

## Curriculum Vitae



### Personal information

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

Address XXIV Street, no. 43, Sag Village, RO 307395, Timis, Romania

Telephone +40 745762600

E-mail alina\_taculescu@yahoo.com  
alina.moaca@umft.ro

Nationality Romanian

Date of birth 30.10.1984

Family situation Married, 1 child

### Work experience

Dates **17.09.2018 – present**

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

Main activities and responsibilities **Higher education (didactic activity – courses:** Methodology of Scientific Research (II<sup>nd</sup> year AsF), Veterinary drugs (III<sup>rd</sup> year AsF), Introduction in to research and documentation (III<sup>rd</sup> year FF); **laboratory didactic activity – Toxicology (IV<sup>rd</sup> and V<sup>ed</sup> years FF), Methodology of Scientific Research (IV<sup>rd</sup> year FF), Drug Industry and Pharmaceutical Biotechnology (V<sup>ed</sup> year FF));**  
**Scientific research:** synthesis of magnetic iron oxide nanoparticles (FeNPs), silver / iron oxide nanoparticles (Ag-FeNPs), via combustion / co-precipitation method, obtaining the biocompatible colloidal suspensions by coating Fe / Ag-FeNPs with various surfactants, polymers); antioxidant activity assessment of aqueous / alcoholic extracts by DPPH method; determination of the total content of polyphenols with Folin-Ciocalteu reagent; determination of tannins and flavonoids content; obtaining magnetic nanoparticles from vegetable extracts by green synthesis, coating and dispersing them in biocompatible dispersion media; attachment of drugs to the surface of iron oxide nanoparticles and incorporation of the complex into liposomes as well as in SiO<sub>2</sub> matrix.

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

Dates **18.09.2015 – 16.09.2018**

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

Main activities and responsibilities **Higher education (laboratory didactic activity – Toxicology (years IV and V FF);**  
**Scientific research:** synthesis of magnetic iron oxide nanoparticles (FeNPs), silver / iron oxide nanoparticles (Ag-FeNPs), made by combustion / co-precipitation method, obtaining the biocompatible colloidal suspensions by coating Fe / Ag-FeNPs with various surfactants, polymers; antioxidant activity assessment of aqueous / alcoholic extracts by DPPH method; determination of the total content of polyphenols with Folin-Ciocalteu reagent; determination of tannins and flavonoids content

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

Dates **15.10.2008 – 01.05.2014**

Occupation or position held	<b>Researcher in Chemistry</b>
Main activities and responsibilities	<ul style="list-style-type: none"> <li>• Synthesis of iron/iron-oxides magnetic nanoparticles by co-precipitation method and production of magnetic nanofluids based on polar and non-polar carriers;</li> <li>• Preparation of magnetic fluids with iron oxide nanoparticles obtained by laser pyrolysis;</li> <li>• Synthesis of magnetic composites „core-shell” type, by encapsulation of magnetic nanoparticles in a silica gel matrix, used to magnetic paper making;</li> <li>• Responsible for precursors activities.</li> </ul>
Name and address of employer	Romanian Academy – Timisoara Branch, Center for Fundamental and Advanced Technical Research, Mihai Viteazu Bvd., no. 24 Timisoara RO 300223 Romania
Dates	<b>17.07.2007 – 14.10.2008</b>
Occupation or position held	<b>Chemist Technician (17.07.2007 – 31.07.2008) / Chemical Engineer (01.08.2008 – 14.10.2008)</b>
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 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

## Education and Training

### Trainings

Dates	<b>2016 – 2017</b>
Title of qualification	<b>Certificate: Teacher Training Department (2<sup>nd</sup> Module); Ac series No. 0026224</b>
Name and type of organization providing education and training	West University of Timisoara, Vasile Parvan street no. 4, Timisoara RO-300223 Romania
Dates	<b>01.06.2014 – 15.12.2015</b>
Title of qualification	<b>Postdoctoral Researcher</b>
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
Dates	<b>2003 – 2008</b>
Title of qualification	<b>Certificate: Teacher Training Department (1<sup>st</sup> Module); G series No. 0036666</b>
Name and type of organization providing education and training	Politehnica University of Timisoara, Victoriei Square no. 2, Timisoara RO 300006 Romania
Dates	<b>1999 – 2003</b>
Title of qualification	<b>Professional Competence Certificate, specialization – Technician in Chemical Industry, A series No. 0235782</b>
Name and type of organization providing education and training	„Decebal” Scholar Group, Antoninii street no. 2, Drobeta Turnu Severin RO 220125 Romania

