

Curriculum Vitae

PERSONAL INFORMATION:

Dr. Daniela PAMFIL

Nationality: Romanian;

Gender: Female;

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BrainMap ID: U-1700-037M-2012

EDUCATION and TRAINING:

Dates: 2011 – 2016; **Title of qualification awarded:** Doctor in chemistry; **PhD Thesis title:** “New biomaterials responsive to external stimuli containing proteins”; **Supervisors:** Dr. Cornelia Vasile and Dr. Maria Cazacu; **Defense date:** May 9, 2016; Web page address of thesis abstract: http://www.icmpp.ro/files/Rezumat_teza_Pamfil_Daniela.pdf; **Name of organization:** “Petru Poni” Institute of Macromolecular Chemistry, Iași, Romania.

Dates: 2009 – 2011; **Title of qualification awarded:** M. Sc.; **Principal subjects/Thesis title:** Prosthetic Bioengineering/“Hydrogels obtained by the polymerization of HEMA with collagen functionalized by reaction with citraconic anhydride and 2-dimethyl maleic anhydride”; **Name of organization:** “Gr. T. Popa” University, Faculty of Medical Bioengineering, Iași, Romania.

Dates: 2005 – 2009; **Title of qualification awarded:** B. Sc.; **Principal subjects/License title:** Biomaterials and Prosthetic Technology/“Hydrogels based on collagen and poly (N-isopropyl acrylamide) with applications in burn healing”; **Name of organization:** “Gr. T. Popa” University, Faculty of Medical Bioengineering, Iași, Romania.

PROFESSIONAL EXPERIENCE:

Dates: Febr. 2019 – present; **Research Scientist;** **Name/address of employer:** “Petru Poni” Institute of Macromolecular Chemistry / Grigore Ghica - Vodă Alley, no. 41 A, 700487 Iași, Romania.

Dates: 2014 - 2019; **Research Assistant;** **Name/address of employer:** “Petru Poni” Institute of Macromolecular Chemistry / Grigore Ghica - Vodă Alley, no. 41 A, 700487, Iași, Romania.

SCIENTIFIC RESEARCH:

Field of research	- Design, synthesis and physico-chemical characterization of multifunctional polymeric systems (smart hydrogels, biodegradable systems, biocomposites, hybrid systems, drug-cyclodextrin inclusion complexes) with applications in tissue engineering and controlled drug delivery systems.
Publications	- Author/co-author of 18 ISI ranked articles in peer-reviewed journals (4 articles as main author; total impact factor: 59.36), 1 book published in CNCSIS Recognized Publishing Houses (Tehnopress), 3 book chapters published in John Wiley & Sons, Inc. (2015), Springer (2018), and ELSEVIER (2019).
Scientific contribution	- Main author of 15 presentations at national/international scientific meetings (9 oral communications, 6 posters); co-author of 15 presentations at national/international scientific meetings (8 oral communications, 7 posters). - Scientific visibility: Hirsch-index: 7 (according to Web of Science Core Collection), 7 (according to SCOPUS), 7 (according to Google Scholar); Sum of the times cited: 91 (according to Web of Science Core Collection, October 2019).

- Member in **6 research project**: Romania - Norway EEA Grants *ACTIBIOSAFE* nr. *1SEE/30.06.2014* (2014 - 2017); Erasmus + TL-IRMP 2014-1-PL01-KA203-003611 (2014 - 2017); *PN II Partnership Program BIONANOMED* nr. *164/2012 UEFISCDI* (2012-2016); Romania - Slovenia PN II Bilateral Program FPSNewPack nr. 525/14 06 2012 UEFISCDI (2012 - 2013); PN-III-P1-1.1-TE-2016-2038 (2017 - 2020); Internal Research Grant of “Gr. T. Popa” University nr. 29025/2016 (2017 - 2018).

