



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **STEFAN OPREA**
Address Paun Str., 20, Iasi (Romania)
Mobile +40 0742478464
E-mail(s) stefop@icmpp.ro
Nationality Romanian
Date of birth 03/04/1957
Gender Male

Desired employment /
Occupational field **Synthesis and characterization of polymeric materials**

Work experience

Dates 1987–present;
Occupation or position held **Senior researcher, first degree**
Main activities and responsibilities Synthesis of polymers
Name and address of employer "Petru Poni" **Institute of Macromolecular Chemistry, Iasi, Romania,**
Type of business or sector research

Education and training

Dates 1994 - 1999
Title of qualification awarded PhD
Principal subjects / occupational skills covered Thesis : "Optimization of the synthesis of new polyester-urethane-acrylates"
Name and type of organisation providing education and training Iasi Technical University "Gh Asachi "
53A, Dimitrie Mangeron Bld., 700050 Iasi (Romania)
Dates 1978 - 1983
Title of qualification awarded Diploma in Chemistry Engineering
Principal subjects / occupational skills covered Organic Chemistry Engineering Education
Name and type of organisation providing education and training Iasi Technical University "Gh Asachi " (Technical University)
53A, Dimitrie Mangeron Bld., 700050 Iasi (Romania)

Personal skills and competences

Mother tongue(s) **Romanian**

Other language(s)

Self-assessment

European level (*)

English

French

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user

(*) [Common European Framework of Reference \(CEF\) level](#)

Social skills and competences

Communication abilities, adaptability, self improvement

Organisational skills and competences

Experience in organizing educational activities, in organizing and coordinating work teams. Teamwork

Technical skills and competences

Researches and Design in Macromolecular chemistry

Computer skills and competences

PC user

Artistic skills and competences

Songs, travelling

Other skills and competences

Excellent communication, presentation, public relations skills

Driving licence(s)

B

Additional information

Member of Romanian Chemistry Association

“C.D. Nenitescu” Award of the Romanian Academy, 2012

Collaboration in research - development projects as a head or team member with scientific and technical responsibilities.

Scientific articles published:

1. Vlad S, Oprea S, Stanciu A, Banceanu D, Vlad A. Some rheological aspects of polyurethane solutions. *Revue Roumaine de Chimie*, 43: 235-240, 1998.
2. Oprea S, Vlad S, Stanciu A, Ciobanu C, Macoveanu M. Syntheses and characterization of poly(urethane-urea-acrylate)s. *European Polymer Journal*, 35: 1269-1277, 1999.
3. Stanciu A, Bulacovschi V, Lungu M, Vlad S, Balint S, Oprea S. Mechanical behaviour of the crosslinked poly(ester-siloxane)urethanes. *European Polymer Journal*, 35 (11): 2039-2044, 1999.
4. Vlad S, Oprea S, Ciobanu C, Bulacovschi V Maleic anhydride-based unsaturated polyesters. *Revue Roumaine de Chimie - 44,(7):693-698, 1999.*
5. Oprea S, Vlad S, Stanciu A, Macoveanu M. Epoxy urethane acrylate. *European Polymer Journal*, 36, 373-378, 2000.
6. Vlad S, Oprea S, Stanciu A, Ciobanu C, Bulacovschi V. Polyesters based on unsaturated diols. *European Polymer Journal*, 36 (7): 1495-1501, 2000.
7. Oprea S, Vlad S, Stanciu A. Optimization of the synthesis of polyurethane acrylates with polyesters compound. *European Polymer Journal*, 36(11): 2409-2416, 2000.
8. Vlad S, Oprea S, Stanciu A. Optimization study of polyurethanes based on unsaturated polyester blends, *European Polymer Journal*, 37: 105-112, 2001.
9. Stanciu A, Airinei A, Oprea S. Poly(ester-siloxane)urethane network structure from tensile properties, *Polymer*, 42: 6081-6087, 2001.
10. Oprea S, Vlad S, Stanciu A. Poly(urethane-methacrylate)s. Synthesis and characterization, *Polymer*, 42: 7257-7266, 2001.
11. Stanciu A, Bulacovschi V, Oprea S, Vlad S. Thermal and mechanical behaviour of some new crosslinked poly(ester-siloxane)urethanes, *Polymer Degradation and Stability*, 72: 551-558, 2001.
12. Vlad S, Oprea S. Evaluation of rheological behaviour of some thermoplastic polyurethane solutions, *European Polymer Journal*, 37: 2461-2464, 2001.
13. Vlad S, Vlad A, Oprea S. Interpenetrating polymer networks based on polyurethane and polysiloxane, *European Polymer Journal*, 38: 829-835, 2002.
14. Oprea S, Oprea V. Mechanical behavior during different weathering tests of the polyurethane elastomers films, *European Polymer Journal*, 38: 1205-1210, 2002.
15. Oprea S, Vlad S. Evaluation of physico-mechanical properties of precipitated polyurethane films in medium of free radical agents, *European Polymer Journal*, 38: 1465-1470, 2002.
16. Oprea S. Effect of structure on the thermal stability of curable polyester urethane urea acrylates, *Polymer Degradation and Stability*, 75: 9-15, 2002.
17. Oprea S. Synthesis and properties of unsaturated poly(urethane-imide)s, *High Performance Polymers*, 15: 291-299, 2003.
18. Oprea S. Effect of solvent interactions on the properties of polyurethane films, *High Performance Polymers*, 17: 163-173, 2005.
19. Oprea S, Vlad S. Polyurethane materials for passive isolation bearings, *Journal of Optoelectronics and Advanced*