### Education

Dates	<b>01.10.2018 – present</b>
Title of qualification	<b>PhD Student at Faculty of Pharmacy</b>
Name and type of organisation providing education and training	“Victor Babes” University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania
Dates	<b>21.09.2015 – 17.07.2017</b>
Title of qualification	<b>Master Degree in Pharmacy – OTC drugs, dietary supplements, cosmetics, series MA No. 0108177</b>
	<i>Project title: Complexation of some <math>\beta</math>-cyclodextrins with iron oxides magnetic nanoparticles. Synthesis, characterization and applications</i>

Name and type of organisation providing education and training "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Pharmacy, Eftimie Murgu Square no. 2, Timisoara RO-300041 Romania

Dates **01.10.2010 – 07.02.2014**

Title of qualification **PhD. 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 Bvd. no. 6, Timisoara RO 300226 Romania

Dates **01.10.2008 – 24.06.2010**

Title of qualification **Master 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 Bvd. no. 6, Timisoara RO 300226 Romania

Dates **01.10.2003 – 03.07.2008**

Title of qualification **Bachelor 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 Cu<sup>2+</sup> and Cd<sup>2+</sup> 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 Bvd. no. 6, Timisoara RO 300226 Romania

**Personal skills and competences**

Native language(s) Romanian

Other language(s)

Self-assessment

European level (\*)

**English**

**French**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production		Writing	
B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
A1	Beginner user	A1	Beginner user	A1	Beginner user	A1	Beginner user	A1	Beginner user

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

**Technical skills and competences**

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); Chemical synthesis, Physico-chemical characterization of synthesized compounds; Obtaining and characterization of aqueous, alcoholic and / or hydro alcoholic vegetal extracts.

<b>Skills and competences</b>	<p>The research activity that I have carried out as a member in research team conferred me the ability to work in a multidisciplinary team and good communication skills.</p> <p>My research activity can be quantified in:</p> <ul style="list-style-type: none"> <li>• 28 – published articles in ISI journals;</li> <li>• 5 – ISI proceedings articles;</li> <li>• 2 – ISI abstracts;</li> <li>• 4 – abstracts published in journals with ISBN</li> <li>• 1 – articles published in CNCSIS-B+ journals;</li> <li>• 2 – books chapter in international publishing houses;</li> <li>• 1 – book in national publishing house</li> <li>• 41 – articles communicated in international / national conference / workshop;</li> <li>• 13 – research projects (member): (11 national projects and 2 international project)</li> </ul>
<b>National scholarships</b>	<p><b>Doctoral Scholarship – POSDRU 107/1.5/S/77265</b>, entitled: <i>To research careers through doctoral studies</i>. Affiliation: Politehnica University of Timisoara</p> <p><b>Postdoctoral Scholarship – POSDRU/159/1.5/S/141531</b>, entitled: <i>Human resources development - PhD and postdoctoral students - for excellence research in health and biotechnology</i>. Affiliation: „Victor Babes” National Institute of Research and Development in the Pathology Domain and Biomedical Science, Bucharest Romania</p>
