

Team leader of P3 team: CS I Dr. Gheorghe FUNDUEANU-CONSTANTIN

Positions: 2015- present: Principal scientist CSI, Head of the Department of Natural Polymers, Bioactive and Biocompatible Materials (15-20 researchers), "Petru Poni" Institute of Macromolecular Chemistry.

Education: 2000: PhD, Ph.D. Thesis: *Preparation and characterization of micro-and nanoparticles for drug delivery systems*, "Gh. Asachi" Technical University of Iassy; **1992-1993: Specialization**, International School of Advanced Studies in Polymer Science, Ferrara, Italy; **1986: B.S.** Department of Macromolecular Chemistry, Polytechnic Institute of Iasi, Romania

Editorial activity: member of editorial board for Journal of Clinical Rehabilitative Tissue Engineering Research, Journal of Hydrogels, Jacobs Journal of Nanomedicine and Nanotechnology

Fellowships: 1996 – 1997 (7M): French fellowship, "Centre de Recherches sur les Macromolécules Vegetales"(CERMAV), CNRS, Grenoble, France; **1999 – 2000** (10M), **2001** (3M), **2002** (3M), **2003** (7M), **2005** (3M): Research fellowships (bilateral cooperation Romania - Italy), Department of Pharmaceutical Science, University of Ferrara, Italy; **2006** (3M): Research fellowship (bilateral cooperation Romania - Greece), Aristotle University of Thessaloniki, Greece.

Awards: 2011: Romanian Academy Prize for chemistry "Costin D. Nenitescu"

Expertise fields: synthesis and characterization of drug delivery systems based on polymers, cell culture, *in vitro* and *in vivo* testing of the polymeric biomaterials, protocols for the determination of the pharmaceuticals in biological fluids and pharmaceutical preparations

Research contracts: 5 as **Project Director** (4 national, 1 international), **15+** as **member**

Conferences: 50+ presentations

Scientific results were published in **more than 60 scientific papers** in international journals **indexed WoS**. The international recognition in the field is reflected by: **Hirsch factor** (WoS): **19**, **Number of citation** (WoS, independent citations) >**1100**.

Scientific achievements are **centered on drug delivery systems (DDS)**: synthesis, characterization, *in vitro* and *in vivo* testing: short term toxicity, bioactivity, biocompatibility and bioavailability, with high impact on the research in Engineering Materials Science field (**Fundueanu** et al., *Biomaterials* 20(15), 1999 – **180** independent citations). He was among the first that prepared pH- and temperature-sensitive microspheres as DDS from biodegradable and biocompatible natural polymers, i. e. pullulan (**Fundueanu** et al., *Biomaterials* 29(18), 2008 – **80** independent citations) and poly(N-isopropylacrylamide-co-acrylamide) (**Fundueanu** et al., *Acta Biomaterialia* 5(1) - 2009, **48** independent citations). He developed a new self-regulated drug delivery system based on a sensor (pH-sensitive units) and an actuator (thermosensitive hydrogel) (**Fundueanu** et al., *Polymer* 110, 2017).