Materials, 8: 675-681, 2006.

20. Vlad S, Oprea S, Diaconu AC. Polyurethane elastomers based on aromatic diisocyanates for passive isolation systems, *Materiale Plastice*, 43: 9-14, 2006.
21. Oprea S, Vlad S. Optimization of the synthesis of polyurethane for passive isolation bearings, *Materiale Plastice*, 43: 335-339, 2006.
22. Vlad S, Oprea S. Effect of polyols on the physico-mechanical properties of some polyurethanes, *Journal of Optoelectronics and Advanced Materials*, 9: 994-999, 2007.
23. Oprea, S. Synthesis and characterization of polyurethane urea acrylates: Effects of the hard segments structure, *Journal of Applied Polymer Science*, 105: 2509-2515, 2007.
24. Oprea S, Vlad S. Polyurethane materials using aliphatic diisocyanates for passive isolation in buildings applications, *Materiale Plastice*, 44: 26-31, 2007.
25. Oprea S. The effect of polyhydroxyurethane on dyeing of cellulosic fabrics with direct and reactive dyes, *Coloration Technology*, 123: 329-332, 2007.
26. Oprea S, Vlad S, Stoicescu G, Casariu M. Polyurethane elastomeric bearing materials for passive isolation of railway, *Materiale Plastice*, 44: 226-232, 2007.
27. Vlad S, Oprea S. Chain extender and diisocyanate amount effects on the thermal, mechanical and wettability properties of some polyurethane elastomers, *E-Polymers*, Article Number: 027 (2008).
28. Oprea S, Ciobanu C. Effect of the temperature of polyurethane wet-casting membrane formation on the physico-mechanical properties, *High Performance Polymers*, 20: 208-220, 2008.
29. Oprea S. Synthesis and properties of cross-linked polyurethane composite materials for passive isolation, *Materiale Plastice*, 45: 15-19, 2008.
30. Oprea S. Effect of the diisocyanate and chain extenders on the properties of the cross-linked polyetherurethane elastomers, *Journal of Materials Science*, 43: 5274-5281, (2008).
31. Oprea S. Influence of the Chemical Structure of Soft Segment on the Properties of Polyurethane Acrylates, *Materiale Plastice*, 45: 269-273, 2008.
32. Oprea S. Effects of fillers on polyurethane resin-based polyurethane elastomeric bearing materials for passive isolation, *Journal of Composite Materials*, 42: 2673-2685, 2008.
33. Oprea S, Oprea V. Properties of Polyurethane Elastomers Obtained with Various Chain Extenders, *Materiale Plastice*, 45: 345-350, 2008.
34. Oprea S. Effect of structure on the thermal stability of crosslinked poly(ester-urethane), *Polimery*, 54, 120-125, 2009.
35. Oprea S. Effect of Composition and Hard-segment Content on Thermo-mechanical Properties of Cross-linked Polyurethane Copolymers, *High Performance Polymers*, 21: 353-370, 2009.
36. Oprea S, Potolinca O. Synthesis of cross-linked polyurethane elastomers with fluorescein linkages, *Journal of Materials Science*, 44: 4181-4187, 2009.
37. Oprea S, Oprea V. Synthesis and properties of polyetherurethane urea amide acrylates, *Designed Monomers and Polymers*, 12: 433-444, 2009.
38. Oprea S, Potolinca O. Synthesis and characterization of polyurethane elastomers based on 4,5-dibromofluorescein and various crosslinkers, *Materiale Plastice*, 46: 408-412, 2009.
39. Oprea S. Structure and Properties of Cross-Linked Polyurethane Copolymers, *Advances in Polymer Technology*, 28: 165-172, 2009.
