

PERSONAL INFORMATION



Violeta Otilia Potolincă

 Splai Bahlui, nr. 10, 700163 Iasi (Romania)

 potolincă.otilia@icmpp.ro

Sex Female | Date of birth 10/02/1986 | Nationality Romanian

WORK EXPERIENCE

01/08/2017–Present

Scientific researcher

"Petru Poni" Institute of Macromolecular Chemistry
41A Grigore Ghica Voda Alley, 700487 Iasi (Romania)
www.icmpp.ro

Synthesis and characterization of polyurethanes with different hard segment structure

Business or sector Research

02/11/2008–31/07/2017

Research assistant

"Petru Poni" Institute of Macromolecular Chemistry
41A Grigore Ghica Voda Alley, 700487 Iasi (Romania)
www.icmpp.ro

Synthesis and characterization of linear and cross-linked polyurethanes based on renewable resources and heterocyclic compounds

Business or sector Research

EDUCATION AND TRAINING

2010–2016

Ph.D. in Chemistry

Romanian Academy, "Petru Poni" Institute of Macromolecular Chemistry
41A Grigore Ghica Voda Alley, 700487 Iasi (Romania)
www.icmpp.ro

Development and characterization of new polyurethane elastomers with heterocyclic groups

2008–2020

Master degree

"Alexandru Ioan Cuza" University of Iasi, Faculty of Chemistry
11th, Carol I Blvd, 700506 Iasi (Romania)
www.chem.uaic.ro

Chemistry and biochemistry of heterocyclic compounds

2005–2008

Bachelor degree in Chemistry

"Alexandru Ioan Cuza" University of Iasi, Faculty of Chemistry
, 11th, Carol I Blvd, 700506 Iasi (Romania)
www.chem.uaic.ro

Technological biochemistry

PERSONAL SKILLS

Mother tongue(s)

Romanian

Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages - Self-assessment grid

Communication skills Communication abilities, adaptability, self improvement, meticulousity

Organisational / managerial skills Team spirit, good organisational skills, ability to work under pressure

Job-related skills A good knowledge of polyurethanes synthesis technique and polymer characterization by spectral techniques, thermal and surface analysis

Digital skills	SELF-ASSESSMENT				
	Information processing	Communication	Content creation	Safety	Problem-solving
	Independent user	Independent user	Basic user	Basic user	Basic user