PERSONAL SKILLS AND COMPETENCES:

Technical skills <i>Trained to use the following instruments:</i>	Cary60UV-Vis spectrophotometer, Bruker Vertex 70 spectrophotometer, Adhesion tests with TA.XT Plus Texture Analyzer, DSC Mettler Toledo, Agilent 708-DS Dissolution tester, CAM-200 Goniometer, Anton Paar MCR301 rheometer, L100-5000 Gas Permeability, ER12 respirometer.
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Articles

1. C. Vasile, R. N. Darie, C. N. Cheaburu-Yilmaz, G.-M. Pricope, M. Bračić, **D. Pamfil**, G. E. Hitruc, D. Duraccio, Low density polyethylene - chitosan composites, *Composites: Part B*, DOI: 10.1016/j.compositesb.2013.06.008, vol. 55, pp. 314 - 323, December **2013**. **IF = 6.864**; **WOS: 000325301900036**.
2. **D. Pamfil**, M. T. Nistor, L. Zemljic, L. Verestiuc, M. Cazacu, C. Vasile, Preparation and characterization of methyl substituted maleic anhydride - modified collagens destined to medical applications, *Ind. Eng. Chem. Res.*, DOI: 10.1021/ie403563r, vol. 53 (10), pp. 3865 - 3879, March 12, **2014**. **IF = 3.375**; **WOS: 000332923000014**.
3. M. T. Nistor, **D. Pamfil**, C. Schick, C. Vasile, Study of the heat - induced denaturation and water state of hybrid hydrogels based on collagen and poly (N - isopropylacrylamide) in hydrated conditions, *Thermochimica Acta*, DOI:10.1016/j.tca.2014.05.020, vol. 589, pp. 114 - 122, August 10, **2014**. **IF = 2.251**; **WOS: 000340320400016**.
4. **D. Pamfil**, C. Schick, C. Vasile, New Hydrogels Based on Substituted Anhydride Modified Collagen and 2-Hydroxyethyl Methacrylate. Synthesis and Characterization, *Ind. Eng. Chem. Res.*, DOI: 10.1021/ie5016848, vol. 53 (28), pp. 11239 - 11248, July 16, **2014**. **IF = 3.375**; **WOS: 000339227700004**.
5. I. E. Raschip, A. D. Panainte, **D. Pamfil**, L. Profire, C. Vasile, In vitro testing of xanthan/lignin hydrogels as carriers for controlled delivery of bisoprolol fumarate, *Rev. Med. Chir. Soc. Med. Nat. Iasi*, vol. 119 (4), pp. 1189 - 1194, Oct - Dec **2015**. **BDI, B+**.
6. **D. Pamfil**, E. Butnaru, C. Vasile, Poly (vinyl alcohol)/chitosan cryogels as pH responsive ciprofloxacin carriers, *Journal of Polymer Research*, DOI 10.1007/s10965-016-1042-1, vol. 23 (8), Article Number: 146, July 4, **2016**. **IF = 1.53**; **WOS: 000409901100001**.
7. C. Vasile, M. Sivertsvik, A. C. Miteluț, M. A. Brebu, E. Stoleru, J. T. Rosnes, E. E. Tănase, W. Khan, **D. Pamfil**, C. P. Cornea, A. Irimia, M. E. Popa, Comparative Analysis of the Composition and Active Property Evaluation of Certain Essential Oils to Assess their Potential Applications in Active Food Packaging, *Materials*, DOI: 10.3390/ma10010045, vol. 10 (1), 45, January 7, **2017**. **IF = 2.972**; **WOS: 000394838800045**.
8. C. Cheaburu-Yilmaz, **D. Pamfil**, N. Bibire, C. Vasile, R.-V. Lupușoru, C. - L. Zamfir, C. Lupusoru, Toxicity, biocompatibility, pH-responsiveness and methotrexate release from PVA/hyaluronic acid cryogels for psoriasis therapy, *Polymers MDPI AG*, DOI: 10.3390/polym9040123, vol. 9(4), April **2017**. **IF = 3.164**; **WOS: 000401719700009**.
9. A. Chiriac, L. Nita, A. Diaconu, M. Bercea, N. Tudorachi, **D. Pamfil**, L. Tartau Mititelu, Hybrid Gels by Conjugation of Hyaluronic Acid with Poly(itaconic anhydride-co-3,9-divinyl-2,4,8,10-tetraoxaspiro

