



Hungary-Serbia

IPA Cross-border Co-operation Programme



The Programme is co-financed by the European Union

## Europass Curriculum Vitae

**Project acronym**

OCEEFPTRWR

**Abbreviated name of the organization**

UNSPMF

### Personal information

First name(s) / Surname(s)

**Valerija (Valéria) GUŽVANJ(Guzsvány)**

Address(es)

3, Trg D. Obradovića , 21000, Novi Sad, R. Serbia

Telephone(s)

Fixed: ++381 214852782

Mobile: ++381 641564082

Fax(es)

++381 21454065

E-mail

valeria.guzsvany@dh.uns.ac.rs

Nationality

Hungarian

Date of birth

07/03/1975

Gender

Female

**Position / role  
In the project**

**Researcher**

### Work experience

Dates

Assistant Professor 01.03.2007,  
Teaching and Research Assistant 01/2004 –02/2007,  
Trainee Teaching and Research Assistant, 01/2001 – 04/2004,  
Fellowship of the Ministry of Science, Technology and Development of the Republic of Serbia,  
09/1998– 01/2001

Occupation or position held

Assistant Professor

Main activities and responsibilities

Teaching and research

-Lectures (BSc)

Basic of Instrumental Analysis (additional forms of teaching

Instrumental Analysis

Practicum of Instrumental analysis

Bioanalytical Chemistry

-Lectures (MSc)

Chemical Sensors

Bioanalytical Chemistry

-Lectures (PhD)

Chemical Sensors

-Research

- Surface and bulk modified carbon-based electrodes for voltammetric analysis
- Developing new methods (voltammetry, HPLC/TLS (TLS, thermal lens spectroscopy)) for sensitive determination of some insecticides from different samples
- Stability and photocatalytic degradation study of some pyridine and thiazol based insecticides
- Investigation of the aggregation characteristics of the recently synthesized derivatives of the cholic acid in the presence of different pharmaceutical preparations

Name and address of employer

University of Novi Sad, Department of Chemistry, Biochemistry and Environmental Protection



**Hungary-Serbia**

IPA Cross-border Co-operation Programme



The Programme is co-financed by the European Union

Type of business or sector	Education, research
<b>Education and training</b>	
Dates	19/ 07/2006
Title of qualification awarded	PhD thesis
Principal subjects/occupational skills covered	Analytical Chemistry
Name and type of organisation providing education and training	Department of Chemistry, University of Novi Sad, Novi Sad, Serbia
Level in national or international classification	PhD
Dates	04/07/2003
Title of qualification awarded	M.Sc. Thesis
Principal subjects/occupational skills covered	Analytical Chemistry
Name and type of organisation providing education and training	Department of Chemistry, University of Novi Sad, Novi Sad, Serbia
Level in national or international classification	M.Sc.
Dates	29/09/1998
Title of qualification awarded	B.Sc. in Chemistry
Principal subjects/occupational skills covered	Analytical Chemistry
Name and type of organisation providing education and training	Department of Chemistry, University of Novi Sad, Novi Sad, Serbia
Level in national or international classification	B.Sc.

**personal skills and competences**Mother tongue(s) **Hungarian**Other language(s) **Serbian, English, German**

Self-assessment

*European level (\*)***Serbian****English****German**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
B2	Independent user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B2	Independent user
B1	Independent user	B1	Independent user	B1	Independent user	B1	Independent user	A2	Basic user

(\*) [Common European Framework of Reference for Languages](#)

Social skills and competences Team spirit, good ability to adapt to multicultural environment, gained tough my work experience aboard, good communication skills, member Serbian Chemical Society, Secretary of the Analytical Chemistry Division of the Serbian Chemical Society-Vojvodina Branch (2005-2009), Foreign Member of the Public Body of the Hungarian Academy of Sciences (2004-)

Organisational skills and competences Leadership (coordinator of CEEPUSII network on the level of R. Serbia), sense of organisation, good experience in project and team management , team spirit: participated as researcher in 7 projects

Technical skills and competences Broad experience in instrumental analysis: electrochemical methods (voltammetry, potentiometry), flow injection analysis and sequential injection analysis, spectroscopy (UV-VIS, AAS, NMR) chromatography (HPLC)

Computer skills and competences Good command of Microsoft Office tools (Word, Excel, PowerPoint)  
Basic knowledge of graphic design applications (Adobe Illustrator, PhotoShop, Corel Draw )  
Data bases of Web of Science, Scopus, Science direct  
Application of different instrument software packages

Artistic skills and competences Music (piano) basic level

Other skills and competences Hobbies: gardening  
Sports: running and table tennis