Digital skills - Self-assessment grid

A good knowledge of Microsoft Office, Origin, TopSpin, ChemDraw

ADDITIONAL INFORMATION

- Publications**
1. Stefan Oprea, **Violeta Otilia Potolinca**, Veronica Oprea: *Synthesis and characterization of novel polyurethane elastomers that include curcumin with various cross-linked structures*. Journal of Polymer Research, 2020, 27(3), No. 60. DOI: 10.1007/s10965-020-2036-6
 2. Stefan Oprea, **Violeta Otilia Potolinca**, Veronica Oprea, Livia Ingrid Diaconu: *Structure-properties relationship of the polyurethanes that contain Schiff base in the main chain*. High Performance Polymers, 2020, No. UNSP 0954008319901152. DOI: 10.1177/0954008319901152
 3. Stefan Oprea, **Violeta Otilia Potolinca**, Veronica Oprea: *Physical properties and the ability to disperse into different polar solvents of the new polyurethane-cellulose composites*. Journal of Elastomers and Plastics, 2019, No. UNSP 0095244319877562. DOI: 10.1177/0095244319877562
 4. Stefan Oprea, **Violeta Otilia Potolinca**, Petronela Gradinariu, Veronica Oprea: *Biodegradation of pyridine-based polyether polyurethanes by the Alternaria tenuissima fungus*. Journal of Applied Polymer Science, 2018, 135(14), Nr. 46096. DOI: 10.1002/app.46096
 5. Stefan Oprea, **Violeta Otilia Potolinca**: *Thermomechanical and dielectric properties of novel pyridine-based polyurethane urea elastomers*. Journal of Elastomers and Plastics, 2018, 50(3), 276-292. DOI: 10.1177/0095244317708593
 6. Stefan Oprea, **Violeta Otilia Potolinca**, Oprea Veronica: *Influence of the hydroquinone ether moieties and Bisphenol A glycerolate diacrylate on the UV stability behavior of new polyurethane materials*. Journal of Polymer Research, 2018, 25(3), No. 79. DOI: 10.1007/s10965-018-1465-y
 7. **Violeta Otilia Potolinca**, Emil C. Buruiană, Ștefan Oprea: *The effects of different positions of the pyridine functional groups on the dielectric relaxation of the heterocyclic polyurethane-urea elastomers*. Materials Today Communications, 2017, 10, 25-33. DOI: 10.1016/j.mtcomm.2016.11.003
 8. Ștefan Oprea, Petronela Gradinariu, Aurora Joga, Bica Zorlescu, Veronica Oprea, **Violeta Otilia Potolinca**: *Fungal degradation behavior of two series of polyurethane urea composites obtained by different silver incorporation methods*. Journal of Elastomers and Plastics, 2017, 49 (2), 120-131. DOI:10.1177/0095244316639636
 9. Ștefan Oprea, **Violeta Otilia Potolinca**, Cristian-Dragoș Varganici: *Synthesis and properties of polyurethane urea with pyridine-2,6-dicarboxamide moieties in their structure*, RSC Advances, 2016, 6:106904-106913, DOI: 10.1039/C6RA23660J
 10. Ștefan Oprea, **Violeta Otilia Potolinca**, Veronica Oprea: *Synthesis and properties of new*

crosslinked polyurethane elastomers based on isosorbide. European Polymer Journal, 2016, 83:161-172. DOI: 10.1016/j.eurpolymj.2016.08.020