40. Oprea S. Properties of polymer networks prepared by blending polyester urethane acrylate with acrylated epoxidized soybean oil, *Journal of Materials Science*, 45: 1315-1320, 2010.
41. Oprea S. Synthesis and properties of new polyurethane elastomers: influence of hard segment structure, *Polimery*, 55: 111-117, 2010.
42. Oprea S. Synthesis and properties of polyurethane elastomers with castor oil as crosslinker, *Journal of the American Oil Chemists Society*, 87: 313-320, 2010.
43. Oprea S. Influence of hard segment structure on degradation of cross-linked poly(ether urethanes) elastomers, *Journal of Elastomers and Plastics*, 42: 163-179, 2010.
44. Oprea S, Oprea V. Influence of crosslinkers on properties of new polyurethane elastomers, *Materiale Plastice*, 47: 54-58, 2010.
45. Oprea S. Synthesis and properties of the porous collagen/polyurethane composite, *Journal of Composite Materials*, 44: 2179-2189, 2010.
46. Oprea S. Synthesis and characterization of cross-linked poly(esterurethane)s for elastomeric bearings, *Polimery*, 55: 634-640, 2010.
47. Oprea S. The effect of chain extenders structure on properties of new polyurethane elastomers, *Polymer Bulletin*, 65: 753-766, 2010.
48. Oprea S, Potolinca O. Synthesis of polyether urethanes with a pyrimidine ring in the main chain, *Designed Monomers and Polymers*, 13: 523-534, 2010.
49. Oprea S. Dependence of fungal biodegradation of PEG/castor oil-based polyurethane elastomers on the hard-segment structure, *Polymer Degradation and Stability*, 95: 2396-2404, 2010.
50. Oprea S. Effect of the hard-segment structure on the dielectric relaxation of crosslinked polyurethanes, *Journal of Applied Polymer Science*, 119: 2196-2204, 2011.
51. Oprea S. Effect of the long chain extender on the properties of linear and castor oil cross-linked PEG-based polyurethane elastomers, *Journal of Materials Science*, 46: 2251-2258, 2011.
52. Oprea S, Potolinca O, Oprea V. Dielectric properties of castor oil cross-linked polyurethane, *High Performance Polymers*, 23: 49-58, 2011.
53. Oprea S, Doroftei F. Biodegradation of polyurethane acrylate with acrylated epoxidized soybean oil blend elastomers by *Chaetomium globosum*, *International Biodeterioration & Biodegradation*, 65: 533-538, 2011.
54. Oprea S Preparation and characterization of the agar/polyurethane composites *Journal of Composite Materials*, 45: 2039-2045, 2011.
55. Potolinca V.O., Oprea S., Ciobanu A., Lungu N.C.. Synthesis and characterization of cyclodextrin polyurethane with scavenging properties. *Journal of Optoelectronics and Advanced Materials* 13(10): 1246- 1250, 2011.
56. Oprea S. Molecular dynamics, thermo-mechanical and optical studies on benzidine chain extended polyurethane-urea. *Journal of Polymer Research* 18: 1777-1785, 2011
57. Oprea S., Musteata V.-E., Potolinca V. O. Molecular dynamics of linear and crosslinked polyester urethanes studied by dielectric spectroscopy. *Journal of Elastomers and Plastics* 43: 559-576, 2011
58. Oprea S, Potolinca VO Synthesis and characterization of photoactive polyurethane elastomers with 2,3-dihydropyridine in the main chain. *Journal of Materials Science* 47:677-684, 2012.

