

Török Gyula



Affiliation: Research Institute for Solid State Physics and Optics

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Education and training:

1968 - 1971 Secondary School, Fazekas Mihaly, Budapest

1971 - 1976 Graduated at University Roland Eötvös, Budapest

Physicist (Monte Carlo modelling of (p,pd) reactions)

1996 Candidate of Physical Science of the Hungarian Academy of Sciences (PhD)

(Structure determination of MBBA and EBBA liquid crystal materials by Rietveld method)

Membership: Roland Eötvös Physical Society (Neutron and Synchrotron Radiation Division)

Qualifications and experience:

1976 - 1981 Assistant Lecturer, Technical University of Budapest, Hungary

(Chemical Physics department)

1981 - 1987 Researcher, Joint Institute for Nuclear Research, Dubna, Russia (installation of TOF correlation spectrometer KORA, neutron guide installation for upgrade of KORA)

1987 - 1988 Assistant Lecturer, Technical University of Budapest, Hungary

(Chemical Physics department)

1989 - Researcher, Research Institute for Solid State Physics, Hungary

(Neutron guide system modelling, installations, cold neutron triple axis spectrometer installation,

1993 Research fellowship at Rutherford Appleton Laboratory, Oxford

(diffraction of liquid crystals)

1994 Responsible for cold neutron triple axis spectrometer

1996 - Senior scientist, Research Institute for Solid State Physics, Hungary

2000 Responsible for thermal neutron triple axis spectrometer

Instrumental development

Cold neutron triple axis, (focussing monochromator beam filters, now the cold neutron triple axis spectrometer equipped with area detector and developed a RITA type spectrometer SANS development, (polarization option) reflectometer development, (polarization option) sample

environment development - magnet for triple axis spectrometer cryogenic head for SANS and triple axis spectrometer. A thermal triple axis spectrometer is under installation on the 8-th channel on BNC

Experimental activity at the Budapest Neutron Centre

See on <http://www.bnc.hu>

3. Experience and activities outside of Hungary:

- installation of TOF correlation spectrometer KORA, neutron guide installation for upgrade of KORA (Joint Institute for Nuclear Research, Dubna, Russia)
- From 1992 common experiments on the PNPI (St Petersburg Nuclear Physics Institute, Russia) on the diffractometer and Spin-echo spectrometer.
- From 1994 a proposer and experimentalist in every year on the NSE spectrometer (MESS) and SANS spectrometer PAXE in LLB Saclay .
- HMI (Berlin) on the spin-echo spectrometer and double crystal spectrometer.
- Also some experiment were carried out in ILL on IN11 and experiment on for circle diffractometers D9 (ILL) and on 3T2 (LLB) Saclay (neutron holography).
- Experiment on catalyzers and other nanomaterials.(BNC, LLB)

Languages: English, Russian,

Research activity, scientific interests:

- Structure and dynamic partially ordered systems liquid crystals, gels ferrofluids, membranes, fullerene compounds, material science deformed and irradiated steel, stress analysis, catalyzers.
- Neutron scattering techniques: powder diffraction, small angle scattering, Spin echo technique inelastic scattering, (triple axis spectrometer, spin echo), neutron optics, neutron holography
- polarized neutron techniques, neutron guides

Oral presentatins:

Selected

Gy. Török: Neutron Scattering Facilities at Budapest's Modernised Reactor/Bhaba Atomic Research Centre, Bombay 1995 Oct

Gy. Torok, V.T. Lebedev, L. Cser, et al Neutron Study of Poly(N-vinyl-pyrrolidone)-Complexes with C₆₀ as Related to their Biological Activity: Interaction with DNA Solutions./ IWFAC2001

Vassily Lebedev, Gyula Török, László Cser, et al Fullerene - polymer complexes: fractal crossover in solutions/ SAS2002 Conf Venice 23-26 aug

Török Gyula "*Neutron Holography* PNPI WINTER SCHOOL on CONDENSED STATE PHYSICS (CSP) on 29 feb- 5 march 2004, St.-Petersburg, Repino.

Gy.Török V.T.Lebedev, D.Bica, L.Vékás, M.V.Avdeev. Structural and dynamical investigation of ferrofluids/ TIMISOARA ACADEMIC DAYS 26-27 May, 2005 Romania.

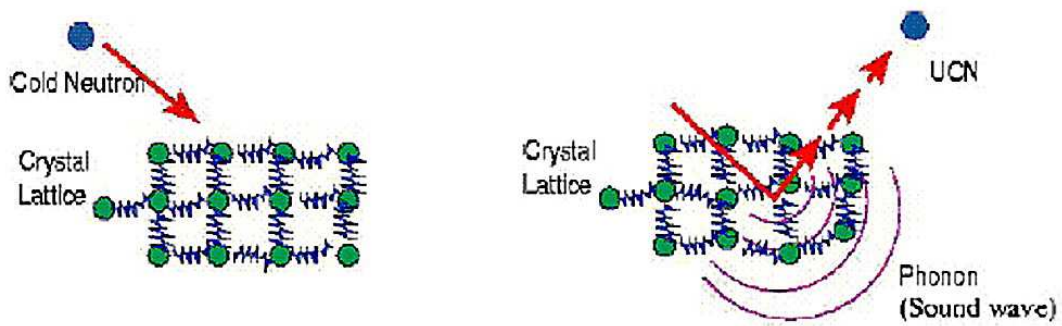
Research supervision and teaching experience

Diploma work: Ildiko Andras Reflectometry and AFM measurements on mirrors.

PhDwork: Eszter Retfalvi Radiation damage of the reactor steels.

A student training on the TAS for physicist of Technical University of Budapest and Graz University

Central European Training School on Neutron Beam Experiments 2002, 2003 and 2005



A Fazekasban kezdődött...