11. Ștefan Oprea, **Violeta Otilia Potolincă**, Petronela Gradinariu, Aurora Joga, Veronica Oprea: *Synthesis, properties, and fungal degradation of castor-oil-based polyurethane composites with different cellulose contents*. Cellulose 06/2016; 23(4):2515-2526. DOI:10.1007/s10570-016-0972-4
12. Ștefan Oprea, **Violeta Otilia Potolincă**: *Synthesis and Thermo-Mechanical Properties of Poly(urethaneurea) Elastomers Based on Heterocyclic Cross-linkers and Purine Diamine as a Chain Extender*. Advances in Polymer Technology 04/2016; 35(1):21532/1-6. DOI:10.1002/adv.21532
13. Ștefan Oprea, **Violeta Otilia Potolincă**: *Synthesis and Characterization of Linear and Cross-Linked Cyclodextrin Polyurethane Elastomers*. Polymer-Plastics Technology and Engineering 12/2013; 52(15):1550-1556. DOI:10.1080/03602559.2013.824463
14. Ștefan Oprea, **Violeta Otilia Potolincă**: *The synthesis and properties of binary acrylate oligomer mixtures and their blends with different soybean oil contents*. High Performance Polymers 10/2013; 25(7):822-831. DOI:10.1177/0954008313486499
15. **Violeta Otilia Potolincă**, Emil Buruiană, Ștefan Oprea: *Dielectric behavior of polyurethane and polyurethane-urea elastomers with pyridine moieties in the main chain*. Journal of Polymer Research 09/2013; 20(9):237. DOI:10.1007/s10965-013-0237-y
16. Ștefan Oprea, **Violeta Otilia Potolincă**: *Synthesis and characterization of novel linear and cross-linked polyurethane urea elastomers with 2,3-diaminopyridine in the main chain*. High Performance Polymers 03/2013; 25(2):147-155. DOI:10.1177/0954008312459546
17. Ștefan Oprea, **Violeta Otilia Potolincă**: *The influence of the chemical structure on the dielectric behavior of triazine derivative-based polyurethane-urea elastomers*. Designed Monomers & Polymers 01/2013; 16(1):47-55. DOI:10.1080/15685551.2012.705489
18. Ștefan Oprea, **Violeta Otilia Potolincă**, Emil C. Buruiană: *Novel pyridine-based poly(urethane-urea) elastomers with several different cross-linkers in the hard segment structure*. Advances in Polymer Technology 12/2012; 31(4):364-373. DOI:10.1002/adv.20259
19. Ștefan Oprea, **Violeta Otilia Potolincă**: *Synthesis and characterization of photoactive polyurethane elastomers with 2,3-dihydroxypyridine in the main chain*. Journal of Materials Science 01/2012; 47(2):677-684. DOI:10.1007/s10853-011-5838-4
20. Ștefan Oprea, Valentina E. Musteață, **Violeta Otilia Potolincă**: *Molecular Dynamics of Linear and Crosslinked Polyester Urethanes Studied by Dielectric Spectroscopy*. Journal of Elastomers and Plastics 11/2011; 43(6):559-576. DOI:10.1177/0095244311413645
21. **Violeta Otilia Potolincă**, Ștefan Oprea, A. Ciobanu, N.C. Lungu: *Synthesis and characterization of cyclodextrin polyurethane with scavenging properties*. Journal of Optoelectronics and Advanced Materials 10/2011; 13(10):1246-1250.
22. Ștefan Oprea, **Otilia Potolincă**, Veronica Oprea: *Dielectric properties of castor oil cross-linked polyurethane*. High Performance Polymers 02/2011; 23(1):49-58. DOI:10.1177/0954008310378403
23. Ștefan Oprea, **Otilia Potolincă**: *Synthesis of Polyether Urethanes with a Pyrimidine Ring in the Main Chain*. Designed Monomers & Polymers 10/2010; 13(6):523-534. DOI:10.1163/138577210X530620
24. Ștefan Oprea, **Otilia Potolincă**: *Synthesis and Characterization of Polyurethane Elastomers Based on 4,5-Dibromofluorescein and Various Crosslinkers*. MATERIALE PLASTICE 12/2009; 46(4):408-412.
25. Ștefan Oprea, **Otilia Potolincă**: *Synthesis of cross-linked polyurethane elastomers with fluorescein linkages*. Journal of Materials Science 08/2009; 44(15):4181-4187. DOI:10.1007/s10853-009-3625-2.

Presentations

1. **Violeta Otilia Potolincă**, Ștefan Oprea, *The influence of diisocyanate structure on the crystallization of polyethylene glycol-based polyurethanes*, 12th Edition of EUROINVENT EUROPEAN EXHIBITION OF CREATIVITY AND INNOVATION, Iași, 21-23 May 2020
2. **Violeta Otilia Potolincă**, Ștefan Oprea, *Fungal degradation of pyridine-based polyether polyurethane*, EUROINVENT International Conference on Innovative Research, Iași, 25-26 May 2017
3. **Violeta Otilia Potolincă**, Ștefan Oprea, Emil C. Buruiană, Valentina E. Musteață, *Insights into the relaxation behavior of new heterocyclic polyurethane and poly(urethane-urea) elastomers*, 3rd International Conference on Chemical Engineering, Innovative Materials and Processes, Iași, 09-11 November 2016, S3-C07
4. Ștefan Oprea, **Violeta Otilia Potolincă**, Petronela Gradinariu, Aurora Joga, Veronica Oprea, *Fungal resistance of pyridine-based polyurethane elastomers*, The 9th International Conference on

Modification, Degradation of Polymers, Krakow (Poland), 4-8 September 2016, P.III.21

5. Ștefan Oprea, **Violeta Otilia Potolincă**, Aurelian Stanciu, Bica Zorlescu, Veronica Oprea, *Synthesis and properties of the polyurethane urea with pyridine-2,6-dicarboxamide in their structure*, The 9th International Conference on Modification, Degradation of Polymers, Krakow (Poland), 4-8 September 2016, P.III.22

