

CS I Dan ROSU, Senior Researcher

Positions: **2017 – present:** Senior scientist, 1st degree, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania, Department: Advanced Research Center for Bionanoconjugates and Biopolymers; **2001 – 2017:** Senior scientist, 2nd degree, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania, Department: Advanced Research Center for Bionanoconjugates and Biopolymers; **1990 – 2001:** Senior scientist, 3rd degree, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania, Department: Polymeric Materials; **1982 1990:** Scientific researcher, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania, Department: Polymeric Materials; **1980 – 1982:** Chemist, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania, Department: Natural Polymers; **1976 – 1980:** Chemist, Central Laboratory of VINIA Iasi, Romania

Education: **1997:** PhD, Title: Contributions to the study of phenol formaldehyde resins and applications/ Empirical research that directly contributes to debates on learning, “Petru Poni” Institute of Macromolecular Chemistry, Iasi, Romania

Memberships of scientific societies: **2000-present:** Member of the Romanian Chemical Society

Awards: **2002:** „Costin D. Nenitescu” award for the papers: „Novolac epoxy-acrylic resins based on phenol p-alchil, together with Dr. Cascaval N. Constantin.

Project manager: Advanced researchers related to the behavior of multi-component polymer systems under simulated environmental factors action, 2011-2015, PNCDI II - IDEAS Program

Scientific Interests: Thermal degradation of polymers; synthesis and characterization of phenolic, epoxy and vinyl ester resins; interpenetrating polymer networks; photodegradation of polymers.

Editorial activity: member in the editorial board of **Polymers**

International conference: in the scientific committee 5th Central and Eastern European Conference on Thermal Analysis and Calorimetry (CEEC-TAC 5) **2019**

2011: Course held within the project "European Social Fund - Postdoctoral fellowship program Cristofor I. Simionescu": Course: Aging of biomaterials based on polymers

Summer Schools: Sustainable composite materials for improving the quality of life”, **2006** Constanta, “Ovidius” University, Course: Epoxy resins, polymer matrices performance for composite materials

Scientific achievements: Synthesis and characterization of phenolic, epoxy and ester-vinyl resins; Extractions and characterization of natural products; Theoretical aspects regarding polymers adhesive and cohesive capacity; Correlation of molecular structure characteristics with adhesively properties of macromolecular compounds; Aspects regarding synthetic adhesives properties and characterization, methods of control and their testing; Complex capitalization of the vegetable biomass, respectively of the polymers waste products through pyrolysis and thermal decomposing; Synthesis and characterization of the interpenetrating polymers networks polyurethanes-modified epoxy resins; Studies of thermal degradation and polymers compatibility (study of decomposition processes, establishing the mechanisms and kinetics of thermal degradation); Polymers photochemical behavior. Recent researches regarding polymers aging under light, especially UV radiation from the solar spectrum, as well as polymers UV stabilization. **105** publications in national and international journals, **10** book chapters, book editor Springer International Publishing Switwerland, Papers published in volumes at scientific events: **43**, Patents: **4**; Periodic research reports: **20**; Laboratory phase technologies: **1**; Micropilot and pilot phase technologies: **6**; Semi industrial /industrial process process: **1**; Task key / branch technical standard: **7**; Approved products: **6**; Homologated technologies: **4**; **10** research projects, of which:

4 project director; international impact/recognition in the field is reflected by: h-index (Scopus): **20**, Number of citations: **1533**.