

Curriculum Vitae

Dr. Violeta Melinte (former Niculescu)

Scientific researcher III, Polyaddition and Photochemistry Department, ICMPP Iasi

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Education, degree and diplomas

- ❖ Oct. 1996 - Jun. 2000: "Al. I. Cuza" University of Iasi, Faculty of Chemistry, Bachelor of Science in *Chemistry*
- ❖ Oct. 2000 - Jun. 2002: "Al. I. Cuza" University of Iasi, Faculty of Chemistry, Master in *Chemistry and Biochemistry of Heterocyclic Compounds*
- ❖ Nov. 2002 - Jul. 2008: "Petru Poni" Institute of Macromolecular Chemistry, Ph.D. in Macromolecular Chemistry with thesis "*Monomers and polymers with photocleavable groups used in microlithography*", scientific coordinator: Acad. Bogdan C. Simionescu
- ❖ Jun. 2010 - Mar. 2013: Post-doctoral Fellow in the frame of European Social Fund - „Cristofor I. Simionescu" Postdoctoral Fellowship Programme, "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania

Professional experience

- Employed from March 2001 at "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Polyaddition and Photochemistry Department
- Research assistant: 2001 – 2006
- Scientific researcher: 2006 – 2009
- Scientific researcher grade III: 2009 – present

Research fields

- ✧ Photosensitive monomers with triazene sequences incorporated in polyurethanes/copolyacrylates/ block copolymers for versatile polymeric photocleavable coatings under UV/laser irradiation or as fluorescent chemosensors
- ✧ Synthesis and characterization of photocurable (meth)acrylic monomers/oligomers, photopolymerization studies concerning the formation, structure and properties of crosslinked networks
- ✧ Synthesis of new photopolymerizable urethane (meth)acrylate monomers/oligomers

and BisGMA derivatives for polymeric materials evaluated in dental applications as restorative or adhesive systems

- ✦ Development of hybrid nanocomposites with improved mechanical/optical features through the inclusion of functionalized inorganic fillers (montmorillonite, magnetite, TiO₂, ZnO, CeO₂) or their *in situ* photogeneration (Au, Ag, Pd) in tandem with the photopolymerization process
- ✦ Implementation of modern polymerization techniques (ATRP, RAFT) in the synthesis of photoactive block copolymers, their structural characterization and testing of applicative potential (chemosensors, patterns for micro- and nanolithography)

Papers, publications and scientometrics indicators

- ✓ Publications: 53 articles ISI indexed (total impact factor ~135)
- ✓ Hirsh index: 13 (from ISI Web of Science, cumulative Melinte V* or Niculescu V*)
- ✓ Sum of the times cited without self-citation: 240 (according to ISI Web of Science, May 2020)
- ✓ Proceedings at international events: 9
- ✓ Book chapters: 2
- ✓ Patents: 2
- ✓ Over 50 presentations (lectures, oral communications or posters) in national and international conferences
- ✓ Project leader, *Design and preparation under mild "green" conditions of UV-cured polymer - metal/metal oxide nanoparticles hybrid coatings with predictable antimicrobial or sealing features* (POLYMETCOAT), PN-III-P1-1.1-TE-2016-1390, 2018-2020
- ✓ Member in 24 national and 2 international projects.

Post-doc research stages

- Oct. - Nov. 2010 - Institute de Sciences des Materiaux de Mulhouse, France - ID POSDRU/89/1.5/S/55216 – Obtaining of hybrid composites through photocuring experiments and their characterization
- Jan.-Feb. 2012 - Institute de Sciences des Materiaux de Mulhouse, France - ID POSDRU/89/1.5/S/55216 – Obtaining of new photopolymerizable hybrid based on methacrylic monomers and metallic nanoparticles.