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Professional Preparation

B.S. Florida Institute of Technology, Melbourne, FL, 1976

Ph.D. Polymer Chemistry, University of Connecticut, Storrs, CT, 1980

Professional Appointments

- 2008-present Educational Foundation Distinguished Professor and CoEE Endowed Chair in Polymer Nanocomposites, Department of Chemistry & Biochemistry, USC
- 2015-2018 Research Professor, Center for High Tech Materials, University of New Mexico
- 1997-2008 Professor, Department of Chemistry and Chemical Biology, Rensselaer Polytechnic Institute
- 1997-2008 Director, NYS Center for Polymer Synthesis, Rensselaer Polytechnic Institute
- 1993-1997 Deputy Group Leader, Polymers and Coatings Group, Los Alamos National Lab
- 1991-1993 Section Leader, Polymers and Coatings Group, Los Alamos National Lab
- 1985-1991 Staff Member, Polymers and Coatings Group, Los Alamos National Lab
- 1982-1985 Senior Scientist, Ethicon, Inc., a Johnson & Johnson Company
- 1980-1982 Research Chemist, Celanese Research Company

Publications - Polymer Nanotechnology

1. *Poly(alkyl methacrylate)-grafted Silica Nanoparticles in Polyethylene Nanocomposites*. M.M. Khani, D. Woo, E.L. Mumpower, B.C. Benicewicz. *Polymer* **2017**, *109*, 339-348.
2. *50th Anniversary Perspective: Are Polymer Nanocomposites Practical for Applications?* S. Kumar, B.C. Benicewicz, R. Vaia, K. Winey. *Macromolecules* **2017**, *50*, 714-731.
3. *Well-Defined Polyisoprene-Grafted Silica Nanoparticles via the RAFT Process*. M.M. Khani, Z.M. Abbas, B.C. Benicewicz. *J. Polym. Sci., Part A: Poly. Chem.* **2017**, *55*(9), 1493-1501.
4. *Investigation of Dielectric Breakdown in Silica-Epoxy Nanocomposites Using Designed Interfaces*. M. Bell, T. Krentz, J.K. Nelson, Linda Schadler, K. Wu, C. Breneman, S. Zhao, H. Hillborg, B. Benicewicz. *J. Colloid and Interface Science* **2017**, *495*, 130-139.
5. *Solution Polymerization of Polybenzimidazole*. K.J. Fishel, A.L. Gullledge, A.T. Pingitore, J.P. Hoffman, W.P. Steckle, B.C. Benicewicz. *J. Polym. Sci., Polym. Chem. Ed.* **2016**, *54*, 1795-1802.

Publications - Membranes for Fuel Cells and Related Electrochemical Cells

6. *Polybenzimidazole Based Random Copolymers Containing Hexafluoro Functional Groups for Gas Separations at Elevated Temperatures*. R.P. Singh, X. Li, K.W. Dudeck, B.C. Benicewicz, K.A. Berchtold. *Polymer* **2017**, *119*, 134-141.
7. *Polybenzimidazole Based Block Copolymers: From Monomers to Membrane Electrode Assemblies for High Temperature Polymer Electrolyte Membrane Fuel Cells*. F. Schoenberger, G. Qian, B.C. Benicewicz. *J. Polym. Sci., Part A: Poly. Chem.* **2017**, *55*(11), 1831-1843.
8. *Solution Polymerization of Polybenzimidazole*. K.J. Fishel, A.L. Gullledge, A.T. Pingitore, J.P. Hoffman, W.P. Steckle, B.C. Benicewicz. *J. Polym. Sci., Polym. Chem. Ed.* **2016**, *54*, 1795-1802.
9. *Polybenzimidazoles*. Y. Wang, T.X. Yang, K. Fishel, B.C. Benicewicz, T.-C. Chung, Chapter 19 Handbook of Thermoplastics, 2nd Edition, Ed. O. Olabisi, K. Adewale, CRC Press, **2015**. pp 616-660.
10. *High Temperature Creep Behavior of Phosphoric Acid-Polybenzimidazole Gel Membranes*. X. Chen, G. Qian, M. Molle, B.C. Benicewicz, H.J. Ploehn. *J. Polym. Sci., Polym. Phys. Ed.* **2015**, *53*(21), 1527-1538.
11. *Electrochemical Hydrogen Pumping*. K. Fishel, G. Qian, G. Eisman, B.C. Benicewicz. In *High Temperature Polymer Electrolyte Fuel Cells - Approaches, Status, and Perspectives*. Edited by J.O. Jensen, H.A. Hjuler, Q. Li. Springer Verlag, Heidelberg, Germany, **2015**, Chapter 24, 527-540.