



## Raluca Ioana Baron

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### Research topics:

Polysaccharides; Functionalization and characterization of polysaccharides; Nitroxyl radicals; Catalysts; Hydrogels; Synthesis, characterization and applications of hydrogels.

### Education:

**2017 – 2020 PhD in Chemistry**, PhD thesis title: „**Synthesis, characterization and applications of new hydrogels from renewable resources**”, Romanian Academy, „Petru Poni” Institute of Macromolecular Chemistry, Iasi, PhD Coordinator: **Dr. Sergiu Coșeri**.

**2009 – 2010** – Faculty of Chemical Engineering and Environmental Protection, „Ghe. Asachi” Technical University of Iasi – Master of Science in Engineering.

**2004 – 2009** – Faculty of Chemical Engineering and Environmental Protection, „Ghe. Asachi” Technical University of Iasi – Engineer Diploma.

### Publications:

1. Bercea M., Biliuta G., Avadanei M., **Baron R. I.**, Butnaru M., Coseri S. Self-healing hydrogels of oxidized pullulan and poly(vinyl alcohol) *Carbohydrate Polymers*, 2019, 206, 210-219  
DOI: 10.1016/j.carbpol.2018.11.001
2. **Baron R. I.**, Bercea M., Avadanei M., Lisa G., Biliuta G., Coseri S. Green route for the fabrication of self-healable hydrogels based on tricarboxy cellulose and poly(vinyl alcohol)  
*International Journal of Biological Macromolecules* 2019, 123 744-751.  
DOI: 10.1016/j.ijbiomac.2018.11.107
3. **Baron R. I.**, Culica M. E., Biliuta G., Bercea M., Gherman S., Zavastin D., Ochiuz L., Avadanei M., Coseri S. Physical Hydrogels of Oxidized Polysaccharides and Poly(Vinyl Alcohol) for Wound Dressing Applications  
*Materials* 2019, 12(9), 1569  
DOI: 10.3390/ma12091569
4. Culica M. E., Biliuta G., Rotaru R., Lisa G., **Baron R. I.**, Coseri S. New Electromagnetic Shielding Materials Based on Viscose - Carbon Nanotubes Composites

*Polymer Engineering & Science* 2019, 59, 1499-1506

DOI: 10.1002/pen.25149

5. Culica M. E., Kasperczyk K., **Baron R. I.**, Biliuta G., Macsim A.M., Lazea-Stoyanova A., Orlinska B., Coseri S.  
Recyclable Polymer-Supported N-Hydroxyphthalimide Catalysts for Selective Oxidation of Pullulan  
*Materials* 2019, 12, 3585  
DOI: 10.3390/ma12213585
6. Nica, I.; Zaharia, C.; **Baron, R. I.**; Coseri, S.; Suteu, D.  
Adsorptive materials based on cellulose: preparation, characterization and application for copper ions retention  
*Cellulose Chemistry and Technology* 2020, 54, 579-590.  
DOI: 10.35812/CelluloseChemTechnol.2020.54.58
7. Culica, M.E.; Avadanei, M.; **Baron, R. I.**; Chibac-Scutaru, A.L.; Asandulesa, M.; Biliuta, G.; Lisa, G.; Coseri, S.  
The source of conductivity and proton dynamics study in TEMPO-oxidized cellulose doped with various heterocyclic molecules  
*Cellulose* 2020, 27, 8585-8604.  
DOI: 10.1007/s10570-020-03372-7
8. **Baron, R. I.**; Coseri, S.  
Preparation of water-soluble cellulose derivatives using TEMPO radical-mediated doxidation at extended reaction time  
*Reactive & Functional Polymers* 2020, 157, 104768.  
DOI: 10.1016/j.reactfunctpolym.2020.104768