

Dr. Brîndușa Alina Petre

Curriculum vitae

1. General Information

Date of Birth: 25 April 1976

Married/two children

Address: Group of Biochemistry, Faculty of Chemistry,
“Al. I. Cuza” University of Iasi,
Bd. Carol I, No.11 700506, Iasi, Romania

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2. Education

- 2008 -2011 PostDoctoral Researcher, Laboratory of Analytical Chemistry and Biopolymer Structure Analysis, Department of Chemistry, University of Konstanz in collaboration with Washington University in St. Louis, MO, USA.
- 2003 - 2008 PhD, Laboratory of Analytical Chemistry and Biopolymer Structure Analysis, Department of Chemistry, University of Konstanz, Dissertation title: “Analytical Development and Biochemical Application of Mass Spectrometry in Combination with Immunoaffinity Methods for Identification and Structural Characterisation of Protein Nitration”.
- 2000 – 2002 M. Sc., Enzymologie und Biotechnologie, “Al. I. Cuza” University of Iasi, Romania and Laboratory of Analytical Chemistry and Biopolymer Structure Analysis, University of Konstanz, Master thesis: “Isolation and structural characterisation of porin ion channel protein by electrophoretic and mass spectrometric methods”.
- 1996 - 2000 B.Sc., Chemistry (summa cum laude), “Al. I. Cuza” University of Iasi, Romania, Diplom title: “Enzymatic Biosensor”.

3. Professional activities

- 11/2011- to date Associate Professor (teaching course and laboratory of (i) Proteomics and (ii) Synthesis and characterization of polypeptides) and Scientific researcher (project manager: PN-II-RU-TE-2011-3-0038) at Faculty of Chemistry, “Al. I. Cuza” University of Iasi, Romania.
- 10/2010 - 02/2011 Postdoctoral scientific exchange program at Washington University in St. Louis, supervisor Prof. Dr. Michael Gross.
- 05/2008 - 08/2008 Postdoctoral scientific exchange program at Washington University in St. Louis, supervisor Prof. Dr. Michael Gross.

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- 2003 - 2011 Supervisor for Master and PhD students in peptide chemistry: Synthesis, chemical and structural characterisation of peptides, and affinity – mass spectrometric approaches, Laboratory of Analytical Chemistry and Biopolymer Structure Analysis, University of Konstanz.
- 2003 – 2008 German Chemical Society (GDCh) course “High Resolution Biopolymer Mass Spectrometry”, University of Konstanz, (co-organizer/instructor).
- 2004 7th European Workshop on Fourier Transform Mass Spectrometry (EFTMS), University of Konstanz, Germany (co-organizer/ participant).
- 04/2001- 06/2001 Special course: Medical Biochemistry, University of Medicine “Ghe.T.Popa” Iasi, Romania (participant).

4.	Invited	Talks
2007	NATO Advanced Research Workshop on Applications of Mass Spectrometry in Life Safety Herculane, Romania – “Molecular Recognition Specificity of anti-3-nitrotyrosine Antibodies Revealed by Affinity-Mass Spectrometry and Immunoanalytical Methods”	
2007	Swiss Proteomics Society (SPS), Lausanne, Switzerland - “New mass spectrometric approach to molecular characterization of tyrosine nitration in human Eosinophil Proteins”	
2008	56 th ASMS Conference on Mass Spectrometry, Denver, USA - “Proteolytic-affinity extraction and FTICR mass spectrometry – PROFINEX: A new approach for identification of nitration in cellular proteins” (workshop)	
2008	Oxidative Post-Translational Modifications of Proteins in Cardiovascular Disease conference, Boston, USA - “Molecular recognition specificity of anti 3-nitro-tyrosine antibodies revealed by affinity-mass spectrometry and immuno-analytical methods”.	
2009	DGMS-workshop: Affinity- Mass Spectrometry – Methods & Bioanalytical Applications, Konstanz, DE - “Affinity-MS for identification of post-translational modifications: Nitration”.	
2012	Affinity-MS workshop: Methods & Applications in immunology, proteomics and biomedicine, Konstanz, DE – “Oxidative tyrosine modifications in proteins: cystic fibrosis patients”.	
2013	Workshop: MSLife - High Performance Mass Spectrometry: Integrating new Tools & Methods with Applications in Life Sciences, Konstanz, DE - “Protein Nitration Analysis using Affinity- Mass Spectrometry”.	
2013	11 th Conference on Colloid and Surface Chemistry, Iasi, RO – “Molecular	

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characterization of neuronal protein aggregates by Mass spectrometry-based footprinting methods”.

4. Fellowships

- 10/2013 – 06/2014 RAF fellowship at “P. Poni” Institute of Macromolecular Chemistry, Iasi;
07- 08/ 2013 DAAD fellowship at University of Konstanz, Germany;
10/2010 – 01/2011 DAAD fellowship at Washington University in St. Louis, MO, USA;
05/2010 – 07/2011 NSF fellowship at Washington University in St. Louis, MO, USA;
07/2007 – 09/2008 WIN-Kolleg fellowship of Heidelberger Academy of Sciences,
Germany;
10/2001 – 06/2002 Socrates - Erasmus fellowship at University of Konstanz, Germany;

5. Awards

- 2008 Price for best Oral Presentation at OPTM Conference, Boston, USA (2008);
2009 Price for best Poster at DGMS Conference, Konstanz, Germany (2009);
2013 Price for best Oral Presentation at CCSC, P. Poni Institute, Iasi, Romania (2013);

6. Memberships in scientific organizations

Deutsche Gesellschaft für Massenspektrometrie (DGMS)

American Society for Mass Spectrometry (ASMS)

Swiss Proteomics Society (SPS)

Romanian Society for Mass Spectrometry (RSMS)

Affinity - Mass Spectrometry: special interest group

7. Synergistic Activities

Journal reviewer for: Journal of Peptide Science, Central European Journal of Chemistry and Acta Chemica Iasi.

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