Curriculum Vitae

Personal information

Name:	**Liliana ROȘU**
Date and place of birth	July 17th 1968, Iasi, Romania
Address:	41A Gr. Ghica Voda Alley, 700487, Iasi, Romania
Gender:	Female
Nationality:	Romanian
Phone number:	+4 0729808033
E-mail:	lrosu@icmpp.ro
Maternal Language:	Romanian
Foreign language:	English

Occupation, education and trainings

2008- present	• Senior Scientist, Centre of Advanced Research in Bionanoconjugates and Biopolymers (INTEL Center), "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania
1997–2003	• Ph.D. in Chemistry from the "Gh. Asachi" Polytechnic Institute, Iasi, Romania, under the supervision of Associate Professor Cornelia Vasile (*New multicomponent polyurethane materials. Structure-Morphology-Properties relations*).
1989-1995	• Bachelor's degree in chemistry, Technical University "Gh. Asachi", Faculty of Industrial Chemistry, Department: Cellulose, Paper and Fiber Technology, Iasi, Romania

Involvement in projects

2020–2022	• PN-III-P1-1.1-TE-2019-0604, The behaviour of new multicomponent polymeric systems in simulated environmental conditions for flame retardant coating materials (EPOXYPHOSDEG) (*member*)
2019	• PN-III-P1-1.1-MC-2019-0219, to participate in the 5th Central and Eastern European Committee for Thermal Analysis and Calorimetry – CEEC – TAC, Rome, Italy, Mobility project *(project director)*
2017-2019	• ERA IB 2, European and International Cooperation Program Horizon H2020/ Wood and derivatives protection by novel bio-coating solutions (PROWOOD) (*member*)
2013–2017	• Project PN-II-PT-PCCA-2013-4-0436, Innovative system for products and technologies for stimulation of eco–efficiency growth in the leather industry; Partnership Project (PROECOPEL) (*member*)
2011–2016	• Project PN–II–ID–PCE–2011–3–0187, Advanced researches related to the behavior of multi–component polymer systems under simulated

	environmental factors action (*member*)
2008-2013	• FP7-NMP-2007-LARGE-1-214539, Bioactive highly porous and injectable scaffolds controlling stem cell recruitment proliferation and differentiation and enabling angiogenesis for cardiovascular engineered tissues (BIOSCENT) *(member)*
2006-2008	• CEEX 26/2005, Advanced multifunctional materials doped with silver nanopowders *(member)*
2006-2007	• CEEX 57/2006, Sustainable polymer composites for improving the quality of life *(member)*
2006-2008	• CEEX 2043/2006, New materials and applications for the modernization of transport infrastructures in order to reduce the level of vibrations and noise for railway, surface and underground lines, (AMTRANS) *(member)*
2005-2008	• CEEX 10/2005, Innovative degradable, biocompatible, bioactive architectures based on natural and synthetic macromolecules *(member)*
2005-2007	• CNCSIS, type A, 927/2007, Composites vinyl ester resins-natural products (turpentine) with special applications. Synthesis-characterization-use *(member)*
2003-2004	• CNCSIS, type At, Polymer networks with special properties based on epoxy resins with predetermined structures. Obtaining and characterization *(project director)*
2003-2005	• CERES C3 – 126/2003, Metal ion effect in multifunctional nanostructured polymer matrices *(member)*
2001-2002	• GRANT MEC, type C, Polyurethane-based interpenetrated polymer networks, with potential application as covering and surface protection materials, respectively finished products for commercial use *(member)*
2000	• Grant ANSTI B9, New high-performance, complex materials with controllable morphologies and special properties: Obtaining Complex Materials for Advanced Technologies. D. New polymers with urethane structure and their photochemical behavior *(member)*
2000-2001	• Grant ANSTI B15, Polymer composites with urethane structure. Structure-property correlations through atomic force microscopy studies and physical-mechanical analyses *(project director)*

Fields of research

- physico–chemical characterization of epoxy resins and multicomponent polymeric materials (polymer blends, composites, semi– and interpenetrated polymer networks)
- thermal and photochemical stability of polymeric materials;
- compatibility studies based on structure–properties relationships in polymeric materials;
- general behavior of polymers exposed under the action of environmental factors;
- artificial accelerated UV aging studies of multicomponent polymeric materials;
- life time evaluation studies of materials from thermal data.

Personal Skills

- Teamwork skills
- Individual work ability
- Creative and communicative person

Skills related to the research activity

- synthesis and characterization of thermo reactive resins (phenolic, epoxy and vinyl ester)
- synthesis and characterization of semi- and interpenetrated polymer networks
- determination of non-isothermal degradation kinetic parameters;
- interpretation of evolved gas analyses during thermal decomposition for elucidating thermal decomposition mechanisms;
- determination of photochemical stability of polymers, by: evaluation of irradiation dose influence on material photo-stability;
- investigation of (surface) properties modification during photo-irradiation (gloss, colour, roughness, contact angle, mass loss, swelling degree) for elucidating photodecomposition mechanisms;
- studies on the possibility of photo-stabilization and lifetime prediction from photochemical data;
- advanced knowledge of field specific characterization methods (FTIR, UV–VIS, GC, MS, MCC, PCFC), recording and interpretation of TGA and DSC spectra;
- basic knowledge of characterization and analysis techniques for small and macromolecular molecules: SEM, AFM, TEM, DRX, XPS and GPC.

Digital skills

- Good knowledge of Microsoft Office (Word, Excel, PowerPoint), scientific programs (ChemDraw, Origin) and other applications in the scientific activity (Browser, E-mail, Paint, MediaPlayer).

Scientific Contribution

- **56** scientific articles published in ISI indexed journals
- **6** scientific articles published in other specialized journals in the country
- **8** book chapters
- **1** book
- **37** articles/studies published in full in the volumes of recognized international/national scientific events in the country and abroad
- **55** oral communications at national and international symposia
- **68** poster communications at national and international symposia

Scientific Visibility

- *H*–index: **20** (according to ISI Web of Science, February 2023)
- Total citations (without self–citations): **1146** (according to ISI Web of Science, February 2023)

Other activity

- Treasurer of the Romanian Chemical Society, Iași Branch (ICMPP, UAIC, UTI, and other Iași Universities)
- Responsible for labor protection, fire prevention and extinguishing, for the INTEL Centre department

Awards and Prizes

- Romanian Academy Award "Costin D. Nenitescu" (December 2020, Bucharest, Romania), *Natural multicomponent polymer systems–modification, degradation, stabilization.*
- Gold medal at EURO INVENT 2017, Inventions section, Iasi, Romania, Composition and process for leather pre-tanning using protein derivatives and metal oxides obtained from waste

Member in Scientific societies

- Romanian Chemical Society (SChR)
- Associazione Italiana di Scienza e Tecnologia delle Macromolecole (AIM)
- ICTAC (International Confederation for Thermal Analysis and Calorimetry)
- CATCAR (Commission for Thermal Analysis and Calorimetry of the Romanian Academy)