

Curriculum Vitae



Personal information

First name / Surname(s) **MOACĂ, ELENA ALINA (born TĂCULESCU)**

E-mail alina.moaca@umft.ro
alina_taculescu@yahoo.com

Nationality Romanian

Work experience

Dates **30.09.2024 – present**

Occupation or position held **Associate Professor, University Clinic of Toxicology, Drug Industry, Management, Marketing, and Dermatopharmacy**

Main activities and responsibilities **Didactic activity (courses, seminars) / Higher education; Scientific research**

Name and address of employer "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro
<https://www.umft.ro/en/pharmacy/departments-of-the-pharmacy-faculty/department-i/toxicology-drug-industry-management-and-legislation/>

Dates **17.09.2018 – 29.09.2024**

Occupation or position held **Lecturer, Department of Toxicology, Drug Industry, Management and Legislation**

Main activities and responsibilities **Didactic activity (courses, seminars, laboratory) / Higher education; Scientific research**

Name and address of employer "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro

Dates **18.09.2015 – 16.09.2018**

Occupation or position held **University Assistant, Department of Toxicology**

Main activities and responsibilities **Didactic activity (laboratory, seminars) / Higher education; Scientific research**

Name and address of employer "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro

Dates **15.10.2008 – 01.05.2014**

Occupation or position held **Researcher in Chemistry**

Main activities and responsibilities

- Synthesis of iron/iron-oxides magnetic nanoparticles by the co-precipitation method and production of magnetic nanofluids based on polar and non-polar carriers;
- Preparation of magnetic fluids with iron oxide nanoparticles obtained by laser pyrolysis;
- Synthesis of magnetic composites „core-shell” type, by encapsulation of magnetic nanoparticles in a silica gel matrix, used for magnetic paper making;
- Responsible for precursor activities.

Name and address of employer Romanian Academy – Timisoara Branch, Center for Fundamental and Advanced Technical Research, Mihai Viteazu Blvd., no. 24, Timisoara RO 300223 Romania, <http://acad-tim.tm.edu.ro/cctfa/>

Dates **17.07.2007 – 14.10.2008**

Occupation or position held **Chemist Technician (17.07.2007 – 31.07.2008) / Chemical Engineer (01.08.2008 – 14.10.2008)**

| | |
|--|--|
| Main activities and responsibilities | Correction of both water-based paints and plasters, respectively – the activity was carried out in the Laboratory of Colorimetry – Research and Development Department / Elaboration of the recipes for synthesis of alkyd and polyester resins, daily collaboration with production staff, preparing annual research projects – the activity was carried out in the Resins Laboratory – Research and Development Department |
| Name and address of employer | SC AZUR SA, Research and Development Department, Constructorilor Bvd. no. 1-3, Timisoara RO 300571 Romania, https://www.azur.ro |
| Education and Training | |
| Training | |
| Dates | 26.01.2024 – 26.07.2025 |
| Title of qualification | Postdoctoral Researcher – Pharmacy Domain (Project acronym: ONCO-MNPs) |
| Name and type of organization providing education and training | “Victor Babes” University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro |
| Dates | 2016 – 2017 |
| Title of qualification | Certificate: Teacher Training Department (2nd Module); Ac series No. 0026224 |
| Name and type of organization providing education and training | West University of Timisoara, Vasile Parvan street no. 4, Timisoara RO-300223 Romania, www.uvt.ro |
| Dates | 01.06.2014 – 15.12.2015 |
| Title of qualification | Postdoctoral Researcher |
| Name and type of organization providing education and training | „Victor Babes” National Institute of Research and Development in the Pathology Domain and Biomedical Science, Splaiul Independentei street no. 99-101, sector 5, Bucharest RO 050096 Romania, www.ivb.ro |
| Dates | 2003 – 2008 |
| Title of qualification | Certificate: Teacher Training Department (1st Module); G series No. 0036666 |
| Name and type of organization providing education and training | Politehnica University of Timisoara, Victoriei Square no. 2, Timisoara RO 300006 Romania, www.upt.ro |
| Dates | 1999 – 2003 |
| Title of qualification | Professional Competence Certificate, specialization – Technician in Chemical Industry, A series No. 0235782 |
| Name and type of organization providing education and training | „Decebal” Scholar Group, Antoninii street no. 2, Drobeta Turnu Severin RO 220125 Romania |
| Education | |
| Dates | 2024 |
| Title of qualification | Habilitation in Pharmacy – as to Order no. 7810 of 17.12.2024 issued by the Minister of National Education |
| | <i>Thesis title: Synthesis methods for pharmaco-toxicological evaluation of metal nanoparticles with or without natural biologically active compounds attached</i> |
| Name and type of organization providing education and training | “Victor Babes” University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro |
| Dates | 01.10.2024 – present |
| Title of qualification | Postgraduate Master's – Toxicology and addiction medication Faculty of Medicine |
| Name and type of organization providing education and training | “Victor Babes” University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro |
| Dates | 01.10.2024 – present |
| Title of qualification | Postgraduate Master's – Pharmacovigilance and Clinical Trial Monitoring Faculty of Pharmacy |
| Name and type of organization providing education and training | “Victor Babes” University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro |

