



## Europass Curriculum Vitae

### Personal information

First name(s) / Surname(s) **ADINA MARIA DOBOS (NECULA)**  
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E-mail [necula\\_adina@yahoo.com](mailto:necula_adina@yahoo.com) , [necula.adina@icmpp.ro](mailto:necula.adina@icmpp.ro),  
Date/place of birth September 8, 1981 / Pascani, Romania  
Nationality/Status Romanian/Married

### Work experience

Dates	2019-present
Occupation or position held	Scientific Researcher
Main activities and responsibilities	Physico-chemical characterization of the complex polymer systems; Analysis of the processes and technologies that are on the border between physics-chemistry-biology at micro- and macro-scales.
Name and address of employer	"Petru Poni" Institute of Macromolecular Chemistry, Physical Chemistry of Polymers Department, Grigore Ghica Vodă Alley, nr. 41A, 700487 - Iassy
Type of business or sector	Research
Dates	2006-2019
Occupation or position held	Research Assistant
Main activities and responsibilities	Fundamental/Applied research of polymers: thermodynamics and morphology of the multicomponent systems both in solution and in solid state.
Name and address of employer	"Petru Poni" Institute of Macromolecular Chemistry, Physical Chemistry of Polymers Department, Grigore Ghica Vodă Alley, nr. 41A, 700487 – Iassy
Dates	2004-2006
Occupation or position held	Professor
Main activities and responsibilities	Teaching and extra-curricular activities
Name and address of employer	"Mogosesti-Siret " Secondary School
Type of business or sector	Education

### Education and training

Dates	July 8-13, 2013
Title of qualification awarded	Diploma of attendance
Principal subjects/occupational skills covered	Polymeric materials
Name and type of organisation providing education and training	Strengthening the Romanian research capacity in Multifunctional Polymeric Materials – STREAM summer school, organized by "Petru Poni" Institute of Macromolecular Chemistry
Dates	2006-2010
Title of qualification awarded	PhD diploma

Principal subjects/occupational skills covered	Elementary studies regarding the conformation, configuration and interactions in diluted solutions under the influence of concentration, solvent mixtures and temperature.
Name and type of organisation providing education and training	Romanian Academy, "Petru Poni" Institute of Macromolecular Chemistry, Iassy
Dates	2004-2006
Title of qualification awarded	Master Degree
Principal subjects/occupational skills covered	Optics, Spectroscopy and Polymer Physics
Name and type of organisation providing education and training	"Al. I. Cuza" University of Iassy, Faculty of Physics, Specialization : Optics, Spectroscopy and Polymer Physics
Dates	2000-2004
Title of qualification awarded	Bachelor Degree
Name and type of organisation providing education and training	"Al. I. Cuza" University of Iassy, Faculty of Physics, Specialization: Biophysics
Dates	1996-2000
Title of qualification awarded	High School Diploma
Name and type of organisation providing education and training	"Mihail Sadoveanu", Theoretical high school, Pascani, Specialization: Chemistry-Physics
<b>Personal skills and competences</b>	
Mother tongue(s)	Romanian
Other language(s)	English, Russian
Social skills and competences	Communication and networking skills acquired through specific activities; Experience in team work; Flexibility for new and different circumstances.
Organisational skills and competences	Capacity for analysis, coordination, organization and planning; Decisional capacity; Assumption of responsibilities.
Technical skills and competences	Ability to use laboratory devices as: - Schott viscosimeter; - Bohlin CS50 rheometer; - Zeiss interferometer; - InoLab 740 Multimeter.
Computer skills and competences	Microsoft Word, Excel, PowerPoint, Adobe PhotoShop, Mathcad, SigmaPlot, HyperChem
<b>Additional information</b>	
	Articles published in extenso in ISI - 19
	Books (as co-author) - 1
	Book chapters - 11
	National and international conferences (poster/or oral presentation) - 60
	Total number of citations (without self-citations): 103
	Hirsch Index according to Web of Knowledge: 12
	Member in project team (CEEX, CNCSIS, PED): 4
	Reviewer of prestigious scientific journals

