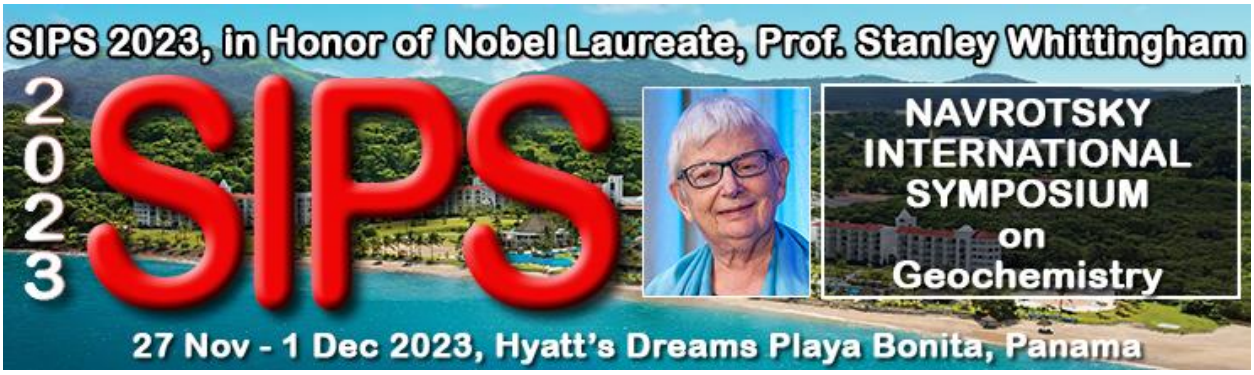

Bio of Dr. Alexandra NAVROTSKY, PhD

Phi Beta Kappa
Sigma Xi, Full Member
Distinguished Lifetime Member, American Ceramic Society
American Chemical Society
American Geophysical Union
Mineralogical Society of America
Materials Research Society
Geochemical Society
National Academy of Sciences
International Union of Pure and Applied Chemistry
World Academy of Ceramics

School of Molecular Sciences and Center for Materials of the Universe
Arizona State University

Alexandra Navrotsky, 80, was educated at the Bronx High School of Science and the University of Chicago (B.S., M.S., and Ph.D. in chemistry). After postdoctoral work in Germany and at Penn State University, she joined the faculty in Chemistry at Arizona State University, where she worked with a leading-edge team in materials science and geochemistry until her move to the Department of Geological and Geophysical Sciences at Princeton University in 1985. She chaired that department from 1988 to 1991 and was active in the Princeton Materials Institute. In 1997, she became an Interdisciplinary Professor of Ceramic, Earth, and Environmental Materials Chemistry at the University of California Davis and was appointed Edward Roessler Chair in Mathematical and Physical Sciences in 2001. She directed the organized research unit on Nanomaterials in the Environment, Agriculture and Technology (NEAT) from 1999 to 2019. Professor Navrotsky rejoined the ASU faculty in 2019 as Professor in the School of Molecular Sciences and the School of Engineering, Matter, Transport and Energy. She is director of the Center for Materials of the Universe at ASU, a cross-disciplinary center which brings together planetary science and materials science.

Her research interests have centered about relating microscopic features of structure and bonding to macroscopic thermodynamic behavior in minerals, ceramics, and other complex materials. She has made contributions to mineral thermodynamics; mantle mineralogy and high pressure phase transitions; silicate melt and glass thermodynamics; order-disorder in spinels; framework

silicates; and other oxides; ceramic processing; oxide superconductors; nanophase oxides, zeolites, nitrides, perovskites; and the general problem of structure-energy-property systematics. The main technical area of her laboratory is high temperature reaction calorimetry. She has published over 900 scientific papers.

Honors include an Alfred P. Sloan Fellowship (1973); Mineralogical Society of America Award (1981); American Geophysical Union Fellow (1988); Vice-President, Mineralogical Society of America (1991-1992), President (1992-1993); Geochemical Society Fellow (1997). She was elected to the National Academy of Sciences in 1993. In 1995 she received the Ross Coffin Purdy Award from the American Ceramic Society and was awarded the degree of Doctor Honoris Causa from Uppsala University, Sweden. In 2004, she was elected a Fellow of The Mineralogical Society (Great Britain) and awarded the Urey Medal (the highest career honor of the European Association of Geochemistry). In October 2009, she received the Roebling Medal, the highest honor of the Mineralogical Society of America. In 2011, she became a member of the American Philosophical Society. In 2017 she received the Goldschmidt Medal of the Geochemical Society and the Kingery Award of the American Ceramic Society, both top lifetime achievement awards. In 2018 she was elected to the World Academy of Ceramics. In 2020 she received the Czochralski Award of the European Ceramic Society and was elected a Distinguished Life Member of the American Ceramic Society.