Dates 01.10.2018 – 20.01.2023
Title of qualification **Ph.D. in Pharmacy - as to Order no. 3900 of 28.03.2023 issued by the Minister of National Education**
Thesis title: Contributions regarding the experimental assessment of different magnetic materials based on iron oxide nanoparticles, from a physicochemical and biological point of view
Name and type of organization providing education and training "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro

Dates 21.09.2015 – 17.07.2017
Title of qualification **Master's Degree in Pharmacy – OTC drugs, dietary supplements, cosmetics, series MA No. 0108177**
Project title: Complexation of some β-cyclodextrins with iron oxide magnetic nanoparticles. Synthesis, characterization, and applications
Name and type of organization providing education and training "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania, www.umft.ro

Dates 01.10.2010 – 07.02.2014
Title of qualification **Ph.D. in Chemical Engineering – as to Order no. 165 of 07.04.2014 issued by the Minister of National Education**
Thesis title: New approaches regarding the synthesis and the use of some nanomaterials with magnetic properties
Name and type of organization providing education and training Politehnica University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, Vasile Parvan Blvd. no. 6, Timisoara RO 300226 Romania, www.upt.ro

Dates 01.10.2008 – 24.06.2010
Title of qualification **Master's Degree in Chemical Engineering - Non-Polluting Process Technologies, I series No. 0034631**
Project title: Direct dyes removal from wastewater of laboratory using synthetic adsorbents
Name and type of organization providing education and training Politehnica University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, Vasile Parvan Blvd. no. 6, Timisoara RO 300226 Romania, www.upt.ro

Dates 01.10.2003 – 03.07.2008
Title of qualification **Bachelor's Degree in Chemical Engineering (Diplomat Engineer) - Engineering and Chemistry of Inorganic Substances, G series No. 0051615**
Project title: Synthesis, characterization, and use of some organic-inorganic hybrids in the extraction of Cu²⁺ and Cd²⁺ ions from aqueous solutions
Name and type of organization providing education and training Politehnica University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering, Vasile Parvan Blvd. no. 6, Timisoara RO 300226 Romania, www.upt.ro

Personal skills and competencies

Native language(s) Romanian

Other language(s)

Self-assessment

European level ()*

English

French

| Understanding | | | | Speaking | | | | Writing | |
|---------------|------------------|---------|------------------|--------------------|------------------|-------------------|------------------|---------|------------------|
| Listening | | Reading | | Spoken interaction | | Spoken production | | Writing | |
| C1 | Independent user | C1 | Independent user | C1 | Independent user | C1 | Independent user | C1 | Independent user |
| B2 | Independent user | B2 | Independent user | B2 | Independent user | B2 | Independent user | B2 | Independent user |

(*) [Common European Framework of Reference for Languages](#)

