Curriculum Vitae

Personal information

Name:	**Dan ROȘU**
Date and place of birth	June 17th 1953, Iasi, Romania
Address:	41A Gr. Ghica Voda Alley, 700487, Iasi, Romania
Gender:	Male
Nationality:	Romanian
Phone number:	+4 0232 217 454
E-mail:	drosu@icmpp.ro
Maternal Language:	Romanian
Foreign language:	English

Occupation, education and trainings

2017 - present	• Senior Scientist, Centre of Advanced Research in Bionanoconjugates and Biopolymers (INTEL Center), "Petru Poni" Institute of Macromolecular Chemistry, Iasi, Romania. Project director of subprogram 1.4: (Bio)polymer materials and multifunctional nanostructured architectures for specific applications
1990–1997	• Ph.D. in Chemistry from the Romanian Academy, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania under the supervision of Acad. Cristofor C. Simionescu *(Contributions to the study and applications of phenol–formaldehyde resins)*
1972-1976	• Bachelor's degree in chemistry, Polytechnic Institute "Gh. Asachi", Faculty of Industrial Chemistry, Department: Chemistry, Iasi, Romania

Involvement in projects

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) (*responsible partner)*
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 *(project director)*
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)*
2005-2008	• CEEX 10/2005, Innovative degradable, biocompatible, bioactive architectures based on natural and synthetic macromolecules *(member)*
2005-2007	• CNCSIS, tip A, 927/2007, Composites vinyl ester resins-natural products (turpentine) with special applications. Synthesis-characterization-use *(project director)*
2003-2005	• CERES C3 – 126/2003, Metal ion effect in multifunctional nanostructured polymer matrices *(member)*
2001-2002	• GRANT MEC, tip C, Polyurethane-based interpenetrated polymer networks, with potential application as covering and surface protection materials, respectively finished products for commercial use *(project director)*

Fields of research

- physico–chemical characterization of epoxy resins and multicomponent polymeric materials (polymer blends, composites, interpenetrating and semi–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 thermoreactive 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

- **103** scientific articles published in ISI indexed journals
- **12** scientific articles published in other specialized journals in the country
- **9** book chapters
- **2** book
- **4** patents granted
- **57** articles/studies published in full in the volumes of recognized international/national scientific events in the country and abroad
- **85** oral communications at national and international symposia
- **76** poster communications at national and international symposia
- **3** courses held
- **20** periodic research reports
- **1** technologies at the laboratory stage
- **6** micropilot and pilot phase technologies
- **1** industrial technological process
- **7** technical specifications
- **6** approved products

Scientific Visibility

- *H*–index: **26** (according to ISI Web of Science, February 2023)
- Total citations (without self–citations): **1978** (according to ISI Web of Science, February 2023)

Editorial activity

- Editorial board member and Guest Editor for Polymers (MDPI)

Other activity

- Member of the scientific council “Petru Poni” Institute of Macromolecular Chemistry

Awards and Prizes

- Romanian Academy Award “Costin D. Nenitescu” (December 2002, Bucharest, Romania) *(Epoxy–acrylic novolac resins based on p-alkyl substituted phenol).*
- Diploma of honor; Second Prize - CHEMISTRY Section, for the paper: "Lactiferous plants, renewable source of hydrocarbons" (1981)

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)