

First name: Ecaterina Stela

Family name: DRAGAN

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Experience : senior scientist, 51 years “Petru Poni” Institute of Macromolecular Chemistry of Iasi

Present Position: CSI, Head of the “M. Dima” Functional Polymers Department

Competences /Expertise: Polymer Chemistry

Research domains: Synthesis and characterization of ionic polymers; Porous ionic nano- and microstructured materials; Separations by ion exchangers and composites; Smart composite hydrogels (cryogels).

Articles (scientific papers –187 ISI articles, 14 book chapters ; 4 Edited books (Taylor and Francis ; Nova Science Publishers); more than 170 International/National Oral Communication); 37 Romanian patents; Individual impact factor: > 120; Hirsh index, h = 31

1. Dragan, E.S., Humelnicu, D.; Dinu M.V. 2019. Development of chitosan and poly(ethylene imine) based double network cryogels and their application as superadsorbents for phosphates, *Carbohydr. Polym.* **210**, 17-25, **2019**, IF = **6.044**; ISSN: 0144-8617
2. Dragan, E.S., Dinu, M.V. Spectacular selectivity in the capture of Methyl Orange by composite anion exchangers with the organic part hosted by DAISOGEL microspheres, *ACS Appl. Mater. & Interfaces*, **10**, 20499–20511, **2018**, IF = **8.456**, ISSN: 1944-8244
3. Dragan, E.S., Humelnicu, D., Dinu, M.V. 2018. Design of porous strong base anion exchangers bearing N,N-dialkyl 2-hydroxyethyl ammonium groups with enhanced retention of Cr(VI) ions from aqueous solution, *React. Funct. Polym* **124**, 55-63, IF = **3.074**; ISSN: 1381-5148
4. Dragan, E.S., Apopei Loghin, D.F. 2018. Novel composite biosorbents based on starch of different botanical origins grafted with PAN immobilized in chitosan cryobeads efficient in the removal of Cu<sup>2+</sup>, Ni<sup>2+</sup>, and Co<sup>2+</sup> ions, *Int. J. Biolog. Macromol.* **120**, 1872-1883, IF = **4.784**, 0141-8130
5. Dragan, E.S., Humelnicu, D., Dinu, M.V., Olariu, R.I. 2017. Kinetics, equilibrium modeling, and thermodynamics on removal of Cr(VI) ions from aqueous solution using novel composites with strong base anion exchanger microspheres embedded into chitosan/poly(vinyl amine) cryogel, *Chem. Eng. J.* **330**, 675-691, IF = **8.355**; ISSN 1385-8947
6. Dragan E.S., Loghin Apopei D.F., Cocarta A.I. 2014. Efficient sorption of Cu<sup>2+</sup> by composite chelating sorbents based on potato starch-graft-polyamidoxime embedded in chitosan beads, *ACS Appl. Mater. & Interfaces* **6**: 16577–16592, IF = **8.456**, ISSN: 1944-8244.
7. Dragan E.S., Cocarta, A.I., Dinu, M.V. 2014. Facile fabrication of chitosan/poly(vinyl amine) composite beads with enhanced sorption of Cu<sup>2+</sup>. Equilibrium, kinetics, and thermodynamics, *Chem. Eng. J.* **255**, 659-669, IF = **8.355**; ISSN 1385-8947.
8. Dragan, E.S., Apopei-Loghin, D.F. 2013. Enhanced removal of Methylene Blue from aqueous solutions by semi-IPN composite cryogels with anionically modified potato starch entrapped in PAAm matrix. *Chem. Eng. J.*, **234**: 211-222, IF = **8.355**, ISSN 1385-8947.
9. Dragan, E.S., Dinu, M.V., Advances in porous chitosan-based composite hydrogels: Synthesis and applications, *React. Funct. Polym.*, IF = **3.074**; ISSN: 1381-5148, accepted **25.09.2019**
10. Dragan, E.S., Dinu, M.V., Timpu, D. 2010. Preparation and characterization of novel composites based on chitosan and clinoptilolite with enhanced adsorption properties for Cu<sup>2+</sup>, *Bioresour. Technol.* **101**, 812-817, IF = **6.669**, ISSN 0960-8524.

Research Grants selected from 10 research grants as Grant Director or Partner Director:

1. Exploratory Research Projects, IDEAS: “Porous Ionic Matrices with Tailored Architectures and Responsiveness to Host Bioactive Compounds”, 2012-2015; <http://dragan300.weebly.com>, Director.
2. Exploratory Research Projects, IDEAS, 2008-2011, “Nanostructured biocomposites responsive at external stimuli”, Project de Cercetare Exploratorie, Director
3. Partnership PNII Project, 2008-2011, “Microbiological membranes and biocompatible synthetic polymers with potential applications to releasing heavy and radioactive metals from the environment”, Partner Director.