Technical skills and competencies

Synthesis of magnetic iron-oxide nanoparticles by co-precipitation method; Production of magnetic nanofluids based on polar and non-polar carriers; Synthesis of magnetic iron-oxide nanoparticles by combustion method; Production of biocompatible colloidal suspensions based on water for biomedical applications; Familiar with the interpretation of the results of various characterization methods: XRD, BET, DLS, TG/DTA, magnetic measurements, optical microscopy (TEM, SEM), hydrodynamic diameter, Zeta potential; Chemical synthesis, Physico-chemical characterization of synthesized compounds; Obtaining and characterization of aqueous, alcoholic and/or hydro alcoholic vegetal extracts; Fabrication of iron oxides magnetic nanoparticles by green synthesis; Fabrication of silver nanoparticles by green synthesis.

Research skills and competencies

My research activity has given me the ability to work in a multidisciplinary team and good communication and management skills.

My research activity can be quantified in:

- 92 – *in extenso* articles published in indexed ISI journals;
- 5 – ISI proceedings articles;
- 12 – ISI abstracts;
- 25 – abstracts published in the volume of abstracts with an ISBN
- 3 – articles published in CNCSIS-B/B+ indexed journals (BDI);
- 3 – published book chapters in international publishing houses;
- 4 – published books in national publishing houses
- 1 – patent
- 81 – communications at international/national conference/workshop;
- 20 – research projects: (as manager – 3 national projects; and as a member – 15 national projects and 2 international projects)
- Hirsch Factor $h = 25$ (according to ISI Web of Science)

Project management (project manager)

1. PN-IV-P2-2.1-TE-2023-1941 - Research Projects for Young Independent Teams, SMART-MNP@MHT, ctr. no. 103TE/08.01.2025 (Period: 08.01.2025 – 31.12.2026)

Smart targeted nanostructures loaded with triterpenic-like antitumor active principles, for magnetic hyperthermia therapy

Project Coordinator: VBUMFT; Project Manager: Associate Professor, Ph.D. Elena-Alina Moacă

2. Advanced Research Grant – Young Researchers, ONCO-MNPs ctr. no. 1682/26.01.2024 (10.000 euro) (Period: 26.01.2024 – 26.07.2025)

New advances in the development of smart magnetic nanoparticles used in cancer pathology

Project Coordinator: VBUMFT; Project Manager: Lecturer Ph.D. Alina Moacă

3. Internal Competition Doctoral Grant, TRITERPENS@MNP, ctr. no. 4DOC/1276/30.01.2020 (20.000 euro) (Period: 02.02.2020 – 02.02.2022)

Magnetic nanoparticles as a support for triterpenic antitumor active principles

Project Coordinator: VBUMFT; Project Manager: Lecturer Ph.D. Alina Moacă

Professional skills and competencies

- Member of the Internal Verification and Validation Commission of PhD theses and habilitation theses of the Council of the Doctoral School (CSUD), UMFVBT, since 2025
- Member of the Commission for setting the minimum standards of teaching and research activities, as well as the modalities of sanctioning employees for failure to meet the minimum conditions, UMFVBT, since 2024
- Member of the Council of Department I of the Faculty of Pharmacy, UMFVBT, since 2024
- Member of the Working Group "Academic Performance of the University of Medicine and Pharmacy "Victor Babeş" from Timișoara", 2023-2025
- Member of the Ethics Committee of the Faculty of Pharmacy, 2020-2023
- Member of the Professional Deontology Consultative Committee of the Faculty of Pharmacy, since 2023
- Member of the Drug Precursors and Toxic Substances Committee of the Faculty of Pharmacy since 2020
- Member of the Preparation of the Periodic Evaluation File of the Pharmacy Study Program (in French) Committee of the Faculty of Pharmacy, since 2022
- Member of the License Committee of the Faculty of Pharmacy since 2016
- Member of the Admissions Committee of the Faculty of Pharmacy since 2016
- Member of the Evaluation Committee regarding the filling of vacant teaching positions in the Faculty of Pharmacy, since 2018
- Member within the Research Center for Pharmacotoxicological Evaluations (FARMATOX), <https://www.umft.ro/cercetare/centre-de-cercetare/farmatox/>, since 2021

