

## **Professor John B Parise**

Distinguished Professor, Geosciences Department and Department of Chemistry, Stony Brook University, Stony Brook, NY 11794-2100; Joint Photon Sciences Institute and Photon Sciences Division, Brookhaven National Laboratory, Upton NY 11973.

### **Professional Preparation**

James Cook University, Chemistry, Australian Atomic Energy Commission, Sydney, PhD fellowship (Australian Nuclear Science and Engineering), 1981

Visiting Pre-doctoral student, Institute of Scientific and Industrial Research, Osaka University, Japan, 1976-77

Post-doctoral, Research School of Chemistry, Australian National University, 1983-85

Visiting Scientist DuPont Chemical, Wilmington, Delaware. 1981-1983; 1986, 1989

### **Appointments**

Director, Joint Photon Sciences Institute, 2012 -

Distinguished Professor, joint-appointment in Chemistry/Geology, Stony Brook, 2010-

Research Scientist, Photon Sciences, Brookhaven National Laboratory, 2010-

Professor of Geoscience, joint-appointment in Chemistry, Stony Brook, 1996-2010

Assistant/Associate Professor, State University of New York Stony Brook, 1989-96

Lecturer (Assistant Professor), Chemistry, University of Sydney, Australia, 1987-89

Lecturer, Chemistry, New South Wales Institute of Technology, Australia 1985-86

### **Awards and Honors**

Fulbright Senior Scholar, Edinburgh University, 2009-10

Chancellor's Award of Excellence in Scholarship and Creative Activities from State University of New York, 2008

Kriedel Memorial Lecturer, 2008

Japan Business Co-operation Committee Fellowship 1977-78

### **Contributions**

As of Aug.. 2017, 390 journal articles, 4 patents, cited 11118 times, with an h-index of 52

#### Some highly cited contributions

1. Michel, F. M., Ehm, L., Antao, S. M., Chupas, P. J., Lee, P., Liu, G., Strongin, Schoonen, M. A. A., Phillips, B. L. and Parise, J. B. (2007) The structure of ferrihydrite, a nanocrystalline material, *Science*, 316, 1726-1729 (cited 364 times).
2. Yeganeh-Haeri, A., Weidner, D. J. and Parise, J. B. (1992) Elasticity of Cristobalite, *Science*, 257, 650-652 (cited 208 times).
3. Inoue, T; Weidner, DJ; Northrup, Parise, J.B. (1998) Elastic properties of hydrous ringwoodite (gamma-phase) in Mg<sub>2</sub>SiO<sub>4</sub>, *Earth and Planetary Science Letters*, 160, 107-113 (cited 149 times).
4. Forster, P. M.; Eckert, J.; Heiken, B. D.; Parise, J. B.; Yoon, J. W.; Jung, S. H.; Chang, J.-S.; Cheetham, A. K. (2006) Adsorption of Molecular Hydrogen on Coordinatively

Unsaturated Ni(II) Sites in a Nanoporous Hybrid Material, *J. Am. Chem. Soc.* 128, 16846-16850 (cited 154 times)

5. Parise, J. B. (1991) An Antimony Sulfide with a Two-Dimensional, Intersecting System of Channels, *Science*, 251, 293-294 (cited 129 times).

#### Other noteworthy contributions

1. Woerner, W.R., Qian, G.-R., Oganov, A.R., Stephens, P.W., Dharmagunawardhane, H.A.N., Sinclair, A.L., and Parise, J.B. (2016) Combined theoretical and in situ scattering strategies for optimized discovery and recovery of high-pressure phases. *Inorg Chem*, 55, 3384-3392.
2. Banerjee, D.; Simon, C. M.; Plonka, A. M.; Motkuri, R. K.; Liu, J.; Chen, X. Y.; Smit, B.; Parise, J. B.; Haranczyk, M.; Thallapally, P. K. Metal-organic framework with optimally selective xenon adsorption and separation *Nature Commun.* 2016, 7, article 11831
3. Jina, H., Plonka, A. M., Parise, J.B. and Goroff, N. S. (2013) Pressure induced topochemical polymerization of diiodobutadiyne: a single-crystal to single-crystal transformation. *CrystEngComm*, 15, 3106-3110
4. Lee, Y., Vogt, T., Hriljac, J. A., Parise, J. B., Hanson, J., and Kim, S.-J (2002) Non-framework cation migration and irreversible pressure-induced hydration, *Nature*, 420, 485- 489
5. Skinner, L.B., Benmore, C.J., Weber, J.K.R., Williamson, M.A., Tamalonis, A., Hebden, A., Wiencek, T., Alderman, O.L.G., Guthrie, M., Leibowitz, L., and Parise, J.B. (2014) Molten uranium dioxide structure and dynamics. *Science*, 346: 984-987
6. Skinner, L.B., C.J. Benmore, J.K.R. Weber, J. Du, J. Neuefeind, S.K. Tumber, and J.B. Parise (2014) Low Cation Coordination in Oxide Melts. *Physical Review Letters*, 112: 157801

#### **Contributions to the community**

- Neutron Advisory Board, Oak Ridge National Laboratory, 2011 – present
- Chair, Neutron Powder Diffraction review, 2016
- Co-chair, NSF CHESS-U synchrotron site visit and review, 2016
- Director, Joint Photon Sciences Institute. The institute is established as a Brookhaven-Stony Brook collaboration to broaden participation in synchrotron research. The institute will conduct education and outreach activities in coordination with SBU and BNL departments. 2010 - present
- Beamline Advisory Team XPD beamline NSLS-II.
- PI Instrument Design Team, SNAP beamline, Spallation Neutron Source.
- Co-organizer of the Erice School on High Pressure Crystallography, summer 2016. PI on application to NATO Advanced Institute Grant to fund this meeting
- Advisory committee, Center for Science at Extreme Conditions, Edinburgh (2010- ).
- Scientific Advisory Committee, Diamond Light Source, UK, 2005-10
- Scientific Advisory Committee, Advanced Light Source, Berkeley, CA, 2005-10
- Chair, National Synchrotron Light Source Users Executive Committee, 1998-99, member NSLS-II committee 2014-15