#### List of ISI publications:

1. **Adina Maria Necula**, Niculae Olaru, Liliana Olaru, Silvia Ioan, Influence of the Substitution Degree on the Dilute Solution Properties of Cellulose Acetate, J. Macromol. Sci. Part. B: Phys., 2008, 47(5), 913-928. **(F.I. = 0.911)**
2. **Adina Maria Necula**, Liliana Olaru, Niculae Olaru, Silvia Ioan, Interferometric Evaluation of Association Equilibrium in the Cellulose Acetate/Acetone/Water Ternary System, Proceedings of the Romanian Academy, Series A, 2008, 9(3), 191-198. **(F.I. = 1.294)**

3. Oana Petreus, Georgeta Cazacu, **Adina Maria Necula**, Diana Ciolacu, Synthesis and Characterization of Phosphorus-Containing Lignin Epoxy Resin, *Cell. Chem. Technol.*, 2008, 42(9-10), 569-576. **(F.I. = 1.43)**
4. **Adina Maria Necula**, Nicolae Olaru, Liliana Olaru, Mihaela Homocianu, Silvia Ioan, Influence of the Substitution Degrees on the Optical Properties of Cellulose Acetates, *J. Appl. Polym. Sci.*, 2009, 115, 1751-1757. **(F.I. = 2.52)**
5. Silvia Ioan, **Adina Maria Necula**, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Ghiocel Emil Ioanid, Surface Properties of Cellulose Acetate, *High Perform. Polym.*, 2010, 22(5), 598-608. **(F.I. = 1.568)**
6. Silvia Ioan, **Adina Maria Necula**, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Influence of Casting Solution Characteristics on Cellulose Acetate Membranes: Rheology and Atomic Force Microscopy, *Int. J. Polym. Anal. Charact.*, 2010, 15(3), 166-181. **(F.I. = 1.716)**
7. **Adina Maria Necula**, Simona Dunca, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Silvia Ioan, Morphological Properties and Antibacterial Activity of Nano-Silver-Containing Cellulose Acetate Phthalate Films, *Int. J. Polym. Anal. Charact.*, 2010, 15(6), 341-350. **(F.I. = 1.716)**
8. **Adina Maria Necula**, Iuliana Stoica, Nicolae Olaru, Florica Doroftei, Silvia Ioan, Silver Nanoparticles in Cellulose Acetate Polymers: Rheological and Morphological Properties, *J. Macromol. Sci., Part. B: Phys.* 2011, 50, 639-651. **(F.I. = 0.911)**
9. **Adina Maria Dobos**, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Emil Ghiocel Ioanid, Silvia Ioan, Surface Properties and Biocompatibility of Cellulose Acetate, *J. Appl. Polym. Sci.*, 2012, 125, 2521-2528. **(F.I. = 2.52)**
10. **Adina Maria Dobos**, Mihaela Dorina Onofrei, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Silvia Ioan, Rheological Properties and Microstructures of Cellulose Acetate Phthalate/Hydroxypropyl Cellulose Blends, *Polym. Compos.*, 2012, 33(11), 2072-2083. **(F.I. = 2.265)**
11. **Adina Maria Dobos**, Mihaela Dorina Onofrei, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Silvia Ioan, Influence of Self-Complementary Hydrogen Bonding on Solution Properties of Cellulose Acetate Phthalate in Solvent/Non-Solvent Mixtures, *Cell. Chem. Technol.*, 2013, 47(1-2), 13-21. **(F.I. = 1.43)**
12. Mihaela Dorina Onofrei, **Adina Maria Dobos**, Iuliana Stoica, Nicolae Olaru, Liliana Olaru, Silvia Ioan, Lyotropic liquid crystal phases in cellulose acetate phthalate/hydroxypropyl cellulose blends, *J. Polym. Environ.*, 2014, 22(1), 99-111. **(F.I. = 2.572)**
13. **Adina Maria Dobos**, Mihaela Dorina Onofrei, Nita Tudorachi, Silvia Ioan, Structural Orientations of Cellulose Acetate Phthalate/Ethyl Cellulose Blends in Solution, *J. Macromol. Sci. Part. B: Phys.*, 2015, 54(9), 1092-1104. **(F.I. = 0.911)**
14. Anca Filimon, **Adina Maria Dobos**, Ecaterina Avram, Silvia Ioan, Ionic Polymers Based on Quaternized Polysulfones: Hydrodynamic Properties of Polymer Mixtures in Solution, *Pure Appl. Chem.*, 2014, 86(11), 1871-1882. **(F.I. = 5.294)**
15. Mihaela Dorina Onofrei, **Adina Maria Dobos**, Simona Dunca, Emil Ghiocel Ioanid, Silvia Ioan, Biocidal Activity of Cellulose Materials for Medical Implants, *J. Appl. Polym. Sci.*, 2015, 132(18), 41932. **(F.I. = 2.52)**
16. Anca Filimon, **Adina Maria Dobos**, Ecaterina Avram, Ionic Transport Processes in Polymer Mixture Solutions Based on Quaternized Polysulfones, *J. Chem. Thermodyn.*, 2017, 106, 160-167. **(F.I. = 2.888)**
17. **Adina Maria Dobos**, Anca Filimon, Predictive Methods of Some Optoelectronic Properties for Blends Based on Quaternized Polysulfones, *Chem. Phys.*, 2017, 498-499, 1-6. **(I.F. = 1.771)**
18. Anca Filimon, **Adina Maria Dobos**, Valentina Musteata, New Perspectives on Development of Polysulfones/Cellulose Derivatives Based Ionic-Exchange Membranes: Dielectric Response and Hemocompatibility Study, *Carbohydr. Polym.*, 2019, 226, 115300. **(I.F. = 7.182)**
19. **Adina Maria Dobos**, Anca Filimon, Alexandra Bargan, Mirela Fernanda Zaltariov, New Approaches for the Development of Cellulose Acetate/Tetraethyl Orthosilicate Composite Membranes: Rheological and Microstructural Analysis, *J. Mol. Liq.*, 2020, 309, 113129 **(I.F. = 5.065)**