- **Scientific Coordinator of:**
 - 44 undergraduate theses within the Pharmacy Study Program, 2017-2025
 - 4 undergraduate theses within the Pharmacy Assistance Study Program from Lugoj, 2016-2021
 - 5 undergraduate theses within the Medical Cosmetics and Cosmetic Product Technology Study Program, 2024-2025
 - 5 dissertation theses within the Master's Program - OTC drugs, food supplements, cosmetics, from 2020-2021
- **Invited reviewer for ISI journal:**
 - International Journal of Nanomedicine (Dove Medical Press), ISSN: 1176-9114;
 - Cancer Management and Research (Dove Medical Press), ISSN: 1179-1322;
 - Journal of Functional Biomaterials (MDPI), ISSN: 2079-4983;
 - Materials (MDPI), ISSN: 1996-1944;
 - Nanomaterials (MDPI), ISSN: 2079-4991;
 - International Journal of Molecular Science (MDPI), ISSN: 1422-0067;
 - International Journal of Environmental Research and Public Health (MDPI), ISSN: 1660-4601;
 - Drug Design, Development and Therapy (Dove Medical Press), ISSN: 1177-8881;
 - Naunyn-Schmiedeberg's Archives of Pharmacology (Springer Link), ISSN: 0028-1298;
 - Frontiers in Pharmacology (Frontiers), ISSN: 1663-9812;
 - Nutrition Research Reviews (Cambridge University Press), ISSN: 0954-4224;
 - Nanomedicine (Taylor and Francis), ISSN: 1743-5889;
- **Guest Editor in 2021** of Pharmaceutics Journal (MDPI), ISSN: 1999-4923 – Special Issue: Magnetic Nanomaterials – a promising approach in cancer therapy (https://www.mdpi.com/journal/pharmaceutics/special_issues/Magnetic_Cancer)
- **Guest Editor in 2024** of Pharmaceutics Journal (MDPI), ISSN: 1999-4923 – Special Issue: Recent insights concerning the use of supramolecular systems for biomedical application (https://www.mdpi.com/journal/pharmaceutics/special_issues/68EUE35G7A)
- **Guest Editor in 2024** of Pharmaceutics Journal (MDPI), ISSN: 1999-4923 – Special Issue: Nano-enabled formulations: recent insights and biomedical applications (https://www.mdpi.com/journal/pharmaceutics/special_issues/PU3R2A6M5C)
- **Guest Editor in 2024** of Gels Journal (MDPI), ISSN: 2310-2861 – Special Issue: Smart Hydrogel-Type Formulations: New Insights Regarding Design and Biomedical Applications (https://www.mdpi.com/journal/gels/special_issues/T1P5H6XX61)
- BrainMap ID (UEFISCDI) - U-1700-039P-3144
- ORCID ID - <http://orcid.org/0000-0002-2631-7028>

National scholarships

- **2010 – 2013 - Doctoral Scholarship – POSDRU 107/1.5/S/77265**, entitled *To research careers through doctoral studies*. Affiliation: Politehnica University of Timisoara, <http://www.bursedoctorale-upt-2010.ro>
- **01.06.2014 – 15.12.2015 - Postdoctoral Scholarship – POSDRU/159/1.5/S/141531**, entitled *Human resources development - Ph.D. and postdoctoral students - for excellence research in health and biotechnology*. Affiliation: „Victor Babes” National Institute of Research and Development in the Pathology Domain and Biomedical Science, Bucharest, Romania, <http://dprd-dru.ro>

