering Technology, Plenum Press, New York, New York 560 p (1996).
10. G. L. Messing, F. F. Lange, and S. Hirano, eds., Ceramic Processing Science, American Ceramic Society, Westerville, OH 572 p (1998).
11. S. Hirano, G. L. Messing and N. Claussen eds., Ceramic Processing Science-VI , American Ceramic Society, Westerville, OH (2001).
12. R. M. German, G. L. Messing and R. Cornwall, eds, Sintering Science and Technology, Pennsylvania State University, University Park, PA 440 pp (2000).
13. G. L. Messing, subject editor for Ceramic Processing in Encyclopedia of Materials Science and Technology, R. Cahn, K. Buschow and M. Flemings, eds. Elsevier Science, Oxford, UK (2001)
14. G. L. Messing, S. Hirano and L. Gauckler, ed., Special issue of the *J. American Ceramic Society*, 89 (6) (2006)
15. G. L. Messing, S. Hirano and L. Gauckler, ed., Supplemental issue of the *J. American Ceramic Society*, 92 (1) (2009)