6. Ștefan Oprea, **Otilia Violeta Potolincă**, Aurelian Stanciu, Aurora Joga, Bica Zorlescu, Veronica Oprea, *Synthesis, properties and fungal degradation of the cellulose- castor oil based polyurethane composites*, International Conference on Green Chemistry and Sustainable Engineering, Rome (Italy), 20-22 July 2016, P.01069

7. Ștefan Oprea, **Otilia Violeta Potolincă**, Aurelian Stanciu, Aurora Joga, Bica Zorlescu, Veronica Oprea, *Synthesis and physical properties of heterocyclic poly(urethaneurea) containing purine derivatives*, European Polymer Congress, Dresden (Germany), 21-26 June 2015, SYN-P-019

8. Ștefan Oprea, **Otilia Violeta Potolincă**, Aurelian Stanciu, Aurora Joga, Bica Zorlescu, Veronica Oprea, *The effects of different methods of inclusion of silver into sulfadiazine-based polyurethane urea on changes in morphology and performance of such polyurethane urea*, European Polymer Congress, Dresden (Germany), 21-26 June 2015, SYN-P-021

9. **Violeta Otilia Potolincă**, Ștefan Oprea, Emil C. Buruiană, *On temperature-frequency analysis of heterocyclic poly(urethane-urea) elastomers*, EuroInvent, Iasi, 22-24 May 2014, RO.115

10. Ștefan Oprea, Aurora Joga, Aurelian Stanciu, Veronica Oprea, **Otilia Violeta Potolincă**, *Behavior of polyurethane acrylates with crude and modified soybean oil blends on the soil-burial biodegradation process*, The 8th International Conference on Modification, Degradation and Stabilization of Polymers, Portoroz (Slovenia), 31 August-4 Septembrie 2014, P46

11. Ștefan Oprea, **Violeta Otilia Potolincă**, Aurora Joga, Aurelian Stanciu, *Synthesis and properties of polyurethane-soybean oil mixtures by multiacrylate-crosslinked polymerization*, European Polymer Congress, Pisa (Italy), 16-21 June 2013, P1-63

12. Ștefan Oprea, **Violeta Otilia Potolincă**, Veronica Oprea, Aurora Joga, *Structure-properties relationship of sulfathiazole and silver sulfathiazole-based polyurethane elastomers*, European Polymer Congress, Pisa (Italy), 16-21 June 2013, P1-64

13. **Violeta Otilia Potolincă**, Ștefan Oprea, Emil Buruiană, *Segmented polyurethane and poly(urethane-urea) elastomers based on heterocyclic moiety: relaxations phenomena*, Zilele Universitatii "Alexandru Ioan Cuza" din Iasi, Conferinta Facultatii de Chimie, 25-26 October 2012, P13

14. Ștefan Oprea, **Violeta Otilia Potolincă**, *Elastomeri poliuretanic-acrilati ce includ in matricea polimera diferite uleiuri vegetale*, A XXXII-a Conferinta nationala de chimie, Calimanesti-Caciulata, Valcea, 3-5 October 2012, P.S.III.-11

15. **Violeta Otilia Potolincă**, Ștefan Oprea, Neculai Catalin Lungu, *Sinteza și caracterizarea elastomerilor poliuretanic liniari și reticulați cu grupări de ciclodextrină*, A XXXII-a Conferință națională de chimie, Călimănești-Căciulata, Vâlcea, 3-5 October 2012, P.S.III.-28

16. **Violeta Otilia Potolincă**, Ștefan Oprea, Emil C. Buruiană, *Evaluarea tranzițiilor și proceselor de relaxare dintr-o serie de elastomeri poliuretanic și poliuretanic-ureici prin schimbarea grupei funcționale a alungitorului de catenă*, Călimănești-Căciulata, Vâlcea, 3-5 October 2012, P.S.III.-29