Driving licence

**Additional information**

Number of citations: **44**  
Numebr of heterocitations: **22**

**Annexes**

Specialisations/further educations, Awards, Projects list, Publication list

-----  
Signature



Hungary-Serbia

IPA Cross-border Co-operation Programme



The Programme is co-financed by the European Union

## SPECIALISATIONS/FURTHER EDUCATIONS

- University of Pardubice, Czech Republic, team leader Prof Dr Karel Vytřas, CEEPUSII, Teacher (2009 January, one month)
- Kyushu University, Graduate School of Engineering, Global Center of Excellence Program, Japan, post-doc position in the team of Dr Toshihiko Imato (2007-2008, 5.5 months)
- University of Nova Gorica, Slovenia, Laboratory for Environmental Research, research team lead by Dr Mladen Franko (chromatography, thermal lens spectroscopy) (2006-two months, 2005 one month)
- Budapest University of Technology and Economics, BUTE, Electroanalytical Academic Research Team, Dr Klára Tóth, Hungary (2007-one month, 2006-one month, 2005 three months, 2004, two months)
- XXXVI. Further Training in Chromatography, January 26-28, 2005, Cereal Research Non-Profit Company, Szeged, Hungary

## AWARDS

- Several University awards for success during the studies (1994, 1996, 1997, 1998)
- Special prize of the Serbian Chemical Society for success during the studies (1998)
- "Domus Hungarica Scientiarum et Artium Junior" fellowship (Hungarian Academy of Science) (2004, 2005)
- Fellowship of the Richter Gedeon Centinarium (Richter Gedeon LD, Budapest), Hungary, 2005
- Junior Fellowship of "HTMT" (Hungarian Academy of Science), (2005)
- Junior grant of the Academy of Science and Arts of the Autonomous Province of Vojvodina (Serbia) (2006)
- Senior Fellowship of "HTMT" (Hungarian Academy of Science), (2006-2009)
- Fellowship of the SENAREC (Slovenian European Natural Sciences Research Centre) (2007)

## PROJECTS

- CEEPUS II network, 2007-, researcher, 2009-koodinator of the Project for Serbia, International project (Coordinator Prof. Dr. Karel Vytras, Czech R.)
- Global Center of Excellence Program, 2007-2008, postdoc researcher, Japan, MEXT. (Coordinator Prof. Dr. Toshihiko Imato, Japan, 5.5 months)
- "Regional Water Resources Investigations in the Scope of Sustainable Development", HU-RO-SCG 04SER02/01/009 (European Neighbourhood Programme, International (EU) project), 2006-2008, researcher
- "Analytical Chemistry and Degradation of Neonicotinoids", Bilateral project (Serbia-Slovenia) 2006-2007, researcher
- "Environmental Audit of a Fertilizer Factory in the Republic of Serbia, Austria GEF CTF TF3034 (Bluewaters, Austria), 2003, researcher
- "Development of New and Improvement of the Existing Analytical Methods and Techniques for Monitoring the Quality of Environment", ON142029, Ministry of Education and Environmental Protection, Serbia, 2002-2004, 2005, 2006- (Domestic project), researcher
- Development of Methods of Chemical Analysis of Neonicotinoids and Pyridine-carboxylic Acid Derivatives", 114-451-00619/2006-01, Secretariat for Science and Technological Development, Autonomous Province of Vojvodina, Serbia, 2007-, researcher

## Publication list

### Book chapters:

1. **V. Guzsvány**, M. Kádár, F. Gaál, L. Bjelica, K. Tóth, "Cathodic Electrochemical Application of Bismuth Film Electrode: Determination of Thiamethoxam Insecticide", *Sensing in Electroanalysis* (K. Vytřas, K. Kalcher, eds.), Vol. 2, ISBN 978-80-7194-954-1, Pardubice (Czech Republic), **2007**, 75-84.
2. **V. Guzsvány**, Zs. Papp, L. Bjelica, F. Gaál, "Voltammetric monitoring of photocatalytic degradation of imidacloprid, nitenpyram and acetamiprid neonicotinoid insecticides" *Sensing in Electroanalysis* (K. Vytřas, K. Kalcher, I Švancara eds.), Vol. 3, ISBN 978-80-7395-087-3 Pardubice (Czech Republic), **2008**, 105-116.
3. Zs. Papp, I. Švancara, **V. Guzsvány**, K. Vytřas, F. Gaál, L. Bjelica, B. Abramović, "Some new applications of tricresyl phosphate-based carbon paste electrodes in voltammetric analysis", *Sensing in Electroanalysis* (K. Vytřas, K. Kalcher, eds.), Vol. 4, ISBN 978-80-7395-212-9, Pardubice (Czech Republic), **2009**, 47-59.
4. **V. Guzsvány**, H. Nakajima, N. Soh, K. Nakano, T. Imato "Determination of Trace Metals by Sequential Injection-Anodic Stripping Voltammetry by Bismuth Film Electrode" *Sensing in Electroanalysis* (K. Vytřas, K. Kalcher, I Švancara eds.), Vol. 4, ISBN 978-80-7395-212-9, Pardubice (Czech Republic), **2009**, 121-132.

