

Curriculum vitae

Dr. habil Mariana-Dana DAMACEANU (previous name: IOSIP)

Current Positions: - Senior Researcher (CS I), “Petru Poni” Institute of Macromolecular Chemistry (ICMPP)
- Head of Electroactive Polymers and Plasmochemistry Laboratory, ICMPP
- Ph.D. Coordinator in Chemistry, Advanced Studies School of the Romanian Academy (SCOSAAR), Iasi Branch

Fields of interest:

Organic materials for use in (opto)electronic and energy applications

- » Smart materials with chromic response to various stimuli
- » Heterocyclic polymers for active layers in biosensors, chemosensors, humidity sensors
- » Polymer membranes for gas separation and CO₂ capture
- » Organic materials for (opto)electronic devices: light-emitting diodes, photovoltaic cells, fuel cells, capacitors, supercapacitors, electrochromic devices, etc.

Education and training:

2016	Habilitation in Chemistry , habilitation certificate: OM 4831/11.08.2016
2010 – 2013	PostDoc Fellow in the frame of European Social Fund - „Cristofor I. Simionescu” Postdoctoral Fellowship Program
2003 – 2004	PhD Fellow within the FP5 European project "Research Training Network (RTN) - EUROFET", Bicocca University, Milan, Italy
2000 – 2005	PhD in Chemistry , PhD thesis title: "New polymers containing 1,3,4-oxadiazole rings for high-performance applications", Romanian Academy, ICMPP
1999 – 2001	Master Degree , Specialization "Chemistry and biochemistry of heterocyclic compounds", "Al. I. Cuza" University, Faculty of Chemistry, Iasi, Romania
1995 – 1999	Bachelor Degree , Specialization "Chemistry and Physics", "Al. I. Cuza" University, Faculty of Chemistry, Iasi, Romania

Work experience:

January 2021-present	Head of Electroactive Polymers and Plasmochemistry Laboratory, ICMPP
2019-2020	Group leader within Polycondensation and Thermostable Polymers Lab., ICMPP
2018-present	PostDoc Mentor within PN-III-PD projects <i>Hybrid composites based on doped ZnO micro-/nanoparticles for enhanced UV and visible light photocatalysis – PhotoCat,</i> Engineering organic thin films for use as efficient active layers in optoelectronic devices - EngFilm
2016-present	PhD Coordinator with 3 PhD enrolled students, 1 with PhD degree awarded
2017-2019	Project Director , <i>Smart materials with versatile chromic response to external stimuli developed by macromolecular engineering - SMARTCrom</i> , PN-III-PCE
2017-2018	Project Director , <i>Dye-sensitized solar cells by molecular engineering of phenoxazine or phenothiazine-based sensitizers, EngDSSC</i> , PN-III-PED
2014-2013	Contract manager , Framework Services Contract within POS-CCE-axis II CDI project, <i>Photovoltaic cell with hyperpolarizable organic chromophore - Novocell</i>

2013-2011	Post-doc stages , <i>Thiophene-based derivatives</i> , Institute of Thin Film and Microsensoric Technology, Teltow, Germany (each year, 5 months total)
2013-2010	Project Director , <i>Materials based on aromatic polymers with condensed rings for application in electronic and optoelectronic nanotechnologies</i> - research project for the stimulation of forming young independent research teams (PNII-TE)
2013 and 2001	Visiting scientist , <i>Heterocyclic polymers for high-performance applications</i> , Institute of Organo-Element Compounds, Moscow, Russia (5 weeks total)
2010-present	Visiting scientist , <i>Heterocyclic polymers for optoelectronic and membrane applications</i> , Centre of Polymers and Carbon Materials, Zabrze, Poland (2010, 2011, 2012, 2015, 2017 and 2018, 1 week each year)
2008-2006	Project Director , <i>Synthesis and study of polymer materials with special properties (electroinsulating, semiconductor, liquid crystalline) for electronic and optoelectronic nanotechnologies</i> - CEEEX-ET
Nov 2002 Dec 2000	Visiting Scientist , <i>Heterocyclic polymers for high-performance applications</i> , Central Chemical Research Center, Budapest, Hungary (5 weeks total)
2001-2002	Associated Professor Assistant , "Al. I. Cuza" University, Faculty of Chemistry

Scientific contribution:

- **96** scientific referred articles published in **ISI journals (93)** or BDI journals (**3**)
- **28** papers published in the proceedings of scientific meetings (**9 ISI indexed**)
- more than **91** oral presentations (lectures or communications), from which **5 are invited**
- **2** books and **4** book chapters as co-author (**2** as first author)
- **director** of **5** research projects (**1** contract with a company) and **member** of other **19** projects
- international **reviewer** of **more than 40** articles in prestigious ISI journals
- **expert evaluator** of **11** research **projects** in national (PNII - RU) or international competitions (Bulgaria, Chile)
- **chair person** in **6** national/international symposia and the **organizer** of **1** scientific workshop
- **member of the scientific committee** of *International Congress ANCON 2017*
- **member of the Materials Science Commission** of The National Council of Scientific Research (CNCS), Romania
- **Elsevier book editor**: "Polyimides: Advances in Blends and Nanocomposites"

Scientific visibility:

H-index: 23

Sum of the times cited: 1224; without self-citations: 775 (according to *Web of Science, cumulative Damaceanu MD or Iosip MD*)

Awards:

- "Nicolae Teclu" prize of the Romanian Academy (in 2012)
- National Science and Art Foundation award (in 2013)

BrainMap ID: U-1700-035A-7657, adress: <https://www.brainmap.ro/mariana-dana-damaceanu>

Selected publications:

1. The chromic and electrochemical response of CoCl₂ – filled polyimide materials for sensing applications

M. D. Damaceanu, I. Sava, C. P. Constantin

Sensors and Actuators B: Chemical, 234, 549–561 (2016).

<https://doi.org/10.1016/j.snb.2016.04.172>

2. Heteroatom-mediated performance of dye-sensitized solar cells based on T-shaped molecules

M. D. Damaceanu, C. P. Constantin, A. E. Bejan, M. Mihaila, M. Kusko, C. Diaconu, R. Mihalache, R. Pascu

Dyes and Pigments, 166, 15-31 (2019).

<https://doi.org/10.1016/j.dyepig.2019.02.055>

3. Synergetic Effect between Structural Manipulation and Physical Properties towards Perspective Electrochromic *n*-Type Polyimides

C. P. Constantin, A. E. Bejan, **M. D. Damaceanu**

Macromolecules, 52, 8040-8055 (2019).

<https://doi.org/10.1021/acs.macromol.9b01576>

4. Electrochemically Active Polyimides Containing Hydroxyl-Functionalized Triphenylmethane as Molecular Sensors for Fluoride Anion Detection

A. P. Chiriac, I. Butnaru, **M. D. Damaceanu**

Electrochimica Acta, 353, 136602 (2020).

<https://doi.org/10.1016/j.electacta.2020.136602>

5. Insights into molecular engineering of membranes based on fluorinated polyimide-polyamide miscible blends which do not obey the trade-off rule

I. Butnaru, C. P. Constantin, M. Asandulesa, A. Wolińska-Grabczyk, A. Jankowski, U. Szeluga, **M. D. Damaceanu**

Separation and Purification Technology, 233, 116031 (2020).

<https://doi.org/10.1016/j.seppur.2019.116031>