<b>Prizes</b>	<p><b>PN-III-P1-1.1-PRECISI-2018-25554</b> - Maghemite, gamma-Fe<sub>2</sub>O<sub>3</sub>, nanoparticles preparation via carbon-templated solution combustion synthesis – red zone (6000 RON)</p> <p><b>PN-III-P1-1.1-PRECISI-2018-25367</b> - Stable PEG-coated silver nanoparticles – A comprehensive toxicological profile – red zone (6000 RON)</p> <p><b>PN-III-P1-1.1-PRECISI-2018-23991</b> - One-step synthesis of near-infrared reflective brown pigments based on iron-doped lanthanum aluminate, LaAl<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub> – red zone (6000 RON)</p> <p><b>PN-III-P1-1.1-PRECISI-2018-23985</b> - Solution combustion synthesis: a straightforward route for the preparation of chromium-doped lanthanum aluminate, LaAl<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub>, pink red pigments – red zone (6000 lei)</p> <p><b>PN-III-P1-1.1-PRECISI-2018-23950</b> - Main Isoflavones Found in Dietary Sources as Natural Anti-inflammatory Agents – yellow zone (2000 RON)</p> <p><b>PN-III-P1-1.1-PRECISI-2017-16345</b> - Biocompatible Colloidal Suspensions Based on Magnetic Iron Oxide Nanoparticles: Synthesis, Characterization and Toxicological Profile – red zone (6000 RON)</p> <p><b>PN-II-RU-PRECISI-2015-9-8803</b> - Synthesis and characterization of γ-Fe<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub> composites as possible candidates for magnetic paper manufacture – red zone (4000 RON)</p> <p><b>PN-II-RU-PRECISI-2015-9-8398</b> - gamma-Fe<sub>2</sub>O<sub>3</sub> nanoparticles prepared by combustion synthesis, followed by chemical oxidation of residual carbon with H<sub>2</sub>O<sub>2</sub> – yellow zone (2000 RON)</p> <p><b>PN-II-RU-PRECISI-2014-8-4615</b> - Dielectric-spectroscopy approach to ferrofluid nanoparticle clustering induced by an external electric field – yellow zone (2000 RON)</p> <p><b>PN-II-RU-PRECISI-2013-7-3168</b> - Dielectric response of transformer oil based ferrofluid in low frequency range – yellow zone (2000 RON)</p> <p><b>PN-II-RU-PRECISI-2013-7-2722</b> - Fabrication and characterization of magnetoresponse electrospun nanocomposite membranes based on methacrylic random copolymers and magnetite nanoparticles – yellow zone (2000 RON)</p> <p><b>PN-II-RU-PRECISI-2012-6-0897</b> - Solution Combustion Synthesis and Characterization of Magnetite, Fe<sub>3</sub>O<sub>4</sub>, Nanopowders – red zone (4000 RON)</p>
<b>Skills and competences of computer use</b>	<p>Microsoft Office (Word, Excel, Power Point), Internet, programs for data processing (Origin, Table Curves 2D)</p>
<b>Other competences</b>	<p>Fast learning; tenacious; analytical behavior, with strong capacity of synthesis; entrepreneurship behavior expressed by approaching and solving some existing problems; work experience in team organization; eager to gain new knowledge, development and improvement the career; perseverance in pursuing and achieving a goal; devotion and respect for work tasks; eager for affirmation and promote.</p>
<b>License (s) driving</b>	<p>B Category since 2006</p>

