

Curriculum Vitae

Marcela-Corina Roșu

PERSONAL INFORMATION



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PROFESSIONAL CURRENT STATUS

Chemist / Research Scientist
Mass Spectroscopy, Chromatography and Applied Physics Department
INCDTIM - National Institute for Research and Development of Isotopic and Molecular Technologies (website: www.itim-cj.ro)

MAIN RESEARCH FIELDS

PHOTOCATALYSIS ENVIRONMENT

Preparation and characterization of TiO₂-based photocatalysts for degradation of various organic pollutants from water
Development of new TiO₂/graphene-based nanocomposites with applications in textile and leather industries

BIOMATERIALS

Synthesis and characterization of graphene-based composites for biomedical applications (dental nanocomposites, substrates for cells proliferation and differentiation, electrochemical detection of bioactive compounds)

EDUCATIONAL BACKGROUND

2008-2011

PhD Chemistry

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania

2007-2008

MSc Quality analysis and environment monitoring

Babes-Bolyai University, Faculty of Environmental Science and Engineering, Cluj-Napoca, Romania

2003-2007

BSc Chemical-Physics

Babes-Bolyai University, Faculty of Chemistry and Chemical Engineering, Cluj-Napoca, Romania

1990-1993

Graduate Nursing Programs

Victor Babes Special Medical College, Cluj-Napoca, Romania

WORK EXPERIENCE

2007-present

Chemist / Research Scientist

National Institute for Research and Development of Isotopic and Molecular Technologies (INCDTIM) Cluj-Napoca, Romania

1994-2007

Nurse

Niculae Stancioiu Heart Institute, Cluj-Napoca, Romania

1988-1990

Chemist Operator

The Enterprise of Synthetic Fibers, Cellulose and Paper (current name: SC Somes SA), Dej, Romania

PERSONAL SKILLS

Mother tongue(s)

Romanian

Other language(s)

English

General skills

responsability, integrity, creative, positive attitude, interpersonal skills

Computer skills

Microsoft Office programmes (Word, Excel, PowerPoint), Adobe, Origin

Organisational, managerial skills

leader of component project ECOTEL within PN-III-P1-1.2-PCCDI-2017 0743/44PCCDI/2018: Interinstitutional program for the development of advanced eco-nanotechnology solutions for multifunctional treatments of leather and textile materials - PHYSforTEL (2018-2021)

ADDITIONAL INFORMATION

- Trainings
- 1st Autumn School on Physics of Advanced Materials (PAMS-1), organized by Alexandru Ioan Cuza University, 22-28 September 2014, Iasi, Romania
 - International training workshop on Principles of Environmental Science and Engineering, organized by the Michigan State University, Institute of International Health and Forgarty International Center Program on Environmental Health, 8-11 September 2008, Cluj-Napoca, Romania

Professional affiliation Romanian Catalysis Society

Reviewer Journal of Material Sciences & Engineering; Toxicology in Vitro; Materials Research Bulletin; Environmental Science and Pollution Research; Materials Science in Semiconductor Processing; Materials; Journal of Solid State Chemistry; NANO Brief Reports and Review

Awards M. Moldovan, S. Pruneanu, C. Socaci, M.C. Rosu, C. Sarosi, S. Cuc, D. Prodan, Graphene oxide-based composite for dental restorations, Excellence Diploma and Gold Medal at International Salon of Research, Innovation and Inventions PRO INVENT 2017 XVth edition, March 22-24, 2017, Cluj-Napoca, Romania

Scientometric data

According to Scopus database	According to Web of Science database
Hirsch Index: 13	Hirsch Index: 12
ISI Papers: 44	ISI Papers: 36
Total ISI Citations: 483	Total ISI Citations: 427

Participation of international conferences: 41, 92 papers (31 papers as first author)

Projects as team member

- **RO-NO-2019-29/2020:** TiO₂ nanotubes/graphene-based nanomaterials to address the emerging contaminants pollution – **GRAFTID (2020-2023)**
- **ATTRACT** Third Party Project (funded by the European Union's Horizon 2020 Programme): Carbon quantum dots/graphene hybrids with broad photoresponsivity – **BANDPASS (2019-2020)**
- **PN-III-P2-2.1-PED-2016-0392:** Laboratory technology for detection of leukemia biomarkers using new graphene-based materials - **BIOLEUK (2017-2018)**
- **PN-III-P2-2.1-PED-2016-1907 (PED 101/2017):** New luting materials with graphene used in dentistry - **LUTGRAF (2017-2018)**
- **PN-II-RU-TE-2014:** Graphene-porphyrin supramolecular assemblies for chemical and electrochemical detection of hydrogen peroxide-an oxidative stress marker **(2015-2017)**
- **PN-II-PT-PCCA-2013-4-1282 (230/2014):** New nanocomposites based on biocompatible polymers and graphene for dental applications – **BIOGRAF (2014-2017)**
- **PN II 92095/2008:** Modern methods of investigation, authentication, preservation and showcasing of the icons from the patrimony of the Transilvania – **CONSIGN (2008-2011)**
- **PN II 22-124/2008:** Solar photocatalytic hydrogen production using industrial sulphurous wastes (H₂S, SO₂) - **H₂SOLAR (2008-2011)**
- **PN II 71-122/2007 –** Oxidic micro- and nano-structured materials with controlled luminescent chromatics – **MAMINAL (2007-2010)**
- **CEEX - VIASAN 102/2006:** Porphyrin biocomposites used in photodynamic therapy of cutaneous malign tumors – **PORFIDERM (2006-2008)**
- **CEEX - MENER 710/2006:** Photo-electrolytic production of hydrogen – **HIDROSOL (2006-2008)**