UEFISCDI Awarding research results - scientific articles

<https://uefiscdi.gov.ro/premierea-rezultatelor-cercetarii-articole>

Over 30 awarded scientific papers

PN-IV-P2-2.3-PRECISI-2023-81714 – Q1 area; PN-IV-P2-2.3-PRECISI-2023-72024 – Q1 area; PN-IV-P2-2.3-PRECISI-2023-82218 – Q2 area; PN-III-P1-1.1-PRECISI-2021-67401 – Q2 area; PN-III-P1-1.1-PRECISI-2021-66567 – Q2 area; PN-III-P1-1.1-PRECISI-2021-60186 – Q2 area; PN-III-P1-1.1-PRECISI-2021-61674 – Q2 area; PN-III-P1-1.1-PRECISI-2021-60618 – Q1 area; PN-III-P1-1.1-PRECISI-2021-60626 – Q2 area; PN-III-P1-1.1-PRECISI-2021-59293 – Q1 area; PN-III-P1-1.1-PRECISI-2021-58870 – Q1 area; PN-III-P1-1.1-PRECISI-2019-39660 – Q2 area; PN-III-P1-1.1-PRECISI-2019-39666 – Q1 area; PN-III-P1-1.1-PRECISI-2019-35025 – Q2 area; PN-III-P1-1.1-PRECISI-2019-35343 – Q2 area; PN-III-P1-1.1-PRECISI-2019-34566 – Q2 area; PN-III-P1-1.1-PRECISI-2019-30408 – Q1 area; PN-III-P1-1.1-PRECISI-2019-30519 – Q2 area; PN-III-P1-1.1-PRECISI-2019-30648 – Q2 area; PN-III-P1-1.1-PRECISI-2018-25554 – Q1 area; PN-III-P1-1.1-PRECISI-2018-25367 – Q1 area; PN-III-P1-1.1-PRECISI-2018-23991 – Q1 area; PN-III-P1-1.1-PRECISI-2018-23985 – Q1 area; PN-III-P1-1.1-PRECISI-2018-23950 – Q2 area; PN-III-P1-1.1-PRECISI-2017-16345 – Q1 area; PN-II-RU-PRECISI-2015-9-8803 – Q1 area; PN-II-RU-PRECISI-2015-9-8398 – Q2 area; PN-II-RU-PRECISI-2014-8-4615 – Q2 area; PN-II-RU-PRECISI-2013-7-3168 – Q2 area; PN-II-RU-PRECISI-2013-7-2722 – Q2 area; PN-II-RU-PRECISI-2012-6-0897 – Q1 area

Skills and competencies in computer use

Microsoft Office (Word, Excel, PowerPoint), Internet, processing data programs (Origin, Table Curves 2D)

Other competencies

Fast learning; tenacious; analytical behavior, with a strong capacity for synthesis; entrepreneurship behavior expressed by approaching and solving some existing problems; work experience in team organization; eagerness to gain new knowledge, develop and improve the career; perseverance in pursuing and achieving a goal; devotion and respect for work tasks; eager for affirmation and promotion.

License (s) driving

B Category since 2006

Annexes

Publication list
List of Projects / Grants / Research Contracts

ANNEX I. SCIENTIFIC RESEARCH ACTIVITY**I.1 RESEARCH PROJECTS (research team member)**

- 1. Project PRV/6.1.D/1, MYSMIS:321935, funded by the West regional program 2021-2027, Priority: 6 – An educational and attractive region** (Period: December 2024 – November 2026)

Modernizing learning conditions, developing students' skills and ensuring non-discretionary access to quality education at UMFVBT

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timișoara; Project Manager: Prof. Univ. Dr. Oancea Cristian

- 2. Internal Competition Post-Doctoral Grant, ctr. no. 3POSTDOC/1238/2020 (238.340 RON)** (Period: 02.02.2020 – 02.02.2022)

Populi gemmae - a double win for the pharmaceutical field: therapeutic potential and bio-source for green synthesis of silver nanoparticles

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timișoara; Project Manager: Assoc. Prof. Ph.D. Corina Danciu

- 3. PN-III-P1-1.1-TE-2019-2134 Project, BAPRONIO, ctr. no. 79/30.10.2020 (431.840 RON)** (Period: 2.11.2020 – 31.10.2022)

