

Curriculum Vitae

PERSONAL DETAILS



Dr. Mirela Teodorescu

Scientific researcher

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PROFESSIONAL EXPERIENCE

07.2019–present: Researcher CS, Petru Poni Institute of Macromolecular Chemistry (PPIMC), Iasi, Romania.

2018–2019: Researcher, Project PN-III-P1-1.2-PCCDI-2017-0194: Hydrogen energy revolution driver–fuel cells, on the way from research towards production by mitigation of main technological barriers; PPIMC, Iasi, Romania.

03.2014–06.2019: Research assistant, PPIMC, Iasi, Romania.

2015–2016: Post-Doctoral Researcher, Project PN-II-ID-PCE-2011-3-0199: Polymer Materials with Smart Properties; PPIMC, Iasi, Romania.

03.2013–12.2013: Researcher, FP7 European Project REGPOT-CSA-2010-264115: Strengthening the Romanian research capacity in Multifunctional Polymeric Materials; STREAM; Project coordinator: PPIMC, Iasi, Romania.

2008–2010: Research engineer, The National Research & Development Institute for Textiles and Leather, Bucharest, Romania.

EDUCATION AND TRAINING

2009–2012: PhD in Industrial Engineering; Project: Doctoral scholarships for research performance at European level – EURODOC, ID: 59410; Thesis: Biomimetics applicability in textile field; Gh. Asachi Technical University of Iasi, Faculty of Textile-Leather and Industrial Management, Romania.

10.2011–03.2012: Research internship at Université de Haute-Alsace (UHA), Ecole Nationale Supérieure d'Ingénieurs Sud Alsace (ENSISA), Mulhouse, France.

2007–2008: Master; Gh. Asachi Technical University of Iasi, Faculty of Textile-Leather and Industrial Management, Romania.

2002–2007: Degree in Textile Engineering; Gh. Asachi Technical University of Iasi, Faculty

of Textile-Leather and Industrial Management, Romania.

RESEARCH TOPICS

The most important competences and research results are based on: obtaining simple and multicomponent polymeric systems in the form of solutions/thin films/nanofibres/hydrogels, by different methods (e.g., spin-coating, solution casting, electrospinning, cryogelation, chemical crosslinking), based on synthetic/natural polymers and inorganic compounds (e.g., carbon nanotubes, clays, etc.), physico-chemical characterization (e.g., structural, morphological, optical, electrical, thermal, rheological properties, etc.); obtaining biomaterials with various external stimuli responses/delivery of active principles, for potential medical/pharmaceutical/cosmetic applications, or for various other applications in food, textile fields, etc.

SCIENTIFIC ACTIVITY

- **38** scientific papers, of which: **15** (**8** as **main author**) in ISI journals (cumulative IF = 37.514), **2** (single author) in other journals, **21** (**7** as **main author**) papers in proceedings of conferences (some of them ISI), over **40** participations at international/national scientific events, **1** book (single author), **5** (**1** as **main author**) book chapters. Sum of times cited **248**, H-index **8** (cf. Scopus).
- International awards and diplomas: **Diploma and Gold Medal Award** (International Salon of Inventions and New Technologies „New Time”, Sevastopol, Ukraine, Sept 2012), **Diploma and Medal „Inventica”** (The XVI-th International Exhibition of Research, Innovation and Technological Transfer „Inventica 2012”, Iasi, Romania, June 2012), **Diploma of Honour** in recognition of high scientific contribution (The XVI-th International Conference „Inventica 2012”, Iasi, Romania, June 2012), **Diploma of Excellence for Innovative Research** (EUROINVENT - European Exhibition of Creativity and Innovation – Iasi, Romania, May 2012)

MEMBER OF PROFESSIONAL GROUPS

- Member of Romanian Society of Rheology

SIGNIFICANT PUBLICATIONS:

- M. Teodorescu, M. Bercea, S. Morariu, **Biomaterials of PVA and PVP in medical and pharmaceutical applications: Perspectives and challenges**, *Biotechnology Advances* (FI = 12.831), 2019, 37(1), 109-131, DOI: 10.1016/j.biotechadv.2018.11.008
- M. Teodorescu, M. Bercea, S. Morariu, **Biomaterials of poly(vinyl alcohol) and natural polymers**, *Polymer Reviews* (FI = 6.766), 2018, 58(2), 247-287, DOI: 10.1080/15583724.2017.1403928
- M. Teodorescu, M. Bercea, S. Morariu, **Miscibility study on polymer mixtures in dilute solution**, *Colloids and Surfaces A: Physicochemical and Engineering Aspects* (FI = 3.131), 2018, 559, 325-333, DOI: 10.1016/j.colsurfa.2018.09.062
- M. Teodorescu, S. Morariu, M. Bercea, L. Sacarescu, **Viscoelastic and structural properties of poly(vinyl alcohol)/poly(vinylpyrrolidone) hydrogels**, *RSC Advances* (FI =

3.049), 2016, 6, 39718-39727

- M. Teodorescu, M. Bercea, ***Poly(vinylpyrrolidone) – a versatile polymer for biomedical and beyond medical applications***, *Polymer-Plastics Technology and Engineering* (FI = 1.705), 2015, 54(9), 923-943, DOI: 10.1080/03602559.2014.979506

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A handwritten signature in blue ink, appearing to read 'M. Teodorescu', with a stylized flourish at the end.