

Andrada Serafim

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1. Date and place of birth: 08.10.1981 | Bucharest

2. Studies:

2015-2016: University Politehnica of Bucharest, Romania, Faculty of Applied Chemistry and Materials Science - *Postdoctoral scholarship "Composites based on nanostructured hydrogels with applications in regenerative medicine"*

2010 - 2013: University Politehnica of Bucharest, Romania, Faculty of Applied Chemistry and Materials Science - *PhD "Macromolecular Compounds for Tissue Engineering"*

2013: University Angers, Faculty of Medicine, Research Group on Bone Remodeling and bioMaterials, France, *Internship (3 months)*

2008 - 2010: University Politehnica of Bucharest, **Romania**, Faculty of Engineering in Foreign Languages - *Master in Science „Management of Natural Science. Environmental Economy"*

2000 - 2006: University Politehnica of Bucharest, Romania, Faculty of Applied Chemistry and Materials Science - *Chemical Engineer*

3. Experience

2013 - Ongoing: University Politehnica of Bucharest Advanced Polymer Materials Group, Bucharest, Romania

Postdoctoral Researcher

- Design and synthesis of new materials based on natural and/or synthetic polymers with possible biomedical applications
- Characterization of polymer based materials (water uptake capacity, stability in simulated physiologic media, FTIR, mechanical and rheological behavior, micro and nano-CT, QCM-D etc.)
- Supervision and co-coordination of the research assignments of undergraduate and master students from the Faculty of Medical Engineering

2010 - 2013: University Politehnica of Bucharest, Advanced Polymer Materials Group, Bucharest, Romania

Phd. student

- Synthesis of hybrid natural-synthetic hydrogels with enhanced biocompatibility designed for soft tissue engineering
- Modification of inert polymeric substrates through superficial nanostructuring with functionalized gold nanoparticles in order to stimulate biomimetic apatite formation
- Nanostructuring of polymeric electrospun fibers with functionalized diamond nanoparticles

2006 - 2011: National Research and Development Institute for Energy, Bucharest, Romania
Research Assistant

- Synthesis of high performance anticorrosive protection materials with designed properties for severe strained environments (aggressive chemical agents, high temperature range)
- Synthesis of ecologic thermo-foaming fire protection materials for energetic equipment
- Synthesis of nanocomposite repairing materials designed to increase the durability of electric motors

4. Other professional achievements

2017: Executive Unit for Financing Higher Education, Research Development and Innovation, Bucharest, Romania - Prize for research results (PN-III-P1-1.1-PRECISI-2017-30027)

2016: State Office for Inventions and Trademarks, Bucharest, Romania - Patent Application No. A/00926/28.11.2016 – “Hydrated biocomposite scaffolds with enzymatically crosslinked polypeptidic component, for cellular growth and tissue regeneration/ modeling, and method of obtaining thereof”, I.C. Stancu, S. Cecoltan, D.G. Petre, A. Lungu, A. Serafim, D.M. Dragusin, E. Vasile, R. Marinescu

2016: Executive Unit for Financing Higher Education, Research Development and Innovation, Bucharest, Romania - Prize for research results (PN-III-P1-1.1-PRECISI-2016-11041)

2016: Executive Unit for Financing Higher Education, Research Development and Innovation, Bucharest, Romania - Prize for research results (PN-II-RU-PRECISI-2015-9-8622)

2015: European Society for Biomaterials, Krakow, Poland - Julia Polak European Doctoral Award 2015 at the „27th European Conference on Biomaterials”

2015: American Chemical Society – Romanian International Chapter, Bucharest, Romania - Best poster award at the workshop at the „Young Scientists Joining Forces for Excellence in Biomaterials Research”

2012: Executive Unit for Financing Higher Education, Research Development and Innovation, Bucharest, Romania - Prize for research results (PN-II-RU-PRECISI-2012-6-0994)

2011: State Office for Inventions and Trademarks, Bucharest, Romania - Patent No. RO 125308 B1 - „Anticorrosive polymeric composition for complex solicitations”, G. Cioroianu. L. Cioroianu, G-S. Damian, A. Tudose (Serafim)

2009: Inventika Invention and Innovation Show Bucharest, Romania - Silver medal for “Anticorrosive composition resistant at complex solicitations”

2008: Eureka International Science & Engineering Fair, Brussels, Belgium - Silver medal for “Anticorrosive composition resistant at severe strains”

5. Specializations:

- Advanced knowledge of rheology, FT-IR, QCM-D, mechanical testing, micro and nanoCT
- Basic knowledge of microscopy techniques and cell-culturing
- Abilities in teaching and research coordination gained throughout the academic career