



Curriculum vitae Europass



Personal information

Surname(s) **ALBU**
 First name(s) **Raluca Marinica**
 Address(es) Iași, România
 Telephone(s) +40232 217 454
 Fax(es)
 E-mail(s) albu.raluca@icmpp.ro or alburaluca@yahoo.com
 Nationality Romanian

Current working place

Department of Physical Chemistry of Polymers, "Petru Poni" Institute of Macromolecular Chemistry - Iași, Romania

Occupational field

Research

Work experience

2019-present: Scientific researcher at Petru Poni" Institute of Macromolecular Chemistry
 2012- 2019: Research assistant at Petru Poni" Institute of Macromolecular Chemistry
 2007-2012: PhD student at Petru Poni" Institute of Macromolecular Chemistry
 2004-2007: Qualified teacher in physics and chemistry at „C. F. Unirea" Pașcani High School

Education and training

2007–2012: PhD in chemistry at Petru Poni" Institute of Macromolecular Chemistry - Romanian Academy of Science
 2004–2006: Master diploma at „Al. I. Cuza" University, Faculty of Physics
 2000–2004: Bachelor degree at „Al. I. Cuza" University, Faculty of Physics
 1996–2000: High School diploma at High School „Mihail Sadoveanu" Pașcani-Iași

Personal skills and competences

Mother tongue(s) Romanian
 Other language(s)

Self-assessment
 European level (*)

English
 Russian

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
B1	B2	A2	B1	B1
B1	B1	A1	A2	A1

(*)Common European Framework of Reference for Languages

Social skills and competences

Good collaboration with co-workers and other persons

Computer skills and competences

Microsoft Office 2003-2010, ACDSee, WordPress, AdobePhotoShop, CorelDRAW, Mathcad, Sigma plot, IrfanView

Technical skills and competences	-Operation with Schott viscosimeter: investigation of conformational changes in binary and ternary polymer solution in dilute domain -Operation with Bohlin CS50 rheometer: study of viscoelasticity and flow behavior of semi-concentrated polymer solutions -Operation with Zeiss interferometer: study of refractive index -Operation with inoLab 740 Multimeter: study of ionic conduction in polymer solutions
Organizational skills	Ability of analysis, assistance, organization and scheduling of activities
Scientific contributions	17 research articles in ISI journals 7 chapters appeared in national and international publishers 5 papers published in proceedings >30 participation at conferences member in 2 research projects
Training courses/ Summer schools	8-13.07. 2013: Strengthening the Romanian Research Capacity in Multifunctional Polymeric Materials Summer School, "Petru Poni" Institute of Macromolecular Chemistry, Iasi 2014-2015: Communication in foreign languages, The Centre for Performance in Continuous Vocational Training of "Apollonia" University, Iasi 2014-2015: Operator in introduction, processing and validation of data Supported by PECAFROM project code POSDRU/144/6.3/S/127928, The Centre for Performance in Continuous Vocational Training of "Apollonia" University, Iasi
Main scientific interests	Molecular modeling of polymeric materials, rheology of multicomponent polymer systems, water depollution by means of polymeric materials with chelating groups, porous polymeric architectures generated by modulating the solubility of precursor systems, polymer/metal systems for design of reliable electronic device components, wettability and hemocompatibility of polymer materials
Scientific visibility	Hirsch index: 5 (Web of Science)
Annexes	

Scientific papers:

1. R.M. Albu, E. Avram, I. Stoica, E.G. Ioanid, S. Ioan, Miscibility and morphological properties of quaternized polysulfone blends with polystyrene and poly(4-vinylpyridine), *Polym. Compos.*, 32 (10), 1661 - 1670, 2011.
2. Polysulfones with chelating groups for heavy metals retention, R.M. Albu, E. Avram, I. Stoica, S. Ioan, *Polymer Composites*, 33 (4), 573 - 581, 2012.
3. Dielectric relaxation and AC-conductivity of modified polysulfones with chelating groups, R.M. Albu, E. Avram, V.E. Musteata, S. Ioan, *Journal of Solid State Electrochemistry*, 18 (3), 785 - 794, 2014
4. Gold layers on untreated and plasma-treated substrates of quaternized polysulfones, R.M. Albu, I. Stoica, E. Avram, E.G. Ioanid, S. Ioan, *Journal of Solid State Electrochemistry*, 18 (10), 2803 - 2813, 2014.
5. Blends based on ionic polysulfones with improved conformational and microstructural characteristics: Perspectives for biomedical applications, A. Filimon, R.M. Albu, I. Stoica, *Composites Part B*, 93, 1 - 11, 2016.
6. R.M. Albu, E. Avram, I. Stoica, E.G. Ioanid, S. Ioan, Miscibility and morphological properties of quaternized polysulfone blends with polystyrene and poly(4-vinylpyridine), *Polym. Compos.*, 32 (10), 1661 - 1670, 2011 cited: 5, IF: 2.268.
7. Polysulfones with chelating groups for heavy metals retention, R.M. Albu, E. Avram, I. Stoica, S. Ioan, *Polymer Composites*, 33 (4), 573 - 581, 2012.
8. Dielectric relaxation and AC-conductivity of modified polysulfones with chelating groups, R.M. Albu, E. Avram, V.E. Musteata, S. Ioan, *Journal of Solid State Electrochemistry*, 18 (3), 785 -

