

## *Curriculum Vitae*



**Irina Elena Raschip** - Setting up an X-ray diffraction experiment, Division of Food Sciences, University of Nottingham, United Kingdom – printed in EPNOE magazin

### **Educational background:**

1. Ph.D. degree: Romanian Academy, Petru Poni Institute of Macromolecular Chemistry, Iasi, Romania, Ph.D. thesis title: “Thermodynamic study of some polymer systems having special structures (polysaccharide/synthetic polymer)”. PhD Diploma in Chemistry since 2010.
2. M.Sc. degree: Faculty of Industrial Chemistry, Ghe. Asachi Technical University, Iasi, Romania; October 2001 - July 2002. Speciality: Polymeric Biomaterials; Master Diploma.
3. B.Sc. degree: Faculty of Chemistry, Al. I. Cuza University, Iasi, Romania, October 1996 - July 2000, BsC degree: Chemistry.

**Professional status:** Researcher at Romanian Academy, “Petru Poni” Institute of Macromolecular Chemistry, Iasi

### **International training and professional experience:**

- September 2003 – July 2004, **fellowship MARIE - CURRIE**, at Nottingham University, Food Science Division, United Kingdom, Emeritus Prof. Dr. John R. Mitchell. (Fundamentals of hydrocolloid technology, October 2003, North East Wales Institute of Higher Education (NEWI), Wrexham, United Kingdom)
- September 2006 – March 2007, **European Polysaccharide Network of Excellence (EPNOE PhD student)**, at Nottingham University, Food Science Division, United Kingdom, Emeritus Prof. Dr. John R. Mitchell. (Triton Technology User’s Meeting and Seminar, October 2006, Loughborough University, UK; A post-experience course of the BioUpdate Foundation and Royal Society of Chemistry Biotechnology Group – Understanding Polysaccharide Biotechnology, January 2007, University of Nottingham, Sutton Bonington Campus, UK)
- September 2011 – December 2011, October 2012 and May 2013, **Strengthening the Romanian research capacity in Multifunctional Polymeric Materials (STREAM – junior scientist)**, at Institut Européen des Membranes, Montpellier, France, Dr. Mihail Barboiu.

### **Other trainings:**

1. Tools in Polysaccharide Engineering, August 2011, Wageningen University, Holland.

2. Quartz Crystal Microbalance (QCM-D), June 2012, Laboratory for Characterization and Processing of Polymers, Faculty of Mechanical Engineering, University of Maribor, Slovenia.

**Main fields of interest:**

- Compatibility and biodegradability of natural and synthetic polymers;
- Studies on thermodynamic behaviour of polymeric blends establishing the compatibility of the components, their morphological characteristics, rheological behaviour, microphase structure and physical and mechanical characteristics;
- Viscosimetry of interpolymeric complexes and rheology of polymeric solutions;
- Preparation of stable nanostructured superassemblies from ultrasonicated xanthan solution;
- Encapsulation/release of the active ingredient in/from matrices used in food industry;
- Polysaccharides in food industry and applicability; antimicrobial tests;
- Reversible 2D/3D coatings from zipper-assembly of block copolymer micelles.

**Skills** in the use of the following techniques: viscometry of polymer solutions in diluted and concentrated regimes, rheology, differential scanning calorimetry, and thermogravimetry, IR and fluorescence spectroscopy, optical microscopy, light scattering, X-ray, mechanical - thermodynamic measurements, contact angle, biodegradability experiments.

The **research activity** done by now it is summarized as follows: co-author of **7 book chapters**, **3 patents**, **20 articles** published in ISI ranked, **9 proceedings** published in extenso in volumes of scientific manifestations, **31 presentations** at national and international conferences, **Project leader for 3 research national grants**, team member of **12 national**, **2 international grants**, **2 bilateral cooperation**. Other activities: COST Action FA0904: “Eco-sustainable food packaging based on polymer nanomaterials”

**Total number of citations: 198** (w/o = 179)

**Hirsch-index: 9** (Scopus source);

**Total Impact Factor: 71.952**

**Awards:**

- **Gold and silver medal** – EUROINVENT, INVENTICA 2015 for **Patent** RO129066-A2/2014
- **Bronze medal** – ECOINVENT 2007 for **Patent** RO123275 (B1)
- **Ilie D. Bursuc Prize** - 12<sup>th</sup> International Conference on Physics of Advanced Materials, 2018 for the outstanding oral presentation.

**Knowledge of Foreign Languages:**

- Fluent in English (reading, writing and speaking);
- Good level in French (reading, writing and speaking).