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Professional Preparation

University of Debrecen, Debrecen, Hungary	Physics	Diploma	1989
University of Debrecen, Debrecen, Hungary	Atomic Physics	Ph.D.	1992
Oxford University, Oxford, UK	Atomic Physics	Postdoc	1993
NIST, Gaithersburg, MD	Plasma Radiation	Postdoc	1995
University of Debrecen, Debrecen, Hungary	Magyari Zoltan Fellow	Postdoc	1996

Appointments

1995-1996	Assistant Professor	University of Debrecen, Debrecen, Hungary
1996-1999	Associate Professor	University of Debrecen, Debrecen, Hungary
1995-1999	Research Scientist	ATOMKI, Debrecen, Hungary
1999-2002	Research Scientist	MIT-NIST, Gaithersburg, MD
2002-2012	Associate Professor	University of Debrecen, Debrecen, Hungary
2002-2005	Visiting Scientist	Harvard-SAO, Cambridge, MA
2006	Visiting Fellow	Queens University, Belfast, UK
2006	Research Professor	Vanderbilt University, Nashville, TN
2006-2013	Head Physicist	Rotating Gamma Institute, Debrecen, Hungary
2012-2013	Habilitated Professor	University of Debrecen, Debrecen, Hungary
2013-	Associate Professor	Clemson University, Clemson, SC

Five Related Publications:

1. C. T. Chantler, M. N. Kinnane, J. D. Gillaspay, L. T. Hudson, A. T. Payne¹, L. F. Smale, A. Henins, J. M. Pomeroy, J. N. Tan, J. A. Kimpton, **E. Takacs**, and K. Makonyi, 'Testing Three-Body Quantum Electrodynamics with Trapped Ti²⁰⁺ Ions: Evidence for a Z-dependent Divergence Between Experiment and Calculation', *Physical Review Letters*, **109** (2012), 153001-153005
2. **E. Takacs**, K. Tókési, H. Tawara, C. J. Verzani, T. Hohl, J. D. Gillaspay, and J. Pálinkás, 'Target Dependence of Charge Exchange X-rays', *Radiation Physics and Chemistry*, **76** (2007), 617-20
3. H. Tawara, **E. Takacs**, T. Suta, K. Makónyi, L. P. Ratliff, and J. D. Gillaspay, 'K X rays Produced in Collisions of Bare Ions with Atoms: Contribution of Multiple-Electron Transfer in Kr³⁶⁺, Ar¹⁸⁺, and Ne¹⁰⁺ + Ar Collisions', *Physical Review A*, **73** (2006), 5
4. I. Kink, J. M. Laming, **E. Takacs**, J. V. Porto, J. D. Gillaspay, E. Silver, H. Schnopper, S. R. Bandler, M. Barbera, N. Brickhouse, S. Murray, N. Madden, D. Landis, J. Beeman, and E. E. Haller, 'Analysis of Broadband X-ray Spectra of Highly Charged Krypton from a Microcalorimeter Detector of an Electron-Beam Ion Trap', *Physical Review E*, **63** (2001), 046409
5. **E. Takacs**, Z. Berényi, J. D. Gillaspay, L. P. Ratliff, R. Minniti, J. Pedulla, R. D. Deslattes, and N. Stolterfoht, 'Separation of Inner-Shell Vacancy Transfer Mechanisms in Collisions of Slow Ar¹⁷⁺ Ions with SiO₂', *Journal of Physics B-Atomic Molecular and Optical Physics*, **34** (2001), 1277-87

Five Other Significant Publications:

1. J. M. Laming, I. Kink, **E. Takacs**, J. V. Porto, J. D. Gillaspay, E. H. Silver, H. W. Schnopper, S. R. Bandler, N. S. Brickhouse, S. S. Murray, M. Barbera, A. K. Bhatia, G. A. Doschek, N. Madden, D. Landis, J. Beeman, and E. E. Haller, 'Emission-Line Intensity Ratios in Fe XVII Observed with a Microcalorimeter on an Electron Beam Ion Trap', *Astrophysical Journal*, **545** (2000), L161-L64.
2. C. T. Chantler, D. Paterson, L. T. Hudson, F. G. Serpa, J. D. Gillaspay, and **E. Takacs**, 'Absolute Measurement of the Resonance Lines in Heliumlike Vanadium on an Electron-Beam Ion Trap', *Physical Review A*, **6204** (2000), 13.