**Additional references**

**Prof. Univ. Habil. PhD. Pharm. Cristina Adriana Dehelean** („Victor Babes” University of Medicine and Pharmacy, Faculty of Pharmacy from Timisoara);

**CS I – Member of Romanian Academy PhD.Phys. Ladislau Vékás** (Romanian Academy – Timisoara Branch, Center for Fundamental and Advanced Technical Research, Laboratory of Magnetic Liquids);

**Prof. Univ. PhD. Chem. Cornelia Păcurariu** (Politehnica University of Timisoara, Faculty of Industrial Chemistry and Environmental Engineering).

**Annexes**

Publication list

List of Projects / Grants / Research Contracts

## ANNEXES

### A. PUBLICATIONS

#### I. Articles published in ISI journals

1. A. Popa, C. Păcurariu, **E.A. Tăculescu**, L. Lupa, *Sol-gel synthesized sorbents for  $Cu^{2+}$  and  $Cd^{2+}$  separation from solutions*, Optoelectronics and Advanced Materials - Rapid Communications, **4** (3), pp. 340-344, **2010 (I.F = 0.477)**
2. P. Papaphilippou, A. Pourgouris, O. Marinică, **E.A. Tăculescu**, G.I. Athanasopoulos, L. Vékás, T. Krasia-Christoforou, *Fabrication and characterization of superparamagnetic and thermoresponsive hydrogels based on oleic-acid-coated  $Fe_3O_4$  nanoparticles, hexa(ethylene glycol) methyl ether methacrylate and 2-(acetoacetoxy)ethyl methacrylate*, Journal of Magnetism and Magnetic Materials, **323** (5), pp. 557-563, DOI: 10.1016/j.jmmm.2010.10.009, **2011 (I.F = 1.78)**
3. I. Savva, G. Krekos, **E.A. Tăculescu**, O. Marinică, L. Vékás, T. Krasia-Christoforou, *Fabrication and characterization of magneto-responsive electrospun nanocomposite membranes based on methacrylic random copolymers and magnetite nanoparticles*, Journal of Nanomaterials, 578026, DOI: 10.1155/2012/578026, **2012 (I.F = 1.547)**
4. P. Papaphilippou, M. Christodoulou, O. Marinică, **E.A. Tăculescu**, L. Vékás, K. Chrissafis, T. Krasia-Christoforou, *Multi-responsive polymer conetworks capable of responding to changes in pH, temperature and magnetic field: synthesis, characterization and evaluation of their ability for controlled uptake and release of solutes*, ACS Applied Materials & Interfaces, **4** (4), pp. 2139-2147, DOI: 10.1021/am300144w, **2012 (I.F = 5.008)**
5. M. Timko, K. Marton, L. Tomco, J. Kiraly, M. Molcan, M. Rajnak, P. Kopcansky, R. Cimbala, F. Stoian, S. Holotescu, **E.A. Tăculescu**, *Magneto-dielectric properties of transformer oil based magnetic fluids in the frequency range up to 2 MHz*, Magnetohydrodynamics, **48** (2), pp. 427-434, **2012 (I.F = 0.55)**
6. M. Timko, P. Kopcansky, M. Molcan, L. Tomco, K. Marton, S. Molokac, P. Rybar, F. Stoian, S. Holotescu, **E.A. Tăculescu**, *Magnetodielectric Properties of Transformer Oil Based Magnetic Fluids*, Acta Physica Polonica A, **121** (5-6), pp. 1253-1256, **2012 (I.F = 0.531)**
7. R. Ianoș, **E.A. Tăculescu**, C. Păcurariu, I. Lazău, *Solution Combustion Synthesis and Characterization of Magnetite,  $Fe_3O_4$ , Nanopowders*, Journal of the American Ceramic Society, **95** (7), pp. 2236-2240, DOI: 10.1111/j.1551-2916.2012.05159.x, **2012 (I.F = 2.107)**
8. M. Rajnak, J. Kurimsky, B. Dolnik, K. Marton, L. Tomco, **E.A. Tăculescu**, L. Vékás, J. Kovac, I. Vavra, J. Tothova, P. Kopcansky, M. Timko, *Dielectric response of transformer oil based ferrofluid in low frequency range*, Journal of Applied Physics, **114** (3), pp. 034313-1 – 034313-6, DOI: 10.1063/1.4816012, **2013 (I.F = 2.185)**
9. V. Socoliuc, C. Daia, **E.A. Tăculescu**, L. Vékás, *Colloidal stability loss with increasing dilution of polar carrier based magnetic colloids stabilized by steric repulsion*, Chemistry Magazine, **64** (10), pp. 1194-1196, **2013 (I.F = 0.677)**
10. V. Păunescu, M.F. Bojin, O.I. Gavriliuc, **E.A. Tăculescu**, R. Ianoș, V.L. Ordodi, V.F. Iman, C.A. Tatu, *Enucleation: a possible mechanism of cancer cell death*, Journal of Cellular and Molecular Medicine, **18** (6), pp. 962-965, DOI: 10.1111/jcmm.12271, **2014 (I.F = 4.014)**

