COST ACTION GREENERING – DATA COLLECTION

First name, Family Name: Petronela Nechita
Type: Academic
Country: Romania
Leadership position in the COST: MC member in: CA 18224, CA 18101, FP1405, FP1005, FP1003, FP0904, E48, E32
Working Group in which you are involved: WG1
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Laboratory/Company: Department of Environmental, Applied Engineering and Agriculture – "Dunărea de Jos" University of Galați

Laboratory/Company info (limited to 400 characters): "Dunărea de Jos" University is the largest state higher education institution in South East of Romania with more than 65 years of academic tradition; 14 faculties with more than 12500 students and 700 academics; 67 undergraduate study programmes, 52 master's programmes and 3 doctoral schools.
Department Personnel: 4 professors, 5 associate professors, 9 lecturers, 5 Ph.D students; within department there are two gruops with expertise on environmental engineering and agriculture.

Link to the home page of the Laboratory/Company: www.ugal.ro, www.fib.ugal.ro

Fields of expertise (limited to 400 characters):

- *Pulp and paper science and technology*: coating papers and biopolymer coatings for food packaging papers, paper&board packaging, security papers, paper physic and rheology, paper durability; cellulose micro(nano)fibrilated structures (MFC, NFC); cellulose fibres composite materials for different applications (alimentary liquids filtering, seedling manufacturing, automotive industry or thermal insulating and sound absorber);
- *Environmental engineering:* waste waters treatment; valorisation of sludge from WWTP, modern techniques to remove the waste water pollutants (i.e.bio-sorption, magnetic separation), valorisation of biomass waste in composite materials for industrial applications (i.e. building).

5 Main publications or patents:

- **Nechita P.,** Roman M., *Review on polysaccharides used in coatings for food packaging papers,* Coatings, **2020** *(in print)* https://www.mdpi.com/journal/coatings/special_issues/novel_adv_food_mater (FI: 2,33)(Q2)
- **P. Nechita,** Ş. M.Ionescu, *Investigation on the thermal insulation properties of lightweight biocomposites based on lignocellulosic residues and natural polymers* Journal of Thermoplastic Composite Materials, 31 (11), 1497-1509, **2018** (FI: 0,912), http://journals.sagepub.com/eprint/FCX6XzQaRJKzBkAuyfe7/full;
- **P. Nechita,** S. Năstac, *Foam-formed cellulose composite materials with potential applications in sound insulation, Journal of Composite Materials,* Vol. 52(6) 747–754, **2018** ; (FI: 1,613), (Q2) https://doi.org/10.1177/0021998317714639 http://journals.sagepub.com/impact-factor/jcm
- *Paper with barrier properties for food packaging and method of obtaining*– Authors: D. Manea, A. Radu, C. M. Talaşman, **P. Nechita**, M. Burlacu, D.Gavrilescu, G. Mustățea, M.

Ionescu - **RO128764-A2/2013**, BOPI nr. 8/**2013** (www.osim.ro) Derwent Primary Accession Number: 2013-N12503

- *Security paper and method of obtaining*, Authors: I. Zăpodeanu, D. Buteică**, P. Nechita,** I. Gavrilă, C. Stanciu, G. Cârâc, R. Dinică, P. Dumitriu, G. Aniculăesei - BOPI 6/2011, p. 38 (www.osim.ro) RO 126 417/30.08.**2013** Derwent Primary Accession Number: 2012-C71243

Collaborations:

- West Pomerian University of Technology – Szczecin Poland – Center of Bioimmobilisation and Innovative Packaging Materials, Gheorghe Asachi Technical University of Iasi, Romania – Department of Natural and Synthetic Polymers, University of Grenoble - Département de Pharmacochimie Moléculaire, University of Novi Sad -Department of Graphic Engineering and Design, University of Ljubljana – Faculty of Natural Science and Engineering

Facilities:

- UV VIS, FTIR spectrophotometers
- Scanning Electron Microscopy
- spectral techniques NMR and HPLC
- pilot plant for extraction with supercritical CO_2