

## Europass Curriculum Vitae



### Personal information

First name / Surname **Daniela Ivanov**  
Address 41A Gr. Ghica Voda Alley 700487-Iasi, ROMANIA  
Telephone(s) +40 232 217454 Mobile: +40 747 323013  
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E-mail dani@icmpp.ro  
Nationality Romanian

### Education and training

Dates 2012-2014  
Title of qualification awarded **MS in Medical Bioengineering**  
Principal subjects/occupational skills covered Biomaterials, Biocompatibility, Tissue Engineering, Medical Microbiology, Genetics and Pharmacogenomics, Immunology, Medical Bioethics, Cell and Molecular Biology, Cultures of Cells and Tissues, Drug Design, Biosensors  
Name and type of organisation providing education and training "Gr. T. Popa" University of Medicine, Faculty of Medical Bioengineering, Iasi, Romania

Dates 2004  
Title of qualification awarded **PhD in Chemistry**  
Principal subjects/occupational skills covered **Isomaleimides – Precursors in Polymaleamide Synthesis**/ Physical Organic Chemistry, Synthesis and Characterisation of Monomers, Polyaddition Polymers and Polymer Materials  
Name and type of organisation providing education and training "Gh. Asachi" Technical University, Iasi, Romania

Dates 1992  
Title of qualification awarded **Engineer in Chemistry**  
Principal subjects/occupational skills covered **Organic Chemical Engineering**/ Organic Chemistry, Reaction Mechanisms in Organic Chemistry, Analytical Chemistry, Physical Chemistry, Electrochemistry, Catalysis, Transport Phenomena, Dyes Technology, Drugs Technology, Pesticides Technology  
Name and type of organisation providing education and training "Gh. Asachi" Polytechnic Institute of Iasi (now "Gh. Asachi" Technical University), Faculty of Industrial Chemistry, Iasi, Romania

### Work experience

Dates **2010 – present**  
Occupation or position held **Research scientist**

Main activities and responsibilities	Designing and proposing new research topics. Drafting project proposals. Attracting extra-budgetary funds for research activity. Collaboration with national and international scientific entities. Publication of scientific articles. Participation in symposia and workshops.
Name and address of employer	"P. Poni" Institute of Macromolecular Chemistry of Romanian Academy 41A Gr. Ghica Voda Alley, 700 487 – Iași, ROMANIA, <a href="http://www.icmpp.ro/">http://www.icmpp.ro/</a>
Type of business or sector	<b>R&amp;D</b> ; Biopolymers, polymer biomaterials and polymer composites for biomedical applications; Cultural heritage artefacts characterisation and evaluation for preservation
Dates	<b>2008 - 2010</b>
Occupation or position held	<b>Research assistant professor, Postdoctoral Fellowship</b> - collaborative partnership project of Kythera Biopharmaceuticals, Inc. CA, with "John Hopkins" University, Dept. of Biomedical Engineering MA
Main activities and responsibilities	- protocols design and evaluation of light activated polymer matrix as injectable hydrogels with applications as facial contouring agent – dermal filler, bone and cartilage tissue engineering – based on hyaluronic acid; - scientific reports.
Name and address of employer	University of Illinois at Chicago, Department of Chemistry, 845 W Taylor St, Chicago, IL 60607, USA, <a href="http://chem.uic.edu/chemistry">http://chem.uic.edu/chemistry</a>
Type of business or sector	<b>R&amp;D</b> ; Biopolymers and polymeric biomaterials for medical applications.
Dates	<b>1999 – 2008</b>
Occupation or position held	<b>Research scientist</b>
Main activities and responsibilities	- Studies of reaction mechanism, both experimental and using computational chemistry (physical organic chemistry); - Synthesis and characterization of amide-based monomers, ring opening polyaddition polymers and related polymer networks (polymer chemistry); - Study of polymer biocomposites with applications as biomaterials for dental applications (polymer materials); Writing scientific articles. Drafting project proposals for projects and grant competitions. Participation in symposia and workshops.
Name and address of employer	"P. Poni" Institute of Macromolecular Chemistry of Romanian Academy 41A Gr. Ghica Voda Alley, 700 487–Iași, ROMANIA, <a href="http://www.icmpp.ro/">http://www.icmpp.ro/</a>
Type of business or sector	<b>R&amp;D</b> ; Physical organic chemistry (studies of reaction mechanisms both experimental and using computational chemistry); Cultural heritage oartefacts characterisation and evaluation for preservation
Dates	<b>1995–1999</b>
Occupation or position held	<b>Research assistant</b>
Main activities and responsibilities	Synthesis, purification, and characterization of amide-based monomers and aliphatic polyamide obtained by polycondensation in molten state with applications as thermo adhesives. Laboratory work, synthesis, separation, purification of compounds. Writing scientific articles. Participation in symposia and workshops.
Name and address of employer	"P. Poni" Institute of Macromolecular Chemistry of Romanian Academy 41A Gr. Ghica Voda Alley, 700 487–Iași, ROMANIA, <a href="http://www.icmpp.ro/">http://www.icmpp.ro/</a>
Type of business or sector	<b>R&amp;D</b> ; Organic and polymer chemistry