11. M. Rajnak, J. Kurimsky, B. Dolnik, P. Kopcansky, N. Tomasovicova, **E.A. Tăculescu-Moacă**, M. Timko, *Dielectric-spectroscopy approach to ferrofluid nanoparticle clustering induced by an external electric field*, Physical Review E, **90** (3), Article Number: 032310, DOI: 10.1103/PhysRevE.90.032310, **2014 (I.F = 2.288)**
12. R. Ianoș, **E.A. Tăculescu (Moacă)**, C. Păcurariu, D. Niznansky,  *$\gamma$ -Fe<sub>2</sub>O<sub>3</sub> nanoparticles prepared by combustion synthesis, followed by chemical oxidation of residual carbon with H<sub>2</sub>O<sub>2</sub>*, Materials Chemistry and Physics, **148** (3), pp. 705-711, DOI:10.1016/j.matchemphys.2014.08.038, **2014 (I.F = 2.259)**
13. C. Păcurariu, **E.A. Tăculescu (Moacă)**, R. Ianoș, O. Marinică, C.V. Mihali, V. Socoliuc, *Synthesis and characterization of  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>/SiO<sub>2</sub> composites as possible candidates for magnetic paper manufacture*, Ceramics International, **41** (1), Part B, pp. 1079-1085, DOI: 10.1016/j.ceramint.2014.09.031, **2015 (I.F = 2.605)**
14. F. Ardelean, D. Susan, F. Borcan, **E.A. Moacă**, D.S. Antal, C. Soica, R. Moldovan, D.B. Vaduva, D. Marti, *Synthesis and physico-chemical evaluation of polyurethane microstructures for transmembrane delivery of reynoutria japonica extract*, Materiale Plastice, **54** (4), pp. 651-654, **2017, (I.F = 0.778)**
15. I.Z. Pavel, O.A. Iftode, I. Pinzaru, D. Coricovac, **A. Moacă**, C. Farcas, S.C. Simu, C. Soica, C. Dehelean, A. Motoc, *Skin Specific Cells and UVB Damage - An experimental assessment*, Revista de Chimie, **68** (6), pp. 1227-1231, **2017 (I.F = 1.232)**
16. D.E. Coricovac<sup>#</sup>, **E.A. Moacă<sup>#</sup>** (**# - equal contribution**), I. Pinzaru, C. Cîtu, C. Șoica, C.V. Mihali, C. Păcurariu, V.A. Tutelyan, A. Tsatsakis, C.A. Dehelean, *Biocompatible Colloidal Suspensions Based on Magnetic Iron Oxide Nanoparticles: Synthesis, Characterization and Toxicological Profile*, Frontiers in Pharmacology, **8** (154), pp. 1-18, **2017 (I.F = 4.418)**
17. C. Danciu, S. Avram, I. Pavel, R. Ghiulai, C. Dehelean, A. Ersilia, D. Minda, C. Petrescu, **E.A. Moacă**, C. Soica, *Main Isoflavones Found in Dietary Sources as Natural Anti-inflammatory Agents*, Current Drug Metabolism, **19** (7) pp. 841-853, DOI: 10.2174/1389450118666171109150731, **2018 (I.F = 3.59)**
18. I. Pinzaru, D. Coricovac, C. Dehelean, **E.A. Moacă**, M. Mioc, F. Baderca, I. Sizemore, S. Brittle, D. Marti, D. Calina, A. Tsatsakis, C. Soica, *PEG-coated silver nanoparticles – A comprehensive toxicological profile*, Food and Chemical Toxicology, **111**, pp. 546-556, **2018**, DOI: 10.1016/j.fct.2017.11.051, **(I.F = 3.778)**
19. R. Ianoș, E. Muntean, R. Lazau, R. (Băbuță), **E.A. Moacă**, C. Păcurariu, A. Dabici, I. Hulka, *One-step synthesis of near-infrared reflective brown pigments based on iron-doped lanthanum aluminate, LaAl<sub>1-x</sub>Fe<sub>x</sub>O<sub>3</sub>*, Dyes and Pigments, **152**, pp. 105-111, **2018**, DOI: 10.1016/j.dyepig.2018.01.037, **(I.F = 3.473)**
20. I. Pinzaru, A. Hegheș, D. Marti, C. Dehelean, D. Coricovac, **E.A. Moacă**, M. Moatar, D. Camen, *Therapeutically potential of medicago sativa extracts chemical and in vitro assessments*, Revista de Chimie, **69** (1), pp. 121-124, **2018, (I.F = 1.232)**
21. R. Ianoș, R. Lazău, R. Băbuță, E. Muntean, **E.A. Moacă**, C. Păcurariu, *Solution combustion synthesis: A straightforward route for the preparation of chromium-doped lanthanum aluminate, LaAl<sub>1-x</sub>Cr<sub>x</sub>O<sub>3</sub>, pink red pigments*, Dyes and Pigments, **155**, pp. 218-224, **2018**, DOI: 10.1016/j.dyepig.2018.03.041, **(I.F = 3.473)**

