Curriculum Vitae

Firstname / Surename	**Dr. László Tóth**
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Work experiences

1.

Dates	**02 September 1991 - 31 July 1996**
Name and address of employer	**Institute of Nuclear Research of HAS**, H-4001 Debrecen, POB. 51., Hungary
Occupation or position held	Researcher, assistant lecturer / fellow later PhD student
Main activities and responsibilities	• Investigation of Post Collision Interactions in ion-atom collisions. • Investigation of the structure of inner atomic shells as well as • the coherence and electron correlation effects by electron spectroscopic study of ion-atom collision induced Auger electrons. • Developing instruments and measurements systems as well as data processing software for experiments of atomic physics. • Demonstrations and development of illustrative experiments for the subject of "Experimental Physics" at the Department of Experimental Phisics of University of Debrecen,.

2.

Dates	**01 August 1996 - 31 March 2004**
Name and address of employer	Konkoly Observatory of the HAS, **Heliophysical Observatory** 4010 Debrecen, Pf. 30.
Occupation or position held	Researcher, visiting lecturer/ research fellow
Main activities and responsibilities	• Investigation of the subsurface behavior of solar bipolar active regions. • Study of the effect of solar particle radiation activity on the terrestrial weather (cyclone activity, balance of planetary wave). • Building astronomical instruments as well as developing data and image processing software. • Participating in the regular daily photosphere observation service. • History of astronomy. • Teaching "Introduction to Astronomy" for students of physics at the Institute of Theoretical Physics of University of Debrecen.

3.

Dates	**08 May 2004 – 31 March 2008**
Name and address of employer	*Employer*: Core Research for Evolutional Science and Technology program at the Japan Science and Technology Agency *Workplace:* **Surface and Materials Science Laboratory** at the Nara Institute of Science and Technology,, 8916-5 Takayama, Ikoma, NARA 630-0192 JAPAN
Occupation or position held	Researcher

Main activities and responsibilities

- We have designed and built a new type 1π sr Wide Acceptance Angle spherical aberration corrected Electrostatic Lens (WAAEL) and
- applied that as objective lens in a Display-type Ellipsoidal Mesh Analyzer (DELMA) for electron energy and two dimensional angular distribution measurements.

It is a great leap forward compared to the other available largest acceptance angles (0.07π sr) and opens way towards new application areas.

Our instrument is able to be used for

- simultaneous angular and energy distribution measurements,
- electron spectroscopy and spectrography
- diffraction and holographic measurements furthermore,
- due to the extremely large acceptance angle mode it can be used as Stereo-PEEM to obtain three-dimensional atomic and electronic structures of microscopic-materials.

These properties make it useful in several fields from the atomic and solid state physics through geology to biological applications. (Feyn. 64)

4.

Dates — **01 September 2008 -**

Name and address of employer — University of Debrecen, Faculty of Informatics, **Department of Informatics Systems and Networks**, 4032, Debrecen, Egyetem tér 1.

Occupation or position held — Senior lecturer

Main activities and responsibilities

- Research / development
  - Participation in the Stereo-PEEM program (NAIST, Spring-8)
  - Investigation of the methods of Ultrasound-CT development.
  - Microcontroller based weather prediction network.
  - Electronic version of the GPHR solar database.
- Education (for system engineers, Hun. / English)
  - FPGA and microcontroller based knowledges
  - Verilog, Assembly, LabView
  - Programming Laboratory
  - Individual Laboratory Practice
  - Telecommunication Networks
- Thesis work, Student Scientific Association, PhD teaching / supervising.

Education, degree

1.

Title of qualification awarded — **MSc** in **Physics** (234/1991)

Name and type of organisation providing education and training — University of Debrecen, Faculty of Science and Technology, 4010 Debrecen, Pf. 18.

2.

Title of qualification awarded — **PhD** in **Physics** (140/2008)

Name and type of organisation providing education and training — University of Debrecen, Faculty of Science and Technology, 4010 Debrecen, Pf. 18.

Prices

- University of Debrecen the „Price of the Faculty of Informatics”, Debrecen, 2011. 06.26.

Personal skills

Language exam — **English** (intermediate level, A/1993/0039366, C/2004/410524)

Additional information

Further information and list of publications