17. **Violeta Otilia Potolincă**, Ștefan Oprea, Emil C. Buruiană, *The impact of pyridine derivatives structure on the polyurethane elastomers properties*, The 4th Bilateral Symposium on Functional Heterocyclic and Heterochain Polymers for Advances Materials, Iasi, 2-7 September 2012, P31

18. Ștefan Oprea, **Violeta Otilia Potolincă**, Anca Ciobanu, Sophie Fourmentin, Maria Alexandroaei, Neculai Cătălin Lungu, *Synthesis of some poly(ether urethanes) with adsorbant properties reticulated with β -cyclodextrin*, International Conference of Applied Sciences, Chemistry and Chemical Engineering, Fifth Edition, Bacau, 28-30 April 2011, P56

19. **Violeta Otilia Potolincă**, Ștefan Oprea, Emil Buruiană, *Sinteza și caracterizarea unor elastomeri poli(uretan-ureici) cu grupări piridinice în catena principală*, A XXIII-a Sesiune de comunicări științifice a Institutului de Chimie Macromoleculară „Petru Poni” Iași – Progrese în știința compușilor organici și macromoleculari, Iași, 29 September- 1 October 2011, P40

20. **Violeta Otilia Potolincă**, Ștefan Oprea, *Influența derivaților de piridină asupra dinamicii moleculare a elastomerilor poliuretanic și poliurean-ureici*, A XXIII-a Sesiune de comunicări științifice a Institutului de Chimie Macromoleculară „Petru Poni” Iași – Progrese în știința compușilor organici și macromoleculari, Iași, 29 September- 1 October 2011, P41

21. **Violeta Otilia Potolincă**, Valentina-Elena Musteata, Ștefan Oprea, *Influența structurii alungitorului heterociclic asupra proprietăților dielectrice ale elastomerilor poliuretanic*, Sesiunea de comunicări științifice a Facultății de Chimie, organizată în cadrul manifestărilor consacrate zilelor Universității

„Alexandru Ioan Cuza” din Iași, Iași, 11-13 November 2010, P23

22. **Violeta Otilia Potolincă**, Ștefan Oprea, Anca Ciobanu, Sophie Fourmentin, Cătălin Lungu, *Sinteza și caracterizarea β -ciclodextrin-poliuretanilor reticulați cu proprietăți de captare a compușilor organici*, Sesiunea de comunicări științifice a Facultății de Chimie, organizată în cadrul manifestărilor consacrate zilelor Universității „Alexandru Ioan Cuza” din Iași, Iași, 11-13 November 2010, P24

23. Ștefan Oprea, **Violeta Otilia Potolincă**, *Influența bromfluoresceinei asupra proprietăților elastomerilor poliuretani reticulați*, Sesiunea de comunicări științifice a Facultății de Chimie, organizată în cadrul manifestărilor consacrate zilelor Universității „Alexandru Ioan Cuza” din Iași, Iași, 30-31 October 2009, P50

24. Valentina-Elena Musteață, **Violeta Otilia Potolincă**, Ștefan Oprea, Virgil Barboiu, *Influența reticulării asupra comportării dinamice a poliuretanilor*, Sesiunea de comunicări științifice a Facultății de Chimie, organizată în cadrul manifestărilor consacrate zilelor Universității „Alexandru Ioan Cuza” din Iași, Iași, 30-31 October 2009, P44

Projects Team member, CNDI-UEFISCDI project, contract no. 178/2012, *Structuri compozite din rășini matrice biopoliuretanic sintetizate din uleiuri vegetale rafinate cu fibre liberiene* (BIOCOMRAN), 2012-2016, Ștefan Oprea, Aurelian Stanciu, **Violeta Otilia Potolincă**

Citations

Sum of times cited without self citations: 75 (according to ISI Web of Science, June 2020)

H-index 7 (according to ISI Web of Science, June 2020)

ORCID ID <https://orcid.org/0000-0003-0913-8324>

BrainMap ID U-1700-039L-3633

ResearcherID Q-6343-2016