The Neutron Scattering Society of America

www.neutronscattering.org

Press Release, February 4, 2008

The Neutron Scattering Society of America is pleased to announce the 2008 recipients of its 3 major prizes.

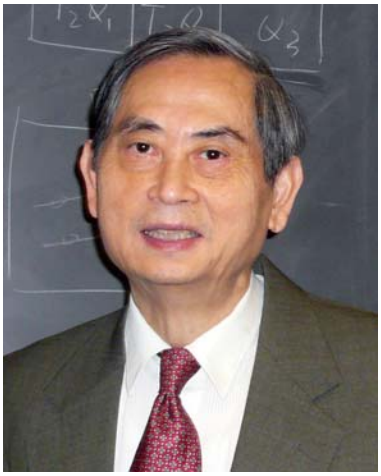
Prof. Sow-Hsin Chen

is the recipient of the

2008 Clifford G. Shull Prize

of the Neutron Scattering Society of America with the citation:

"For seminal contributions to understanding the dynamical properties of supercooled and interfacial water using neutron scattering techniques, and for an exceptional record of training young scientists in the use of scattering techniques to solve topical interdisciplinary problems in complex fluids and soft matter."



Prof. Sow-Hsin Chen

The Neutron Scattering Society of America (NSSA) established the Clifford G. Shull Prize in Neutron Science to recognize *outstanding research in neutron science and leadership promoting the North American neutron scattering community.* The prize is named in honor of Prof. Clifford G. Shull, who received the Nobel Prize in 1994 with Prof. Bertram Brockhouse for seminal developments in the field of neutron science. The establishment of the prize was announced at the inaugural American Conference on Neutron Scattering (ACNS) in 2002.

The nominations were reviewed by a committee of experts in the field of neutron science and the NSSA is pleased to announce the recipient of the 2008 Shull Prize is **Prof. Sow-Hsin Chen** of the Massachusetts Institute of Technology. The prize and $5000 honorarium will be awarded at the 2008 ACNS May 11-15 in Santa Fe, NM (www.lansce.lanl.gov/acns2008/).

Prof. Sow-Hsin Chen's early career interests evolved from the application of space group representation theory to the classification of phonon dispersion relations in complex crystal lattices in the 60's, to the development of photon correlation spectroscopy for studying the critical dynamics in a binary fluid mixture in the 70's, and the development of small-angle neutron scattering methods to determine structures of micelle and microemulsion systems and interactions between proteins in solutions in the 80's. Starting in the early 1980's Chen turned his attention to water, with emphasis on supercooled and confined water. This work discovered the general dynamical properties of "interfacial water", which has broad and profound implications in aqueous chemistry and biology. His group's more recent work has focused on fragile-to-strong and low to high density phase transitions in confined water and hydration water around biopolymers. Since last year, his group has further discovered the existence of the density minimum in supercooled and confined water. This series of work has enabled him to predict the existence of the second (liquid-liquid) critical point in water. A dedicated teacher and mentor, Chen has supervised 40 PhD students, mostly in the general applications of neutron scattering to complex fluids and soft condensed matter.

Prof. Chen received his PhD in 1964 from McMaster University under Prof. B. N. Brockhouse. He joined the Department of Nuclear Science and Engineering of Massachusetts Institute of Technology in 1968, and has been a full professor since 1975. He is a fellow of APS, AAAS, and Japan Society for the Promotion of Science, and an Academician of the Academia Sinica. He has received many honors and awards including the Humboldt Senior Scientist Award from Germany (1987-88), the MIT Department of Nuclear Science and Engineering's Career Achievement Award (2002). He and his co-workers received the 2006 PNAS Editorial Board's Cozzarelli Prize for a paper published in PNAS.

Prof. Sow-Hsin Chen (left), Prof. Cliff G. Shull (center), and Prof. B.N. Brockhouse (right) at the 1995 McMaster University Symposium celebrating Brockhouse and Shull's joint winning of the 1994 Nobel Prize in Physics.