Dr. Lenuta Stroea (Maiden name Hahui)

Nationality: Romanian Date and place of birth: 11.02.1981, Tecuci, Romania

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Education

- 2011 Italian equivalence of B.Sc. Alma Mater Studiorum University, Bologna, Italy
- 2008 Ph.D. Macromolecular Chemistry Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania
- 2007 M.Sc. Enzymology and Biotechnology Alexandru Ioan Cuza University, Iasi, Romania
- 2007 M.Sc. Polymeric Biomaterials Gheorghe Asachi Technical University, Iasi, Romania
- 2004 B.Sc. Chemistry Alexandru Ioan Cuza University, Iasi, Romania

Experience

January 2014 – present

Researcher – Petru Poni Institute of Macromolecular Chemistry, Iasi Romania Polyaddition and Photochemistry Department

Main tasks: - Design and development of macromolecular compounds with photosensitive units having well-defined composition, architecture and functionality

February 2009 – December 2013

Post-Doc – Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA) UTTMATF Faenza Research Laboratories – Italy, Tutor – Dr. F. Antolini

Main tasks: - Synthesis, structural and functional characterisation of new single-source precursors and generation of the corresponding nanoparticles (inorganic systems);- Synthesis and characterization of polymer/nanoparticles composites (organic/inorganic hybrid systems) for applications in advanced electronics (OLED and solar cells) within European Research Project LAMP (no. 247928)

November 2008 – February 2009

Research Assistant – Petru Poni Institute of Macromolecular Chemistry, Iasi Romania Photochemistry Department

Main tasks: Synthesis and characterization of macromolecular compounds by different polymerization methods (radical free polymerization, ATRP, etc.) for various applications (optics, sensors)

November 2004 – November 2008

PhD in Polymer Chemistry – Petru Poni Institute of Macromolecular Chemistry, Iasi Romania; Photochemistry Department, Tutor – Dr. E.C. Buruiana

Main tasks: - Synthesis of triazene acrylic monomers and their corresponding photopolymers using radical free polymerization; studies of spectral characterization (FTIR, ¹H-NMR, UV-Vis), thermal characterization (DSC, ATG), optical microscopy (AFM), SEM and kinetics determinations; - Fluorescence studies on triazene- and pyrene (co)polyacrylates including quenching measurements for future sensor applications

Publications, research projects and other scientometrics indicators

BrainMap ID: U-1700-036P-4632 Hirsh Index: 8 Publications: 16 articles ISI indexed Proceedings: 7 papers Scientific presentations: 24 oral and 19 posters Research projects: member in 3 international and 15 national projects

Representative Peer Reviewed Publications:

- [01] Polymer Nanocomposites for Photocatalytic Applications, V. Melinte, L. Stroea, A.L. Chibac-Scutaru - Catalysts, 9, 986, 2019
- **[02]** Photocrosslinked hybrid composites with Ag, Au or Au-Ag NPs as visible-light triggered photocatalysts for degradation/reduction of aromatic nitroderivatives, V. Melinte, L. Stroea, T. Buruiana, A. L. Chibac Eur. Polym. J. 121, 109289, 2019
- **[03]** Synthesis and solution properties of thermosensitive hydrophilic imidazole based copolymers with improved catalytic activity, L. Stroea, T. Buruiana, E.C. Buruiana Mat. Chem. Phys. 223, 311, 2019
- [04] Highly Luminescent Colloidal CdS Quantum Dots with Efficient Near Infrared Electroluminescence in Light-Emitting Diodes, A.K Bansal, F. Antolini, S. Zhang, L. Stroea, L. Ortolani, M.Lanzi, E.Serra, S.Allard, U. Scherf, I.D.W. Samuel - J. Phys. Chem. C 120 (3), 1871, 2016
- [05] In situ formation and photo patterning of emissive quantum dots in small organic molecules, A.K. Bansal, M.T. Sajjad, F. Antolini, L. Stroea, P. Gecys, G. Raciukaitis, P. Andre, A. Hirzer, V. Schmidt, L. Ortolani, S. Toffanin, S. Allard, U. Scherf, I.D.W Samuel - Nanoscale 7, 11163, 2015

Representative research projects:

- **2018-2020** PN-III-P1-1.1-TE-2016-1390 (34/02.05.2018) Design and preparation under mild "green" conditions of UV-cured polymer metal/metal oxide nanoparticles hybrid coatings with predictable antimicrobial or sealing features
- **2018-2020** PN-III-P1-1.2-PCCDI-2017-0428 Innovative nanotechnologies based on polymers for new advanced materials obtaining
- **2010-2013** European Research Project LAMP no: ICT-2009.3.8 -247928 LAser induced synthesis of polymeric nanocomposite materials and development of Micro-Patterned hybrid light emitting diodes (LED) and transistors (LET)

Languages

Romanian (native), English (fluent), Italian (fluent), French (basic)

Computer skills

Excellent skills on the use of different common computer programmes (Internet Explorer and Office applications) but also specialized chemistry programs (ISIS Draw, CHEM Draw, Mestrec, ORIGIN, 1- D WIN-NMR, X' PERT, etc.)

Further information - if relevant

- Dynamic and creative person
- Communicative person, interested in establishing new relationships with people of different nationalities and culture
- Capacity to organize work, defining priorities and assuming liability during different professional experiences
- Skills and experience in drafting scientific reports for publishing and/or for scientific conferences
- I like to keep fit, dancing, travelling, cooking and socializing