3. E. Silver, H. Schnopper, S. Bandler, N. Brickhouse, S. Murray, M. Barbera, **E. Takacs**, J. D. Gillaspay, J. V. Porto, I. Kink, J. M. Laming, N. Madden, D. Landis, J. Beeman, and E. E. Haller, 'Laboratory Astrophysics Survey of Key X-ray Diagnostic Lines Using a Microcalorimeter on an Electron Beam Ion Trap', *Astrophysical Journal*, **541** (2000), 495-500
4. **E. Takacs**, E. S. Meyer, J. D. Gillaspay, J. R. Roberts, C. T. Chantler, L. T. Hudson, R. D. Deslattes, C. M. Brown, J. M. Laming, J. Dubau, and M. K. Inal, 'Polarization Measurements on a Magnetic Quadrupole Line in Ne-like Barium', *Physical Review A*, **54** (1996), 1342-50
5. C. A. Morgan, F. G. Serpa, **E. Takacs**, E. S. Meyer, J. D. Gillaspay, J. Sugar, J. R. Roberts, C. M. Brown, and U. Feldman, 'Observation of Visible and UV Magnetic Dipole Transitions in Highly-Charged Xenon and Barium', *Physical Review Letters*, **74** (1995), 1716-19

Synergistic Activities

- 2000-2004: Member of the General Committee of the International Conference on Photonic Electronic and Atomic Collisions (ICPEAC)
- 1995-1996: Physics Secretary of the Debrecen Regional Section of the Hungarian Academy of Sciences
- 1997: Co-Chairman, XVth International Seminar on Ion-Atom Collisions, ISAC XV, Budapest, Hungary, Satellite Meeting of the XXth ICPEAC Conference
- 1996-2006: Faculty advisor – Undergraduate research advisor at the University of Debrecen (Csilla Szabo, Zoltan Berenyi, Balint Radics, Timea Hohl)
- 1999-2006: Undergraduate summer research advisor at NIST - (Sam Brewer, Balint Radics, Timea Hohl, Geza Sztasi, Tibor Suta, Zoltan Bader)
- 2013-: Mentor “Creative Inquiry” Undergraduate research team at Clemson University (12 students)

Collaborators:

John D. Gillaspay, Lawrence T. Hudson (NIST); Marcus Mendenhall (Vanderbilt University); Christopher T. Chantler (University of Melbourne), Martin Laming, Charles Brown (NRL); Eric Silver, Herb Schnopper (Harvard SAO); David Pritchard (MIT); Jozsef Palinkas (University of Debrecen); Dezsó Horváth (KFKI);

Postdoctoral and Doctoral Advisor:

Keith Burnett, Oxford University, UK

Bela Sulik, PhD, Sandor Ricz, PhD, Institute of Nuclear Research of the Hungarian Academy of Sciences (ATOMKI) Debrecen, Hungary;

Graduate and University Diploma Students Advised

PhD Atomic Physics – University of Debrecen

Csilla Szabo, “*High Energy Electronic X-ray Spectrometer (HENEX) for high density laser produced plasmas*” (2002-2006)

Timea Hohl, (2010-)

Roshani Silwal (2014-)

Amy Gall (2014-)

M.Sc. Physics – University of Debrecen

(Erika Veibel 1998, Peter Illyes 1999, Zoltan Berenyi 1999, Csilla Szabo 1999, Tibor Suta 1999, Bertalan Juhasz 2000, Balazs Ujvari 2000, Peter Szabo 2006, Geza Sztasi 2006, Balint Radics 2006, Gergely Lekli 2006, Laszlo Gulyas 2007, Timea Hohl 2007)

Memberships

1992 -: Hungarian Physical Society (Roland Eötvös Physical Society)

1994 -: American Physical Society

2012 -: European Physical Society