794, 2014

9. Gold layers on untreated and plasma-treated substrates of quaternized polysulfones, R.M. Albu, I. Stoica, E. Avram, E.G. Ioanid, S. Ioan, *Journal of Solid State Electrochemistry*, 18 (10), 2803 - 2813, 2014.
10. Blends based on ionic polysulfones with improved conformational and microstructural characteristics: Perspectives for biomedical applications, A. Filimon, R.M. Albu, I. Stoica, *Composites Part B*, 93, 1 - 11, 2016.
11. A.I. Barzic, C. Hulubei, I. Stoica, R.M. Albu, Insight on light dispersion in semi-alicyclic polyimide alignment layers to reduce optical losses in display devices, *Macromol. Mater. Eng.*, 303 (12), 2018.
12. Antagonistic effects in structural design of sulfur-based polyimides as shielding layers for solar cells, C. Hulubei, R.M. Albu, G. Lisa, A. Nicolescu, E. Hamciuc, C. Hamciuc, A.I. Barzic, *Solar Energy Materials and Solar Cells*, 193, 219-230, 2019.
13. Semi-alicyclic polyimides as potential membrane oxygenators: rheological implications on film processing, morphology and blood compatibility, R.M. Albu, C. Hulubei, I. Stoica, A.I. Barzic, *eXPRESS Polym. Lett.*, 13 (4) 349-364, 2019.
14. C.-D. Nechifor, M. Postolache, R.M. Albu, A.I. Barzic, D.O. Dorohoi, Induced birefringence of rubbed and stretched polyvinyl alcohol foils as alignment layers for nematic molecules, *Polymers for advanced technologies*, 30 (8), 2143-2152, 2019.
15. C. Hulubei, R.M. Albu, G. Lisa, A. Nicolescu, E. Hamciuc, C. Hamciuc, A.I. Barzic, Antagonistic effects in structural design of sulfur-based polyimides as shielding layers for solar cells, *Solar energy materials and solar cells*, 193, 219-230, 2019, cited:1, IF: 6.019.
16. C.-D. Nechifor, M. Postolache, R.M. Albu, A.I. Barzic, D.O. Dorohoi, Induced birefringence of rubbed and stretched polyvinyl alcohol foils as alignment layers for nematic molecules, *Polymers for advanced technologies*, 30 (8), 2143-2152, 2019, cited:0, IF: 2.162.
17. A.I. Barzic, M. Soroceanu, R.M. Albu, E.G. Ioanid, L. Sacarescu, V. Harabagiu, Correlation between shear-flow rheology and solution spreading during spin coating of polysilane solutions, *Macromol. Res.*, 27 (12), 1210-1220, 2019, IF: 1.758.

List of book chapters:

1. R.M. Albu, Structure-properties relationships of functionalized polysulfones, in functionalized polysulfones: synthesis, characterization, and applications, A. Filimon, in *Functionalized polysulfones. Synthesis, characterization, and applications*, S. Ioan, Ed., Taylor & Francis, Boca Raton, 97-124, 2015.
2. R.M. Albu, Functionalized polysulfones-metal complexes, in *Functionalized polysulfones. Synthesis, characterization, and applications*, S. Ioan, Ed., Taylor & Francis, Boca Raton, 97-124, 2015
3. R.M. Albu, Electrochemical inclusion of metallic clusters in organic polymers, in *Multiphase polymer systems: Micro- to nanostructural evolution in advanced technologies*, A.I. Barzic, S. Ioan, Ed., Taylor & Francis, Boca Raton, 313-330, 2016.
4. R.M. Albu, Thin metal films on polymer substrate, in *Multiphase polymer systems: Micro- to nanostructural evolution in advanced technologies*, A.I. Barzic, S. Ioan, Ed., Taylor & Francis, Boca Raton, 331-347, 2016.
5. A.I. Barzic, R.M. Albu, L.I. Buruiana, Liquid crystal polymers, in *High performance polymers and their nanocomposites*, P.M. Visakh, A.O. Semkin, Ed., Wiley, USA, 27-58, 2018
6. A.I. Barzic, L.I. Buruiana, R.M. Albu, Cellulose derivatives: synthesis, properties and applications, in *Carboxymethyl cellulose - Synthesis and Applications*, M.I.H. Mondal, Ed., Nova Science Publisher, USA, 271-299, 2019.
7. A.I. Barzic, L. I. Buruiana, R.M. Albu, Perspectives on polymer materials in products manufacturing for green electronics, in *Green materials and environmental chemistry new production technologies, unique properties, and applications*, Ed.: A. Zahrim Yaser, P. Khullar, A.K. Haghi, Apple Academic Press Taylor & Francis, accepted, 2020.

List of research projects as a member:

1. New approaches in designing polymer surfaces with controllable pattern for applications in biomedicine and high technologies, project leader: Dr. A.I. Barzic, research team: L.I. Buruiana, R.M. Albu, I. Stoica, C. Hulubei, S.L. Nica, A. Coroaba, Grant CNCS, PNII- RU-TE-2014-4-2976, no. 256/1.10.2015, budget: 550 000 lei.
2. High performance polymeric biomaterials based on functionalized polysulfones with medical applications, project leader: Dr. A. Filimon, research team: S. Ioan. E. Avram, A.M. Dobos, R.M. Albu, I.L. Buruiana, M.D. Onofrei, Grant CNCS, PN-II-RU-TE-2012- 3-0143, no. 62/30.04.2013, budget: 645 832 lei