### Papers published in journals:

1. B. F. Abramović, **V. J. Guzsvány**, F. F. Gaál, Z. V. Laušević, "Potentiometric Application of Boron-and Phosphorus Doped Glassy Carbon Electrodes" *J. Serb. Chem. Soc.*, **2001**, 66, 179-188.
2. B. F. Abramović, L. J. Bjelica, F. F. Gaál, **V. J. Guzsvány**, Lj. S. Jovanović, "Some Electrochemical Characteristics of Boron- and Phosphorus-doped Glassy Carbon Electrodes" *Electroanalysis*, **2003**, 10, 878-884.
3. B. F. Abramović, **V. J. Guzsvány**, F. F. Gaál, "Phosphorus-doped and Undoped Glassy Carbon Indicator Electrodes in Controlled-current Potentiometric Titrations of Bromide- or Chloride-containing Active Ingredients in Some Pharmaceutical Preparations" *J. Pharm. Biomed. Anal.*, **2005**, 2, 265-271.



4. **V. J. Guzsvány**, F. F. Gaál, L. J. Bjelica, Sz. N. Ökrész, "Voltammetric Determination of Imidacloprid and Thiamethoxam" *J. Serb. Chem. Soc.*, **2005**, 70, 735-743.
5. **V. Guzsvány**, J. Csanádi, F. Gaál, "NMR Study of the Influence of pH on the Persistence of Some Neonicotinoids in Water" *Acta Chim. Slov.* **2006**, 53, 52-57.
6. **V. Guzsvány**, M. Kádár, F. Gaál, K. Tóth, L. Bjelica "Rapid Differential Pulse Polarographic Determination of Thiamethoxam in Commercial Formulation and Some Real Samples", *Microchim. Acta*, **2006**, 154, 321-328.
7. **V. Guzsvány**, M. Kádár, F. Gaál, L. Bjelica, K. Tóth, "Bismuth Film Electrode for the Cathodic Electrochemical Determination of Thiamethoxam", *Electroanalysis*, **2006**, 18, 1363-1371.
8. **V. Guzsvány**, A. Madžgalj, P. Trebše, F. Gaál, M. Franko "Determination of Selected Neonicotinoid Insecticides by Liquid Chromatography with Thermal Lens Spectrometric Detection" *Environmental Chemistry Letter*, **2007**, 5, 203-208.
9. F. Gaál, **V. Guzsvány**, L. Bjelica, "Determination of Various Insecticides and Pharmaceuticals Using Differently Modified Glassy Carbon Electrodes" *J. Serb. Chem. Soc.* **2007**, 12, 1465-1475.
10. **V. Guzsvány**, "Bismuth film Electrode for Voltammetric Analysis" *J. Flow Injection Analysis*, **2007**, 24, 126.
11. **V. Guzsvány**, M. Kádár, Zs. Papp L. Bjelica, F. Gaál, K. Tóth "Monitoring of Photocatalytic Degradation of Selected Neonicotinoid Insecticides by Cathodic Voltammetry with a Bismuth Film Electrode", *Electroanalysis*, **2008**, 20, 291-300.
12. M. Poša, **V. Guzsvány**, J. Csanádi, S. Kevrešan, K. Kuhajda "Formation of hydrogen-bonded complexes between bile acids and lidocaine in the lidocaine transfer from an aqueous phase to chloroform" *European Journal of Pharmaceutical Sciences*, **2008**, 34, 281-292.
13. **V. Guzsvány**, J. Csanádi, S. Lazić, F. Gaál "Photocatalytic Degradation of the Insecticide Acetamiprid on TiO<sub>2</sub> Catalyst" *Journal of Brazilian Chemical Society*, **2009**, 20, 152-159.
14. Zs. J. Papp, I. Švancara, **V. J. Guzsvány**, K. Vytrás, F. F. Gaál "Voltammetric Determination of Imidacloprid Insecticide in Selected Samples Using a Carbon Paste Electrode" *Microchim. Acta* **2009**, 74, 84-90.
15. M. Pósa, **V. Guzsvány**, J. Csanádi, J. Borbás, F. Gaál "Study of Association of 12-monoketocholic acid by <sup>1</sup>H NMR relaxation method" *Acta Chim. Slov.* **2009**, 56, 807-814.
16. M. Poša, **V. Guzsvány**, J. Csanádi "Determination of critical micellar concentrations of two monoketo derivatives of cholic acid, novel permeability promoters. Which of the two is more hydrophobic?" *Colloids and Surfaces B: Biointerfaces*, **2009**, 74, 84-90.
17. **V. Guzsvány**, N. Banić, Zs. Papp, F. Gaál, B. Abramović "Comparison of different iron-based catalysts and TiO<sub>2</sub> for photocatalytic removal of imidacloprid" *Reaction Mechanism, Kinetics and Catalysis*, **2010**, (accepted)
18. **V. Guzsvány**, Zs. Papp, S. Lazić, B. Abramović, L. Bjelica "Rapid spectrophotometric determination of imidacloprid in selected commercial formulations in the presence of 6-chloronicotinic acid" *J. Serb. Chem. Soc.* **2009**, 74, 1455-1465.
19. Zs. Papp, Sz. Kubiak, **V. Guzsvány**, A. Bobrowski, L. Bjelica "Voltammetric Determination of Neonicotinoid Insecticide Thiamethoxam using a Tricresyl Phosphate-based Carbon Paste Electrode" *J. Serb. Chem. Soc.* (accepted)
20. **V. Guzsvány**, H. Nakajima, N. Soh, K. Nakano, T. Imato "Antimony film electrode for the determination of trace metals by sequential injection analysis/anodic stripping voltammetry" *Anal. Chim. Acta*, **2010**, 658, 12-17.