22. **E.A. Moacă**, C. Farcaș, A. Ghițu, D. Coricovac, R. Popovici, N.L. Cărăba-Meiță, F. Ardelean, D.S. Antal, C. Dehelean, Ș. Avram, *A Comparative Study of Melissa officinalis Leaves and Stems Ethanolic Extracts in terms of Antioxidant, Cytotoxic, and Antiproliferative Potential*, Evidence-Based Complementary and Alternative Medicine, **2018**, Article ID 7860456, pp. 1-12, **2018**, DOI: 10.1155/2018/7860456, (**I.F = 1.740**)
23. D. Coricovac, C. Dehelean, **E.A. Moacă**, I. Pinzaru, T. Bratu, D. Navolan, O. Boruga, *Cutaneous Melanoma—A Long Road from Experimental Models to Clinical Outcome: A Review*, International Journal of Molecular Science, 19, pp. 1566-1583, **2018**, DOI: 10.3390/ijms19061566 (**I.F = 3.226**)
24. R. Ianos, **E.A. Moacă\*** (\* - **corresponding author**), A. Căpraru, R. Lazău, C. Păcurariu, *Maghemite,  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>, nanoparticles preparation via carbon-templated solution combustion synthesis*, Ceramics International, **2018**, DOI: 10.1016/j.ceramint.2018.04.258 (**I.F = 2.986**)
25. D. Circioban, A. Ledeti, G. Vlase, D. Coricovac, A. Moaca, C. Farcas, T. Vlase, I. Ledeti, C. Dehelean, *Guest–host interactions and complex formation for artemisinin with cyclodextrins: instrumental analysis and evaluation of biological activity*, Journal of Thermal Analysis and Calorimetry, 134(1), pp. 741-748, **2018**, DOI: 10.1007/s10973-018-7497-z (**I.F=1.953**)
26. V.G. Guriță, I.Z. Pavel, M. Poenaru, **E.A. Moacă\*** (\* - **coresponding author**), S. Florescu, C. Danciu, V. Dumitrașcu, I. Imbrea, G. Pop, *Assessment of the Antioxidant Effect of Ethanolic Extracts Obtained from Agrimonia eupatoria L., Filipendula ulmaria (L.) Maxim. And Filipendula vulgaris Moench Collected from the Estern Part of Romania*, Revista Chimie, 69(9), pp. 2385-2390, 2018 (**I.F=1.412**)
27. D. Circioban, A. Ledeti, G. Vlase, **A. Moacă**, I. Ledeti, C. Farcas, T. Vlase, C. Dehelean, *Thermal degradation, kinetic analysis and evaluation of biological activity on human melanoma for artemisinin*, Journal of Thermal Analysis and Calorimetry, 134, pp. 741–748, **2018**, DOI: 10.1007/s10973-018-7497-z (**I.F=1.953**)
28. S.L. Coșarcă<sup>#</sup>, **E.A. Moacă<sup>#</sup>** (**# - equal contribution**), C. Tanase, D.L. Muntean, I.Z. Pavel, C.A. Dehelean, *Spruce and beech bark aqueous extracts: source of polyphenols, tannins and antioxidants correlated to in vitro antitumor potential on two different cell lines*, Wood Science and Technology, 2018, DOI: 10.1007/s00226-018-1071-5 (**I.F=1.706**)

## II. ISI Proceedings

1. R. Turcu, A. Nan, I. Crăciunescu, C. Leoștean, S. Macavei, **E.A. Tăculescu**, O. Marinică, C. Daia, L. Vékás, *Synthesis and characterization of magnetically controllable nanostructures using different polymers*, AIP Conference Proceedings - 8<sup>th</sup> International Conference on the Scientific and Clinical Applications of Magnetic Carriers, Rostock, Germany, 25-29 May 2010, DOI: 10.1063/1.3530014, **1311**, pp. 20-27, **2010**
2. V. Socoliuc, **E.A. Tăculescu**, C. Podaru, A. Dobra, C. Daia, O. Marinică, R. Turcu, L. Vékás, *Clustering in water based magnetic nanofluids: investigations by light scattering methods*, AIP Conference Proceedings - 8<sup>th</sup> International Conference on the Scientific and Clinical Applications of Magnetic Carriers, Rostock, Germany, 25-29 May 2010, DOI: 10.1063/1.3530065, **1311**, pp. 89-95, **2010**
3. I. Savva, O.M. Marinică, **E.A. Tăculescu**, L. Vékás, T. Krasia-Christoforou, *Superparamagnetic nanocomposite PEO/PLLA-based fibrous membranes: Synthesis, characterization and evaluation in*



*drug release applications*, Euromembrane Conference, Westminster, London, United Kingdom, 23-27 September 2012, DOI: 10.1016/j.proeng.2012.08.673, Book Series: Procedia Engineering, **44**, pp. 1050-1051, **2012**