Rendering to the dermo-cosmetic market a modern topical formulation with betulinic acid incorporated in proniosomes

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timișoara; Project Manager: Assoc. Prof. Ph.D. Dorina Coricovac

- 4. CNFIS-FDI-2019-0393 Project, ctr. no. 104/21.05.2019** (Period: 21.05.2019 - 15.12.2019)

Professional development center in the field of dermato-cosmetic products based on medicinal plants

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timișoara; Project Manager: Professor Ph.D. Cristina Dehelean

- 5. CNFIS-FDI-2018-0159 Project, ctr. no. 35/16.05.2018** (Period: 16.05.2018 - 15.12.2018)

Center for the development of practical skills in the field of medicinal plants

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timișoara; Project Manager: Professor Ph.D. Cristina Dehelean

- 6. PN-III-P4-ID-PCE-2016-0765 Project, ctr. no. 10718/21.07.2017** (Period: 2017-2019)

Advanced materials based on combustion-synthesized magnetic iron oxide nanoparticles and their cytotoxicity designed for cancer treatment - MagNanoCytoTox

Project Coordinator: Politehnica University of Timișoara; Project Manager: Professor Ph.D. Cornelia Păcurariu

- 7. PN-III-P2-2.1-2016-BG-0354 Project, ctr. no. 1506/21.10.2016** (Period: 2016-2018)

Betulin and gold nanoparticles - based formulations in preventing skin aging - BETGOSKIN

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timișoara; Project Manager: Professor Ph.D. Șoica Codruța Marinela

- 8. PN-II-RU-TE-2014-4-0514 Project, ctr. no. 60 from 01/10/2015** (Period: 2015-2017)

Development of nanostructured magnetic composite used as nano-adsorbents and nano-catalysts with high performance in environmental applications

Project Coordinator: Politehnica University of Timișoara; Project Manager: Lecturer Ph.D. Stoia Marcela Elena

- 9. PN-II-RU-TE-2014-4-1587 Project, ctr. no. 142 from 01/10/2015** (Period: 2015-2017)

Combustion synthesis of smart near-infrared reflective nanopigments for heat-reflective (cool) coatings

Project Coordinator: Politehnica University of Timișoara; Project Manager: Assoc. Prof. Ph.D. Ianoș Robert Gabriel

- 10. FP7 (RPF'S FP 2009 – 2010, Cyprus) Project** (Period: 2013-2014)

Novel, multi-responsive cross-linked films with controlled architectures: synthesis, characterization and application in icon restoration

Project Coordinator: University of Cyprus; Partner 2: Romania Academy Timișoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Ladislau Vékás, CS1

- 11. PN-II-PT-PCCA-2011-3.2-0538 Project - MagNanoMicroSeal, ctr. no. 157/2012** (Period: 2012-2015)

High magnetization magnetic nanofluids and nano-micro composite magnetizable fluids: applications in high-pressure and heavy-duty rotating seals and the magnetorheological controller device

Project Coordinator: Romania Academy Timișoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Manager: Dr. Ladislau VÉKÁS, CS1

- 12. ID_76 Project Surface and Interface Science: physics, chemistry, biology, and applications** (Period: 2012-2013)

Project Coordinator: Romania Academy Timișoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Victor SOFONEA, CS1

- 13. FP7 (MAGPRO2LIFE) Project** (Period: 2009-2013)

Advanced Magnetic nanoparticles deliver smart processes and products for life

Project Coordinator: SOLAE Co., Denmark; Partner 11: Romania Academy Timișoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Ladislau VÉKÁS, CS1

14. PN-II ERA-NET (MAFINCO) Project, ctr. no. 7-018/2009 (Period: 2009-2011)

Nanofluid magnetic - a new isolating and cooling medium for electrical transformers

Project Coordinator: Politehnica University of Timisoara; Partner 1: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Ladislau VÉKÁS, CS 1

