



Bio of Prof. Kenneth Poeppelmeier

Kenneth Poeppelmeier is an internationally recognized expert in materials chemistry and has served the inorganic solid state and materials chemistry communities for over 40 years. Ken received his Ph.D. from Iowa State University in 1978 under Prof. John D. Corbett, after which he began his professional career as a Senior Staff Chemistry at Exxon Research and Development (*J. Solid State Chem.*, 1982, 44, 89; *J. Solid State Chem.*, 1982, 45, 71). Ken is the Charles E. & Emma H. Morrison Professor of Chemistry at Northwestern University.

Ken is a leader and pioneer in the design, synthesis, and elucidation of structure-property relationships of mixed metal oxides and mixed anion materials. His research has had tremendous impact on understanding the growth of oxide substrates and led to the identification of remarkable oxide nanoparticle surface structures (*Nano Letters*, 2014, 14, 191), as well as sensible structures for complex oxide surfaces (*Nature* 2002, *Nature Materials* 2010). Ken's work on acentric materials, beginning with a review article that started a renaissance in the field (*Chem. Mater.* 1998), has led to the development of design rules for synthesizing new acentric materials (*J. Am. Chem. Soc.* 2007) and influenced other groups worldwide working in this space. More recently, Ken has been the Director of the Center for Catalysis and Surface Science and member of the Institute of Sustainability and Energy at Northwestern University. He has led interdisciplinary energy-related research thrusts, including the synthesis of high voltage cathode materials based on reversible intercalation of multivalent ions. This has improved understanding of structure-property relationships in framework structures and led to the development of post-spinel with potential use in battery applications. Additionally, Ken has been actively involved in the synthesis of size- and shape-controlled mixed metal oxide nanoparticles for use as supports in the catalytic upcycling of polymers.

Beyond research, Ken has served as Editor-in-Chief with Jan Reedijk of both the second and third editions the landmark major reference work and educational series *Comprehensive Inorganic Chemistry* published in 2012 and 2023, respectively, by *Elsevier*. Ken has also served as an Associate Editor for ACS Inorganic Chemistry, among other contributions to the field. When he does get time away from the office, Ken enjoys skiing, fly-fishing, and spending time with his grandchildren.