59. Oprea S. Degradation of crosslinked poly(ester-urethanes) elastomers in distilled water: Influence of hard segment. *Journal of Applied Polymer Science* 124(2):1059–1066, 2012
60. Oprea S. Synthesis and characterization of linear and crosslinked poly(urethane urea) elastomers with triazine moieties in the main chain *Polymer Bulletin* 68(5): 1271-1285, 2012
61. Oprea S. Novel quinoline-based polyurethane elastomers. The effect of the hard segment structure in properties enhancement. *Journal of Polymer Research* 19:9767(1-9), 2012
62. Oprea S. Effect of resorcinol-based chain extenders chemical structure on the enhanced properties of polyurethane elastomers. *High Performance Polymers* 24(5): 389–397, 2012
63. Agavriiloaie L., Oprea S., Barbuta M., Luca F. Characterisation of polymer concrete with epoxy polyurethane acryl matrix. *Construction and Building Materials* 37: 190–196, 2012
64. Oprea S., Potolinca V. O., Buruiana E. C. Novel pyridine-based poly(urethane-urea) elastomers with several different cross-linkers in the hard segment structure. *Advances in Polymer Technology*, 31(4): 364–373 2012
65. Oprea S. Effects of guar gum content on structure and properties of multi-crosslinked polyurethane composite films. *Composites: Part B* 44: 76–83, 2013
66. Oprea S., Potolinca V.O. The influence of the chemical structure on the dielectric behavior of triazine derivative-based polyurethane–urea elastomers. *Designed Monomers and Polymers* 16(1): 47–55, 2013
67. Oprea S., Potolinca V. O. Synthesis and characterization of novel linear and cross-linked polyurethane urea elastomers with 2,3-diaminopyridine in the main chain *High Performance Polymers*, 25: 147-155, 2013
68. Oprea S. Effect of pyridazine content and crosslinker structure on the properties of polyurethane elastomers *Journal of Applied Polymer Science* 128: 3974–3981, 2013
69. Oprea S., Gradinariu P., Joga A., Oprea V. Synthesis, structure and fungal resistance of sulfadiazine-based polyurethane ureas *Polymer Degradation and Stability* 98:1481-1488, 2013
70. Oprea S. Properties of crosslinked polyurethanes obtained by acrylic side-group polymerization and of their blends with various plant oils. *Journal of Applied Polymer Science* 129: 3640–3649, 2013
71. Potolinca V O, Buruiana E, Oprea S. Dielectric behavior of polyurethane and polyurethane-urea elastomers with pyridine moieties in the main chain. *Journal of Polymer Research* 20:237, 2013
72. Oprea S., Oprea V. Synthesis and characterization of the cross-linked polyurethane–gum arabic blends obtained by multiacrylates cross-linking polymerization. *Journal of Elastomers & Plastics* 45(6) 564–576, 2013
73. Oprea S., Potolinca V. O. The synthesis and properties of binary acrylate oligomer mixtures and their blends with different soybean oil contents. *High Performance Polymers* 25: 822-831, 2013
74. Oprea S., Potolinca VO. Synthesis and characterization of linear and crosslinked cyclodextrin polyurethane elastomers. *Polymer-Plastics Technology and Engineering* 52: 1550–1556, 2013
75. Oprea S, Hitruc E G, Oprea V. Structure – properties relationship of sulfathiazole and silver sulfathiazole-based polyurethane elastomers. *Polymer-Plastics Technology and Engineering*, 53: 671–677, 2014
76. Oprea S, Joga A, Zorlescu B, Oprea V. Effect of the hard segment structure on properties of resorcinol derivatives-based polyurethane elastomers. *High Performance Polymers* 2014, Vol. 26(8): 859–866
77. Oprea S. Effects of introducing crude and modified soybean oil into polyurethane structures on the soil-burial biodegradation process. *Polymer-Plastics Technology and Engineering*, 54: 342–349, 2015
80. Oprea S., Oprea V.. Biodegradation of crosslinked polyurethane acrylates/guar gum composites under natural soil burial conditions. *E-Polymers*, 16(4): 277-286, 2016.
81. Oprea S., Potolincă V. O., 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*, 35(1):21532, 2016.
82. Oprea S., Potolincă V. O., Grădinariu P., Joga A., Oprea V.. Synthesis, properties, and fungal degradation of castor-oil-based polyurethane composites with different cellulose contents. *Cellulose*, 23(4):2515-2526, 2016.
83. Oprea S., Potolincă V. O., Oprea V.. Synthesis and properties of new crosslinked polyurethane elastomers based on isosorbide. *European Polymer Journal*, 83:161-172, 2016.
84. Oprea S., Potolincă V. O., Varganici C.-D. Synthesis and properties of polyurethane urea with pyridine-2,6-dicarboxamide moieties in their structure, *RSC Advances*, 6:106904-106913, 2016.

Patents:

1. Ciobanu C., **Oprea S.** *Composition of ink ribbons* No. 104759/1991.
2. **Oprea S.**, Ciobanu C., Bărlădeanu C. *Method of obtaining crosslinked polyurethanes* No. 104707 / 1994
3. **Oprea S.**, Ciobanu C., Nastase O.I. *Dyes or pigment pastes and process for obtaining* No. 111465 / 1996
4. **Oprea S.** *Epoxy urethane acrylate and process for obtaining* No. 116406 / 2001
5. **Oprea S.**, Ciobanu C., Adumitresci C. *Polyurethane acrylate and process for obtaining* No. 116627 / 2001

d) Hirsch index = 16, Publications range = 1998-2016, Total number of citations = 669

