2001 Board of Trustees' Award for Outstanding Research and Creative Scholarship Recipient

Professor Barbara E. Wyslouzil

Professor Barbara Wyslouzil has established a pre-eminent research program to determine the structure of multi-component nanodroplets and nucleation. Widespread recognition of her accomplishments both as a theoretician and innovative experimentalist is testimony of the importance of her work to aerosol science. Her work is critically important to the understanding of chemical processes in the atmosphere and to environmental quality.
Professor Wyslouzil collaborates with the leading nucleation theorists and has, herself, set the standard for the field in binary nucleation kinetics. Her work is of international caliber and has been widely exploited by other researchers in achieving progress towards a unified theory of binary nucleation rates. Professor Wyslouzil's hallmark is an ability to make significant progress in areas where mathematics and physics are very complex and often regarded as intractable.

Even more highly regarded is her development of an experimental technique to study aerosol nucleation. Small Angle Neutron Scattering (SANS) has opened the door to exciting new capabilities in the measurement of nucleation rates. SANS is an extremely impressive engineering accomplishment that required ingenuity, creativity, and resourcefulness. Professor Wyslouzil was the leader in this endeavor, which holds the promise of being able to accurately measure both composition and concentration gradients in aerosol droplets, a feat that has not previously been accomplished. According to other experts in the field, this accomplishment is an "experimental tour de force" that has wide scientific, environmental, and societal implications.

Professor Wyslouzil has received widespread praise for her research and is highly regarded by her students and colleagues. In recognition of her many significant contributions to the field of aerosol science, it is with great pride and enthusiasm that Barbara Wyslouzil is named the recipient of the 2001 Board of Trustees' Award for Outstanding Research and Creative Scholarship. Attested to this day, 12 April 2001, by the Committee.