#### Selected International Conferences:

1. **V. Guzsvány**, J. Csanádi, F. Gaál, "NMR Study of the Influence of pH on the Persistence of Some Neonicotinoids in Water", *The 14<sup>th</sup> International Symposium "Spectroscopy in Theory and Practice"* Nova Gorica, Slovenia, **2005**, 53.
2. **V. Guzsvány**, A. Madžgalj, P. Trebše, F. Gaál, M. Franko, "Determination of Neonicotinoid Insecticides by Liquid Chromatography Coupled with Thermal Lens Spectrometric Detection" *6<sup>th</sup> European Meeting on Environmental Chemistry –EMEC6*, December 6-10, Belgrade, Serbia, **2005**, pp.110.
3. **V. Guzsvány**, J. Csanádi, S. Lazić, L. Bjelica, F. Gaál "Persistence and hydrolysis studies of some neonicotinoid insecticides" *1<sup>st</sup> European Chemistry Congress*, 27-31 August **2006**, Budapest, Hungary, 200.
4. **V. Guzsvány**, M. Franko, P. Trebše, F. Gaál S. Lazić "Comparison of solid-phase extraction procedures for determining neonicotinoid insecticides in honey by liquid chromatography" *1<sup>st</sup> European Chemistry Congress*, 27-31 August **2006**, Budapest, Hungary, 197 (invited lecturer-English).
5. **V. Guzsvány**, Zs. Papp, L. Bjelica, F. Gaál, "Voltammetric Study of Photocatalytic Degradation of Imidacloprid in Aqueous Solution", *Proc. of the 13<sup>th</sup> Symposium on Analytical and Environmental Problems*, SZAB, Szeged, Hungary, **2006**, 96-110.
6. **V. Guzsvány**, J. Csanádi, F. Gaál, Lj. Božović, "<sup>1</sup>H NMR study of the photocatalytic degradation of acetamiprid and 6-chloronicotinic acid, *The 15<sup>th</sup> International Symposium "Spectroscopy in Theory and Practice"* Nova Gorica, Slovenia, **2007**, 106.
7. **V. Guzsvány**, L. Bjelica, Zs. Papp, F. Gaál "Voltammetric Monitoring of Photocatalytic Degradation of Selected Neonicotinoid Insecticides", *Ernö Pretsch Symposium-Development and Application of Chemical Sensors*, Switzerland, Zürich, June 28,29, **2007** (poster presentation)
8. **V. Guzsvány**, N. Banić, Zs. Papp, F. Gaál, "Investigation of the Different Photooxidation Degradation Processes of Imidacloprid", *Proceedings of the 14<sup>th</sup> Symposium on Analytical and Environmental Problems*, Szeged, Hungary, **2007**, 100-104.
9. **V. Guzsvány**, N. Banić, J. Krstić, F. Gaál "Fotokatalitička degradacija insekticida tiakloprida primenom nanodimenzionih čestica Fe<sub>2</sub>O<sub>3</sub> na TiO<sub>2</sub> nosaču" (Photocatalytic degradation of insecticide thiacloprid by nanosized particles of Fe<sub>2</sub>O<sub>3</sub> on TiO<sub>2</sub> support) *5. Simpozijum Hemija i zaštita životne sredine (The 5<sup>th</sup> Symposium Chemistry and Environmental protection)* 27-30 maj, **2008**, Tara, 218-219