#### Books (as co-author):

1. Andreea Irina Cosutchi, Anca Filimon, **Adina Maria Necula**, Raluca Marinica Albu, Silvia Ioan, *Modele Matematice Pentru Prestabilirea Unor Proprietati Specifice Polimerilor. Teorie si Experiment*, Editura PIM – Acreditata CNCSIS, Bucuresti, ISBN: 978-606-520-216-0, 2008.

#### Book chapters:

1. Anca Filimon, Andreea Irina Cosutchi, **Adina Maria Necula**, Investigarea Proprietatilor de Suprafata prin Metoda Microscopiei de Forta Atomica (AFM) In: *Plasma Rece in Tratamentul Materialelor: De la Fundamental la Aplicatii*, Ed. Performantica - CNCSIS Bucuresti, ISBN: 978-973-730-394-3, 2007, Ch. II, pg. 337-351.
2. Silvia Ioan, **Adina Maria Dobos-Necula**, Silver Nanoparticles in Cellulose Derivative Matrix In: *Nanotechnology in Polymers*, Ed. Studium Press LLC, Houston-Texas, ISBN: 1-933699-90-6, 2012, Ch. 11, pg. 191-248.
3. **Adina Maria Dobos**, Mihaela-Dorina Onofrei, Silvia Ioan, Liquid Crystals and Cellulose Derivatives Composites In: *Green Biorenewable Biocomposites From Knowledge to Industrial Applications*, Ed. Apple Academic Press-CRC Press Taylor and Francis Group, Canada, ISBN: 978-1-77188-032-9, 2015, Ch. 3, pg. 57-110.
4. Mihaela Dorina Onofrei, **Adina Maria Dobos**, Silvia Ioan, Processes in Cellulose Derivative Structures In: *Nanocellulose Polymer Nanocomposites: Fundamentals and Applications*, Ed. Wiley, USA, ISBN: 978-1-118-87190-4, 2014, Ch. 14, pg 355-393.