- (5.5)undecane) Copolymers, *International Journal of Biological Macromolecules*, DOI: 10.1016/j.ijbiomac.2017.01.116, vol. 98, pp. 407 – 418, May **2017**. **IF=4.784; WOS: 000396950600046.**
10. **D. Pamfil**, C. Vasile, L. Tarțau, L. Vereștiuc, A. Poiată, pH-responsive HEMA / citraconic anhydride modified collagen hydrogels as ciprofloxacin carriers for wound dressings, *Journal of Bioactive and Compatible Polymers*, DOI: 10.1177/0883911516684653, Vol. 32(4), pp. 355-381, July **2017**, **IF = 1.976; WOS: 000405508600002.**
 11. C. Vasile, **D. Pamfil**, M. Râpă, R. N. Darie-Niță, A. C. Mitelut, E. E. Popa, P. A. Popescu, M. C. Draghici, M. E. Popa, Study of the soil burial degradation of some PLA/CS biocomposites, *Composites: Part B*, DOI: 10.1016/j.compositesb.2018.01.026, Vol. 142, pp. 251-262, June 1, **2018**, **IF = 6.864; WOS: 000431157500022.**
 12. A.-D. Panainte, G. Popa, **D. Pamfil**, E. Butnaru, C. Vasile, Liliana Mititelu Tarțau, Carmen Gafițanu, In vitro characterization of polyvinyl alcohol/chitosan hydrogels as modified release systems for bisoprolol, *FARMACIA*, Vol. 66 (1), pp. 44-48, Jan.-Feb. **2018**, **IF = 1.527; WOS: 000429408600006.**
 13. R. N. Darie-Niță, C. Vasile, E. Stoleru, **D. Pamfil**, T. Zaharescu, L. Tarțau, N. Tudorachi, M. A. Brebu, G. M. Pricope, R. P. Dumitriu, K. Leluk, Evaluation of the Rosemary Extract Effect on the Properties of Polylactic Acid-Based Materials, *Materials MDPI*, 11 (10), 1825, Oct. **2018**, **IF = 2.972, WOS:000448658400039.**
 14. D. Ailincăi, **D. Pamfil**, L. Marin, Multiple bio-responsive polymer dispersed liquid crystal composites for sensing applications, *Journal of Molecular Liquids*, Vol. 272, pp. 572 - 582, DOI: 10.1016/j.molliq.2018.09.125, December 15, **2018**, **IF = 4.513, WOS: 000451494700063.**
 15. M. D. Stelescu, A. Airinei, E. Manaila, G. Craciun, N. Fifere, C. Varganici, **D. Pamfil**, F. Doroftei, Effects of Electron Beam Irradiation on the Mechanical, Thermal, and Surface Properties of Some EPDM/Butyl Rubber Composites, *Polymers MDPI*, 10(11), 1206, DOI: 10.3390/polym10111206, Nov. **2018**, **IF = 3.164, WOS: 000454456800028.**
 16. A. G. Rusu, A. P. Chiriac, L. E. Nita, M. Bercea, N. Tudorachi, A. Ghilan, **D. Pamfil**, D. Rusu, F. D. Cojocar, *Interpenetrated Polymer Network with Modified Chitosan in Composition and Self-Healing Properties*, *International Journal of Biological Macromolecules*, DOI: 10.1016/j.ijbiomac.2019.03.136, vol. 132, pp. 374 – 384, July 1, **2019**, **IF = 4.784, WOS: 000470943900038.**
 17. C. Vasile, E. Stoleru, R. N. Darie-Niță, R. P. Dumitriu, **D. Pamfil**, L. Tarțau, *Biocompatible Materials Based on Plasticized Poly(lactic acid), Chitosan and Rosemary Ethanolic Extract I. Effect of Chitosan on the Properties of Plasticized Poly(lactic acid) Materials*, *Polymers MDPI*, 11(6), 941, DOI:10.3390/polym11060941, June **2019**, **IF = 3.164, WOS: 000473819100013.**
 18. A. Crețeanu, **D. Pamfil**, C. Vasile, G. Tantar, C. M. Ghiciuc, L. Ochiuz, A. Ghilan, A. Maxim, *Study on the Role of the Inclusion Complexes with 2-Hydroxypropyl-β-cyclodextrin for Oral Administration of Amiodarone*, *International Journal of Polymer Science*, vol. 2019, ID 1695189, DOI: 10.1155/2019/1695189, Nov. **2019**, **IF = 1.892, WOS: 000501756500001.**