4. I. Savva, D. Constantinou, L. Evaggelou, O.M. Marinică, **E.A. Tăculescu**, L. Vékás, *PEO/PLLA and PVP/PLLA-based magnetoresponsive nanocomposite membranes: Fabrication via electrospinning, characterization and evaluation in drug delivery*, Euromembrane Conference, Westminster, London, United Kingdom, 23-27 September 2012, DOI: 10.1016/j.proeng.2012.08.674, Book Series: Procedia Engineering, **44**, pp. 1052-1053, **2012**
5. F.D. Stoian, S. Holotescu, **E.A. Tăculescu**, O. Marinică, D. Resiga, M. Timko, P. Kopcansky, M. Rajnak, *Characteristic properties of a magnetic nanofluid used as cooling and insulating medium in a power transformer*, 8<sup>th</sup> International Symposium on Advanced Topics in Electrical Engineering, ATEE 2013, Bucharest, Romania, 23-25 May 2013, DOI: 10.1109/ATEE.2013.6563463, Article number 6563463, **2013**

### III. ISI Abstracts

1. C.A. Dehelean, I. Pinzaru, D. Ionescu, **A. Moacă**, D. Coricovac, C. Soica, *Reproducible animal models used for external toxicants tests*, 52<sup>nd</sup> Congress of the European Societies of Toxicology (Eurotox), Seville, Spain, 04 July 2016, DOI: 10.1016/j.toxlet.2016.06.2006, Toxicology Letters, **258**, pp. S289-S289, Supplement: S, Meeting Abstract: P19-021, **2016 (I.F = 3.858)**
2. C.G. Farcas, **E.A. Moacă**, D. Coricovac, C. Dehelean, F. Loghin, *In vitro antiproliferative effects of Fe<sub>3</sub>O<sub>4</sub>-BA loaded liposomes*, 54<sup>th</sup> Congress of the European Societies of Toxicology (EUROTOX) Brussels, Belgium, 2 – 5 Septembrie, 2018, DOI: 10.1016/j.toxlet.2018.06.646, Toxicology Letters, **295**, pp. S113, Supplement 1, Abstract P06-26, **2018 (I.F = 3.166)**

### IV. Abstracts published in journals with ISBN

1. **S. Simu**, D. Coricovac, I. Pinzaru, **A. Moacă**, I. Macaşoi, G. Drăghici, D. Navolan, *Ultraviolet radiation amplifies the noxious effects of sodium lauryl sulfate at skin level*, in: *Safety of Medicinal Plants Products*, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Victor Babeş, Timisoara, 2018, ISBN 978-606-786-104-4
2. **S. Avram**, C. Danciu, I.Z. Pavel, D. Minda, R. Ghiulai, I. Macasoi, D. Coricovac, I. Pinzaru, **A.E. Moacă**, D. Circioban, C. Soica, C. Dehelean, *Safety and wound healing effects of three Artemisia species*, in: *Safety of Medicinal Plants Products*, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Victor Babeş, Timisoara, 2018, ISBN 978-606-786-104-4
3. **S. Avram**, C. Danciu, I.Z. Pavel, D. Minda, R. Ghiulai, I. Pinzaru, I. Macasoi, D. Coricovac, **A.E. Moacă**, M. Mioc, C. Soica, C. Dehelean, *The effect of lemon balm extracts on MCF-7 and MDA-MB-231 breast cancer cells*, in: *Safety of Medicinal Plants Products*, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Victor Babeş, Timisoara, 2018, ISBN 978-606-786-104-4
4. **E.A. Moacă**, I.Z. Pavel, C.A. Dehelean, *Antioxidant and cytotoxic effects of an aqueous extract based on Artemisia absinthium L. collected from the west part of Romania*, in: *Safety of Medicinal Plants Products*, edited by: C. Dehelean, I. Pinzaru, D. Coricovac, Victor Babeş, Timisoara, 2018, ISBN 978-606-786-104-4

## V. Articles published in CNCSIS – B+ indexed journals

1. F. Ardelean, **E.A. Moacă**, C. Păcurariu, D.S. Antal, C. Dehelean, C.C. Toma, S. Drăgan, *Invasive polygonum cuspidatum: physico-chemical analysis of a plant extract with pharmaceutical potential*, Studia Universitatis “Vasile Goldiș”, Life Sciences Series, **26** (4), pp. 415-421, **2016**

## VI. Book Chapters in international publishing houses

1. 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, **2017**
2. **Elena Alina Moacă**, Elena Dorina Coricovac, Codruta Marinela Soica, Iulia Andreea Pinzaru, Cornelia S Păcurariu, Cristina Adriana Dehelean, *Preclinical aspects on magnetic iron oxides nanoparticles and their interventions as anticancer agents: enucleation, apoptosis and other mechanism*, 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, **2018**