5. **Adina Maria Dobos**, Mihaela Dorina Onofrei, Silvia Ioan, Cellulose Acetate Nanocomposites with Antimicrobial Properties In: Eco-friendly Polymer Nano-composites: Chemistry and Applications, Ed. Springer, Germany, ISBN: 978-81-322-2469-3, 2015, Ch. 12, pg. 367-398.
6. **Adina Maria Dobos**, Anca Filimon, Polymeric Membranes: From Basic Concepts and Separation Mechanisms to Their Impact on Daily Life In: Polymer Science: Research Advances, Practical Applications and Educational Aspects, Polymer Science Book Serie N° 1, Ed. Formatex Research, ISBN-13: 978-84-942134-8-9, 2016, pg. 429-440.
7. **Adina Maria Dobos**, Miscible and Immiscible Polymer Blends The Impact of Viscosity and Phase-Separation on the Development of Commercial Products In: Multiphase Polymer Systems Micro- to Nanostructural Evolution in Advanced Technologies, Ed. CRC Press Taylor and Francis Group, New York, ISBN: 978-1-4987-5563-4, 2017, Ch. 1, pg. 3-21.
8. **Adina Maria Dobos**, Surface Engineering of Polymeric Membranes In: Smart Materials: Integrated Design, Engineering Approaches, and Potential Applications, Ed. CRC Press Taylor and Francis Group, New York, ISBN: 9781771886871, 2018, Ch. 10, pg 295-323.
9. **Adina Maria Dobos**, Anca Filimon, Role of Metal Ion Implantation on Ionic Polymer Metal Composite Membranes In: Ionic Polymer Metal Composites for Bending Actuator Applications, Ed. Springer, ISBN-13: 978-3030137274, 2019, Ch.4, pg. 53-73.
10. Anca Filimon, **Adina Maria Dobos**, Application of Electrospun Materials in Bioinspired Systems In: Electrospun Materials and their Allied Applications, Ed. Wiley, ISBN: 978-1-119-65486-5, 2020, Ch. 11, pg. 307-351.
11. **Adina Maria Dobos**, Mihaela Dorina Onofrei, Anca Filimon, Sustainable Eco-Friendly Polymer-Based Membranes Used in Water Depollution for Life Quality Improvement in Green Polymer Chemistry and Composites: Pollution Prevention and Waste Reduction, Ed. CRC Press Taylor and Francis Group, New York, ISBN: 9781771889377, 2021, Ch. 12, pg. 225-268.

### Research project:

Member of 4 research project:

1. CNCSIS Grant, no. 104GR/2007-2008, CNCSIS 178, "Properties of some polymers with special architectures for biomedical applications", Project leader: S. Ioan;
2. CEEEX, Grant, no. 102/14.09.2006 (2006-2008), "Lignin - a source of raw materials for unconventional fuels, energy, chemicals products and performant materials in terms of sustainable development" (LignoMat), Project leader: G. Cazacu;
3. CNCSIS-TE Grant, no. 62/30.04.2013, PN-II-RU-TE-2012-3-0143, "High Performance Polymeric Biomaterials based on functionalized polysulfones with medical applications", Project leader: A. Filimon
4. Demonstration experimental project, no. 310PED/2020, PN-III-P2-2.1-PED-2019-3013, "New "green" technology for advanced water treatment based on functionalized polysulfones/ionic liquids membranes" (GreenTechMembr), Project leader: A. Filimon.

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