### Personal skills and competences

Mother tongue **Romanian**

Other language(s)

Self-assessment  
*European level (\*)*

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Experienced user	C2	Experienced user	C2	Experienced user	C2	Experienced user	C2	Experienced user
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user

(\*)Level of the European Framework of Reference for Languages

Social skills and competences	- Team work: I have worked in various research teams and projects; good communication skills; - Learning skills: I kept permanent learning in order to broad the knowledge and understanding in my scientific fields of interest; - Intercultural skills: good ability to adapt to multicultural environments, developed during my work experience in SUA.
Organisational skills and competences	Good experience in project or team management; Member in Organising/Scientific Committee of different international conferences; Chairman at different international conferences.
Technical skills and competences	Design, synthesis and characterization of polymeric biomaterials for medical applications; Studies of reaction mechanisms both experimental and using computational chemistry; Design, synthesis and characterization of polymaleamide and polymaleamide-polymaleimide networks; aliphatic polyamide by polycondensation in molten state as thermo adhesives; Characterization and evaluation of cultural heritage objects for preservation.
Computer skills and competences	Good operational proficiency of Microsoft Office™ tools (Word™, PowerPoint™), specific software; Basic knowledge of graphic design applications.
<b>Annexes</b>	Web of Science Researcher ID: L-9713-2015 ORCID identifier: 0000-0002-2855-9581

### PROJECTS AND GRANTS

- 2012-2015** "Biologically inspired systems for engineered structural and functional entities" PNII-ID-PCCE-2011-2-0028, CNCS/UEFISCDI, – member; 6,999,150 lei;
- 2008-2011** "Researches regarding the expertise of conservation state of cultural heritage objects using non-destructive modern techniques and obtaining/evaluation of new materials for active conservation" - MILAD, PC 92-084/2008, PNCDI; supported by the Educational and Research Minister – partner director; 2,000,000 lei;
- 2007-2010** „Modern interventional system of designing and rapid achieving of the footwear for locomotory deficiency and profilaxy of foot disorders”, PNII - BIOTECH, nr. 41-064/2007, (ICMPP partener) – member; 82,714 lei/ 2008.
- 2006-2008** „Advanced biocomposites based on new systems of reinforced monomers with nanoparticles and glass fibers with dental applications” CEEX C2/MATNANTECH (ICMPP partener) – member; 10,000 lei/2006;
- 2005-2008** "Nanomaterials and New Adhesives with High Performance Applications in Medicine", CEEX C2/MATNANTECH, PNCDI "P. Poni" Institute Iasi, in collaboration with "Raluca Ripan" Institute Cluj-Napoca, - member; 70,000 lei/2005; 50.000 lei/2006;
- 2002-2004** "Electron-Conducting Polymers", supported by the Educational and Research Minister – member;
- 2000-2002** "Syntheses of Thermostable Polymers with Special Properties", ORIZONT Project supported by a National Research Program – member; 5,000 lei/2000; 6,000 lei/2001; 1,700 lei/2002;
- 1999-2002** "Theoretical and Experimental Studies Concerning the Dynamic of Viscoelastic Fluids", nr. 6182/25.X. 2000, supported by the Educational and Research Minister – member; 3,000 lei/2000; 2870 lei/2001.

### CHAPTERS IN BOOKS

- D. Ivanov.** Methods and challenges in the preparation of scaffolds for tissue engineering application (Chpt. 11). In: Functional Biomaterials: Design and development for biotechnology, pharmacology and biomedicine; (Eds.) T. Mohan, K. S. Kleinschek; Wiley-VCH; **2023**, p 335-370.
- D. Ivanov,** Iulian Vasile Antoniac. Biomimetic and Smart Biomaterials for Orthopedic Applications: More than the Sum of Their Components. In: Smart Materials. Integrated Design, Engineering Approaches, and Potential Applications, A. Filimon Ed., Apple Academic Press Inc., CRC Press - Taylor & Francis Group, **2018**, 353-395.
- B. C. Simionescu, **D. Ivanov** Natural and Synthetic Polymers for Designing Composite Materials. (Chpt. 11) In: Handbook of Bioceramics and Biocomposites, I. V. Antoniac Ed., Springer International Publishing Switzerland, **2016**, 233-286
- D. Ivanov** Hyaluronic Acid Based Biomaterials. In: Encyclopedia of Biomedical Polymers and Polymeric Biomaterials, Munmaya K. Mishra Ed., Taylor & Francis: New York, Published online: 04 Dec **2015**, 3743-3759.

