Adriana–Petronela CHIRIAC

Date of birth: [redacted] | **Nationality:** Romanian | **Gender** Female | (+4[redacted] | chiriac.adriana@icmpp.ro | adrianap.chiriac@gmail.com | Iasi, Romania

WORK EXPERIENCE

01/11/2020 – CURRENT – Iasi, Romania
RESEARCH ASSISTANT – "PETRU PONI" INSTITUTE OF MACROMOLECULAR CHEMISTRY

01/11/2020 – CURRENT – Iasi, Romania
PhD STUDENT – "PETRU PONI" INSTITUTE OF MACROMOLECULAR CHEMISTRY

- Project member: PN-III-P2-2.1-PED-2019-3520, contract no. 438PED/2020, project title: "*State-of-the-art engineering of energy saving polymer-based electrochromic devices with low voltage operation*", acronym EngEChrom - Project Leader: Dr. Catalin - Paul Constantin

01/11/2020 – CURRENT – Iasi, Romania
PhD STUDENT – "PETRU PONI" INSTITUTE OF MACROMOLECULAR CHEMISTRY

- Project member: PN-III-P2-2.1-PED-2019-3993, contract no. 485PED/2020, project title: "*Light Emitting Polymeric Devices Improved by Chemical Tools*", acronym LEPDICT - Project Leader: Dr. Radu - Dan RUSU

2017 – 2019 – Iasi, Romania
PhD STUDENT (RESEARCH ASSISTANT) – "PETRU PONI" INSTITUTE OF MACROMOLECULAR CHEMISTRY

- Project member: PN-III-P4-ID-PCE-2016-0708, contract no. 66/2017, project title: "*Smart materials with versatile chromic response to external stimuli developed by macromolecular engineering*", acronym SMARTCrom - Project Leader: Dr. Mariana - Dana Damaceanu

01/07/2014 – 26/09/2014 – Radauti, Romania
CHEMIST – EGGER TECHNOLOGIA

EDUCATION AND TRAINING

01/11/2017 – CURRENT – Iasi, Romania
PhD STAGE – Romanian Academy, "Petru Poni" Institute of Macromolecular Chemistry

- Thesis title: Functional aromatic polymers with imide cycles for advanced technologies

2015 – 2017 – Iasi, Romania
MASTER DEGREE IN CHEMISTRY, STUDY PROGRAM: ENVIRONMENTAL CHEMISTRY AND FOOD SAFETY – Faculty of Chemistry, "Alexandru Ioan Cuza" University

- Thesis title: Heterocyclic compounds obtained by *N*-ylides

2012 – 2015 – Iasi, Romania
BACHELOR OF CHEMISTRY, STUDY PROGRAM: TECHNOLOGICAL BIOCHEMISTRY – Faculty of Chemistry, "Alexandru Ioan Cuza" University

- Thesis title: Compounds with mixed functions. Monosaccharides

COMMUNICATION AND INTERPERSONAL SKILLS

Communication skills

- Team spirit, increased ability to adapt to unforeseen situations, seriousness, ability to select and assimilate new information.
- Good communication and interaction skills with childrens, acquired during the internship of pedagogical practice and graduation of the psycho-pedagogical module, level I.
- Good practical and communication skills acquired during the specialized internship at S.C. Kober S.R.L. (Piatra Neamt), through the project POSDRU/161/2.1/G/141661, entitled "Ease of insertion of future chemistry graduates on the labor market".
- Organizational skills acquired as a volunteer in the organization of the chemistry contest "Magda Petrovanu", editions 5,6,7,8 and 9.

Digital skills

Microsoft Office, Microsoft Word, Microsoft Excel, Microsoft Power Point; Origin, Chem-Draw, TopSpin (NMR spectra)

SCIENTIFIC CONTRIBUTION

Research interest

- Aromatic/heteroaromatic monomers and polymers;
- Physico-chemical properties of the synthesized compounds;
- Thin films and composite materials based on modified polyimides
- Assessing the applicative potential of polymeric materials for sensors or energy field.

Practical skills

- Fine organic synthesis;
- Synthesis of aromatic and heteroaromatic polymers;
- Structural characterization of organic, small molecular and macromolecular compounds by NMR and FTIR spectra;
- Investigation of opto-electronic properties by UV-Vis spectroscopy, fluorescence spectroscopy, and electrochemical properties by cyclic voltammetry;
- Processing of polymers into thin films.

Scientific activity

- **3** published articles; **7** presentations; 1 poster;
- team member of **3 research projects**;
- PhD Stage: 1 week - October 2018 at Center of Polymers and Carbon Materials of the Polish Academy of Science, Zabrze, Poland.

Brainmap ID: U-1800-055K-8081
ORCID ID: https://orcid.org/0000-0002-8152-5145

Published articles

1. **Chiriac, A. P.**; Butnaru, I.; Damaceanu*, M. D. Electrochemically Active Polyimides Containing Hydroxyl-Functionalized Triphenylmethane as Molecular Sensors for Fluoride Anion Detection. *Electrochim. Acta* **2020**, *353*, 136602. **FI = 6.215**
2. **Chiriac, A. P.**; Damaceanu*, M. D. A novel approach towards crown-ether modified polyimides with affinity for alkali metal ions recognition. *J. Mol. Liq.* **2021**, *322*, 114929. **FI = 5.065**
3. Butnaru*, I.; **Chiriac, A. P.**; Asandulesa, M.; Sava, I.; Lisa, G.; Damaceanu, M. D. Tailoring poly(ether-imide) films features towards high performance flexible substrates. *J. Ind. Eng. Chem.* **2021**, *93*, 436–447. **FI = 5.278**