

ENSA



The European Neutron
Scattering Association

PRESS RELEASE (August 1, 1999)

**1999 Walter Halg Prize
of the
European Neutron Scattering Association (ENSA)**

The prize was made available to the European Neutron Scattering Association (ENSA) by a donation of Professor Walter Halg who is the initiator of neutron scattering in Switzerland. It will be awarded biannually to a European scientist for outstanding, coherent work in neutron scattering with long-term impact on scientific and/or technical neutron scattering applications. The prize (10.000 CHF) will be awarded for the first time in a special ceremony session of the 2nd European Conference on Neutron Scattering (ECNS'99), 1-4 September 1999, Budapest.

A large number of nominations were submitted for the 1999 Walter Halg Prize. They were examined by a Selection Committee which consists of authorities representing the major scientific disciplines. The Selection Committee decided to award the prize to



Professor Ferenc Mezei (Hahn-Meitner-Institut, Berlin)

in recognition of his innovative and outstanding contributions to the science of neutron scattering over the past three decades. His conception, development, construction and application of neutron spin echo techniques opened a hitherto unobtainable energy and time domain for the study of structural and magnetic

relaxation processes. The spin echo method is an entirely novel approach to neutron scattering techniques, which allowed for the first time to break the strong coupling between intensity and resolution by using an ingenious encoding mechanism (i.e., the neutron spin) to store information on the neutron state before and after the scattering event. Ferenc Mezei also introduced entirely novel concepts in instrumentation (e.g., Mezei spin flippers and supermirrors and principles of generalised polarisation analysis). The insights provided by neutron spin echo measurements have had far reaching implications for our understanding of physical systems as diverse as magnetic materials, polymers, proteins, glasses, superconducting vortices, solitons, zeolites and quantum fluids (e.g., 4He).

Ferenc Mezei studied physics at Eötvös University, Budapest. He obtained his diploma in 1965 and his Ph.D. degree in 1968. He then joined the Central Research Institute for Physics (KFKI) in Budapest and started to work in neutron scattering. His first publication in this field introduced a novel approach in high resolution neutron spectroscopy, the neutron spin echo method (1972). In 1972 he moved to the Institut Laue-Langevin (ILL), Grenoble, which operates the world's most powerful neutron source. There he built the neutron spin-echo spectrometer IN11 which has been in user operation since 1978. In 1984 he accepted a joint appointment in Berlin as a full professor at the Technical University and as a group leader at the Hahn-Meitner-Institut (HMI). In 1992 he became the director of the Berlin Neutron Scattering Centre (BENSC) at the HMI, until he joined Los Alamos National Laboratory as the first John Wheatley Scholar in 1997.

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