### CONFERENCES (invited)

- Hyaluronan in biological fluids and related biomedical applications**, International Conference on Rheology, Understanding the Viscoelastic Behavior of Materials – Progress and Challenges, on-line format, May 26th, **2022**
- Biomimetic Hyaluronan Based Viscoelastic Therapies**, 9-th International Conference „Biomaterials, Tissue Engineering & Medical Devices” BIOMMEDD’2022 București România, July 20-22, **2022**
- Biodegradable bone plates – fixation or future direction?** 7th International Conference “Biomaterials, Tissue Engineering & Medical Devices” BiomMedD’2016, September 15-17-th, Constanta, Romania, **2016**
- Hyaluronic acid supplementation in osteoarthritis – price and prejudice**, ECOB 2015- *First European Conference on Orthopedic Biomaterials*, October 21-22nd 2015 Bucharest, Romania, **2015**
- Biologically inspired composites: more than the sum of its components**, *6th International Conference “International Seminar on Biomaterials & Regenerative Medicine”* BIOREMED 2015, September 17-19th 2015, Oradea, Romania, **2015**
- Hyaluronic Acid in Orthopedics**, *6th International Conference “Biomaterials, Tissue Engineering & Medical Devices”* BiomMedD’2014, September 17-20th, Constanta, Romania, **2014**
- Hyaluronan – from structural simplicity to biomedical applications diversity**, *11th Conference on Colloid and Surface Chemistry*, May 9-11th, Iasi, Romania, **2013**

## ARTICLES (selected)

- D. Ivanov**, History of Romanian Chemistry: Most Influential Scientists (I), NOESIS, nr 2, **2023**
- S. I. Trifan, **D. Ivanov**, Strategies of hyaluronan chemical modifications for biomedical applications, *Rev. Roum. Chim.* 68(5-6), 203-209, **2023**
- M. C. Corobea, O. Muhuleț, F. Miculescu, I. V. Antoniac, Z. Vuluga, D. Florea, D. M. Vuluga, M. Butnaru, **D. Ivanov**, S. I. Voicu, V. K. Thakur, Novel Nanocomposite Membranes from Cellulose Acetate and Clay-Silica Nanowires, *Polym Adv Technol*, 27(12) 1586-1595, **2016**
- N. Vornicu, V. Deselnicu, C. Bibire, **D. Ivanov**, F. Doroftei, Analytical techniques used for the characterization and authentication of six ancient religious manuscripts (XVIII–XIX centuries) *Microsc Res Tech*, 78(1), 70-84, **2015**
- B.C. Simionescu, A. Neamtu, C. Balhui, M. Danciu, **D. Ivanov**, G. David. Macroporous structures based on biodegradable polymers-candidates for biomedical application. *J Biomed Mater Res A.*, 101 (9) 2689-2698, **2013**
- D. Ivanov**, A. Neamtu. Molecular Dynamic Evaluation of Hyaluronan Interactions with Dimethylsilanediol in Aqueous Solution, *Rev. Roum. Chim.*, 58(2-3), 229-238, **2013**
- N. Vornicu, C. Bibire, E. Murariu, **D. Ivanov**. Analysis of mural paintings using in situ non-invasive XRF, FTIR spectroscopy and optical microscopy, *X-Ray Spectrometry*, 42(5), 380–387, **2013**
- D. Ivanov**, M. Petrovanu, M. Constantinescu, Transylidation of 3-methyl-phenacylpyridazinium ylides with phenylisocyanate. Influence of triethylammonium cation over prototropic rearrangement, *Rev. Roum. Chim.*, 56(3), 261-268, **2011**
- D. Ivanov**, D. Maftai, M. Constantinescu, Maleamic Acids Cyclodehydration with Anhydrides. DFT Study in the gas phase and solution, *Rev. Roum. Chim.*, 56 (2), 89-95, **2011**
- R. M. Moriarty, S. Tyagi, **D. Ivanov**, M. Constantinescu, The Mechanism of 1,4 Alkyl Group Migration in Hypervalent Halonium Ylides. The Stereochemical Course, *J. Am. Chem. Sci.*, 130, 24, 7564–7565, **2008**
- D. Rosu, **D. Ivanov**, Thermal degradation of some polymaleamides, *J. Opt. Adv. Mat.* 9 (7), 2145 – 2147, **2007**
- M. Constantinescu, **D. Ivanov**, Computational Study of Maleamic acid Cyclodehydration with acetic anhydride *Int. J. Quant. Chem.*, 106 (6) 1330-7, **2006**
- D. Ivanov**, C. Găină, C. Grigoraș, Polymaleamide-Polymaleimide Networks *J. Appl. Polym. Sci.*, 91, 779, **2004**
- D. Ivanov**, M. Constantinescu, Computational Study of Maleamic Acid Cyclodehydration *J. Phys. Org. Chem.*, 16, 348, **2003**
- C. Găină, V. Găină, **D. Ivanov**, Synthesis and characterisation of polyamides containing 1,4-dithiin-2,3:5,6-tetrayl diimide structures, *Macromol. Rapid Commun.*, 22, 25-29, **2001**