Books/ chapters (including monographs):

1. **D. Pamfil**, M. T. Nistor, C. Vasile, *Chapter 13: Collagen-based materials for pharmaceutical applications*, in "Handbook of Polymers for Pharmaceutical Technologies: Volume 3, Biodegradable Polymers", editors: Vijay Kumar Thakur, Manju Kumari Thakur, John Wiley & Sons, Inc., Scrivener Publishing LLC, Hoboken, NJ, USA, ISBN: 978-1-119-04142-9, DOI: 10.1002/9781119041450.ch13, **2015**, pp. 439 - 481, **WOS: 000385867800014.**
2. **D. Pamfil**, C. Vasile, *Chapter 4: Nanogels of natural polymers*, in "Polymer Gels: Perspectives and applications. Gels Horizons-From Science to Smart Materials", editors: V. K. Thakur, M. K. Thakur, S.

I. Voicu, SPRINGER-VERLAG, Singapore, ISBN: 978-981-10-6080-9; 978-981-10-6079-3, ISSN: 2367-0061, DOI: 10.1007/978-981-10-6080-9_4, **2018**, pp. 71 - 110, **WOS: 000441503000005**.

3. D. Pamfil, C. Vasile, *Chapter 2: Responsive Polymeric Nanotherapeutics*, in “Polymeric Nanomaterials in Nanotherapeutics, Micro and Nano Technologies”, 1st Edition, editor: C. Vasile, ELSEVIER, eBook ISBN: 978-0-12-813933-2, Paperback ISBN: 978-0-12-813932-5, DOI: 10.1016/B978-0-12-813932-5.00002-9, **2019**, pp. 67 - 121, **WOS: 000467850300002**.

4. D. Pamfil, C. Vasile, Book: *Pharmaceutical and medical applications of some biomaterials and composites with sensibility at external stimuli*, Tehnopress editure accredited by CNCISIS, cod 89, Iași, Romania, ISBN 978-606-687-149-5, **2014**, 136 pages.

Significant and representative scientific achievements

I dedicated my research career to studies on design, synthesis and characterization of multi-component polymeric systems, especially hydrogels and smart materials. A large part of Master research was developed within an abroad scholarship in United Kingdom for a period of five months (from 01/02/2011 to 30/06/2011) at the *Portsmouth University by the Erasmus – Socrates program*. A mobility as PhD was performed at the *University of Maribor from Slovenia* within the bilateral project FPSNewPack nr: 525/2012, period Nov. 19, 2012 – Dec. 01, 2012, where I achieved *skills in potentiometric titration and evaluation of the total organic and nitrogen of some polymeric materials*. This experience conducted to the firsts scientific results obtained during the PhD stage consisted in a **paper published (as first author)** in a high impact factor journal in the field (*Industrial & Engineering Chemistry Research*, 2014). I had the opportunity to participate on the Short Term Scientific Mission within the COST Action FA0904 scientific program, from 14/01/2013 to 28/02/2013, at the **Rostock University, Germany**, where I gained *competences in thermal analysis by differential scanning calorimetry and thermogravimetry*. The obtained results through this experience were valued by publishing an article in *Thermochimica Acta Journal*, 2014. I took part at the **intensive courses** within the project Erasmus + TL-IRMP 2014-1-PL01-KA203-003611 “**Joint innovative training and teaching/learning program in enhancing development and transfer knowledge of application of ionizing radiation in materials processing**” which consisted in 2 internships in: **Poland, Warsaw** (Sept. 05 – 19, 2015) and **Italy, Palermo**, (Sept. 27 – Oct. 04, 2015). A participation at the Training School within the SimInhale COST Action MP1404 entitled “**The emerging role of fluid-particle dynamics and reduced methods in the context of in silico population studies for pulmonary drug development**” in Athens, Greece (Oct. 02 - 04, 2017) was also performed.