JAMES K. MEEN

Texas Center for Superconductivity at
the University of Houston
University of Houston Science Center
Office Phone 713-743-8284
Fax: 713-743-8201

Depts of Chemistry and EAS
College of Natural Sciences & Mathematics
Houston, TX 77204-5002
Lab Phone: 713-743-8285
e-mail: Jmeen@uh.edu

Education:

1978	B. A. in Mineralogy and Petrology	Cambridge University, U.K.
1979	M.Sc. in Geochemistry	Oxford University, U.K
1985	Ph.D. in Geochemistry & Mineralogy	Pennsylvania State University
	Thesis Advisor(s): David Eggler	

Employment History:

1995-present	Research Associate Professor, University of Houston
1990-1995	Research Assistant Professor, University of Houston
1986-1990	Visiting Assistant Professor, University of North Carolina, Chapel Hill
1985-1986	Post-doctoral fellow, Pennsylvania State University
1983	Pre-doctoral fellow, Dept. of Terrestrial Magnetism, Carnegie Inst. Washington

Honors and Awards:

- AGU Editor's Citation for Excellence in Refereeing for Journal of Geophysical Research - Solid 1995.
- Poster Chair, International Conference Materials & Mechanisms of Superconductivity. High Temperature Superconductors VI, February 2000.
- Exhibits Chair, Applied Superconductivity Conference (ASC), August 2002.
- Educational Outreach Chair, ASC 2003-present.
- Posters Chair and Student Awards Chair, Strongly Correlated Electron Systems '07

Recent Research Highlights:

- Phase relations of Bi-2212 determined as function of oxygen pressure
- Phase relations of BSCCO quaternary determined
- Development of microbeam techniques for valence state determination in transition metals
- Development of microbeam techniques for analysis of oxypnictides/skutterudites
- Investigation of O variations in YBCO at micron scale

Lab Facilities/Expertise:

- Chemical analysis of inorganic ceramics
- Phase equilibria at elevated temperature and pressure
- Microstructural determinations

Five Relevant Publications:

K. Müller, G.S. Majkic, and J.K. Meen, *More issues in the wavelength-dispersive spectrometric characterization of $YBa_2Cu_3O_{7-\delta}$*. IEEE Transactions on Applied Superconductivity, vol. 25, 6605907, 2015.

C-M. Hou and J.K. Meen, *Range in the Cation Ratio of $YBa_2Cu_3O_{7-\delta}$ Crystallized from Liquids.* IEEE Transactions on Applied Superconductivity, vol. 25, 6801004, 2015.

F. Wei, B. Lv, L. Deng, J.K. Meen, Y.Y. Xue, C.W. Chu, *The unusually high T_c in rare-earth-doped single crystalline $CaFe_2As_2$*. Philosophical Magazine, vol. 94, p. 2562-2570, 2014.

W.J. Foster, J.K. Meen, D.A. Fox, *The effect of physiologic aqueous solutions on the perovskite material lead-lanthanum-zirconium titanate (PLZT): potential retinotoxicity,* Cutaneous & Ocular Toxicology, 32(1), 18-22, 2013.

P. To, J.K. Meen, Chemical characterization of melt-textured YBCO produced by hybrid powder metallurgy, *Materials Science and Engineering B*, **151**, 16-20, 2008.