15. PN-II (CFEEL) Project, ctr. no. 21-043/2007 (Period: 2007-2010)

Functional compatibility of special electrical equipment, with magnetic ferrofluid (bushings, measuring transformers, curling tong for physical microparticles, industrial frequency voltage dividers)

Project Coordinator: National Institute for Research and Development for Electrical Engineering ICPE-CA, Bucharest; Partner 2: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Ladislau VÉKÁS, CS1

16. PN-II (BIMAPAFU) Project, ctr. no. 71-083/2007 (Period: 2007-2010)

Advanced magnetic nanostructure processing in the form of nanoparticles and nanofluids based on Fe, for biomedical applications

Project Coordinator: National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca; Partner 1: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Ladislau VÉKÁS, CS 1

17. PN-II (NANOMAGPOLI) Project, ctr. no. 71-068/2007 (Period: 2007-2010)

Biocompatible nanostructured systems based on magnetic nanoparticles and polymers with response to external stimuli

Project Coordinator: National Institute for Research and Development of Isotopic and Molecular Technologies, Cluj-Napoca; Partner 1: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research, Laboratory of Magnetic Liquid; Project Responsible: Dr. Ladislau VÉKÁS, CS 1

I.2 PUBLICATIONS

I.2.1. INTERNATIONAL BOOK CHAPTERS

1. D.C. Lazăr, **E.A. Moacă**, M. Cornianu, S. Tăban, A. Faur, A. Goldiș, Efficiency of Treatment Targeted on Gut Microbiota in Inflammatory Bowel Diseases: Current Strategies and Perspectives, Chapter 4, DOI: 10.5772/intechopen.108664, In Benign Anorectal Disorders - An Update, edited by: Dr. Alberto Vannelli and Dr. Daniela Cornelia Lazar, ISBN 978-1-80355-705-2, InTech Open 2022
2. **E.A. Moacă**, E.D. Coricovac, C.M. Soica, I.A. Pinzaru, C.S. Păcurariu, C.A. Dehelean, Preclinical aspects on magnetic iron oxides nanoparticles and their interventions as anticancer agents: enucleation, apoptosis and other mechanisms, Chapter 12, DOI: 10.5772/intechopen.74176, in: Iron ores and iron oxide materials, edited by: Dr. Volodymyr Shatokha, ISBN 978-1-78923-321-6, InTech Open 2018
3. C. Șoica, D. Antal, F. Andrica, R. Băbuța, **A. Moacă**, F. Ardelean, R. Ghiulai, S. Avram, C. Danciu, D. Coricovac, C. Dehelean, V. Păunescu, Lupan-Skeleton Pentacyclic Triterpenes with Activity against Skin Cancer: Preclinical Trials Evolution, Chapter 5, DOI: 10.5772/intechopen.68908, In Unique Aspects of Anti-cancer Drug Development, edited by Jolanta Natalia Latosinska and Magdalena Latosinska, ISBN 978-953-51-3347-6, InTech Open 2017

I.2.2. NATIONAL BOOK

1. C. Stroia, **E.A. Moacă**. Plant Systematics. Life Science Publishing, Timișoara, 198 pages, ISBN 978-606-785-351-3, 2026
2. A.R. Jijie, C.M. Șerban, **E.A. Moacă**, I.A. Predescu. Facts on Europe's deadly flora. 1st Volume, "Victor Babes" Timișoara Publisher, 132 pages, ISBN 978-606-786-458-8, 2025
3. D. Coricovac, C. Dehelean, I. Pinzaru, **A. Moacă**, New aspects regarding the use of toxic plants, „Victor Babes” Timisoara Publisher, 126 pages, ISBN 978-606-786-107-5, 2018
4. **Tăculescu Elena Alina**, New approaches regarding the synthesis and use of nanomaterials with magnetic properties, Doctoral Thesis of UPT (Politehnica University of Timisoara), Series 4, No. 78, 124 pages, Politehnica Publisher, ISSN:1842-8223, ISBN:978-606-554-785-8, 2014

I.2.3. ISI INDEXED SCIENTIFIC ARTICLES (selection)

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