## VII. Book in national publishing houses

1. D. Coricovac, C. Dehelean, I. Pînzaru, **A. Moacă**, *Noi aspecte în ceea ce privește utilizarea plantelor toxice (New issues regarding the use of toxic plants)*, Victor Babeș, Timisoara, **2018**, ISBN 978-606-786-107-5

## VIII. National / International Scientific Communications

1. **E.A. Tăculescu**, C. Păcurariu, A. Popa, L. Lupa, *Hybrid materials obtained by grafting phenil phosphonic acid on silica gel. Removal of  $Cu^{2+}$  and  $Cd^{2+}$  from aqueous solution*, The 11<sup>th</sup> Edition of Timisoara's Academic Days, Chemistry, 28-29 May 2009, Timisoara, Romania, pp. 71, **2009**, (poster)
2. **O. Marinică**, **E.A. Tăculescu**, C. Daia, C. Podaru, *Ferrofluids with non-polar and polar carriers: effect of stabilizant layer on magnetic and flow behavior*, UEFISCSU Exploratory Workshop - New Trends In Complex Fluids Modeling - CFM 2009, 18-21 June, Bran, Brasov, Romania, pp. 88, **2009**, (poster)
3. **L. Vékás**, Daniela Susan-Resiga, M.V. Avdeev, E. Tombacz, R. Turcu, I. Morjan, V. Socoliuc, O. Marinică, A. Han, S. Muntean, I. Borbáth, T. Boros, **E.A. Tăculescu**, C. Podaru, A. Dobra, C. Daia, *Magnetic particles in fluid systems: synthesis, properties and some applications*, *IERD Workshop*, 10-12 September 2009, Bucharest, Romania, **2009**, (oral presentation)
4. **E.A. Tăculescu**, **A. Popa**, C. Păcurariu, L. Lupa, *Removal of divalent metals ( $Cu^{2+}$ ,  $Cd^{2+}$ ) from water after preconcentration on phosphonate St-DVB polymer/ $TiO_2$  hybrid*, The 16<sup>th</sup> Symposium on Analytical and Environmental Problems, Szeged, Hungary, 28 September 2009, pp. 317-320, **2009**, (oral presentation)
5. **R. Turcu**, I. Crăciunescu, A. Nan, O. Pană, L. Vékás, C. Leoștean, **E.A. Tăculescu**, *Encapsulation of functionalized magnetic nanoparticles in polymeric gels*, International Conference on Advanced Polymers and Macromolecular Engineering- APME, Book of abstracts, Dresden, Germany, 4-7 October 2009, pp. 77, **2009**, (oral presentation)

6. L. Vékás, D. Bica, M.V. Avdeev, **E.A. Tăculescu**, C. Podaru, S. Muntean, V. Socoliuc, O. Marinică, A. Han, C. Daia, A. Dobra, R. Turcu, I. Morjan, *Biocompatible water based magnetic nanofluids: synthesis, colloidal stability and properties*, Structural aspects of biocompatible ferrofluids: stabilization, properties control and application Workshop, GKSS Research Center of Geesthacht, 28-29 January 2010, Germany, **2010**, (oral presentation)
7. O. Marinică, **E.A. Tăculescu**, C. Podaru, C. Daia, A. Dobra, V. Socoliuc, *Magnetic and granulometric properties of water based magnetic nanofluids*, Nanotheranostics-Fabrication & Safety Concerns, European Science Foundation (ESF), 27-30 April 2010, Cyprus, **2010**, (poster)
8. L. Vékás, E. Tombácz, **E.A. Tăculescu**, C. Podaru, S. Muntean, M.V. Avdeev, V. Socoliuc, O. Marinică, C. Daia, A. Dobra, I. Morjan, *Water based magnetic nanofluids: synthesis procedures, colloidal stability and properties*, Nanotheranostics-Fabrication & Safety Concerns, European Science Foundation (ESF), 27-30 April 2010, Cyprus, **2010**, (oral presentation)
9. V. Socoliuc, **E.A. Tăculescu**, D. Susan-Resiga, O. Marinică, C. Daia, L. Vékás, *The influence of the surfactant layer thickness on the rheological properties of magnetic nanofluids*, "Dynamics of Complex Fluids Conference", 5-7 May 2011, Iasi, Romania, **2011**, (oral presentation)
10. **E.A. Tăculescu**, R. Ianoș, C. Păcurariu, *The influence of the fuel's nature on the synthesis of iron oxides by the combustion method*, The 12<sup>th</sup> Edition of Timisoara's Academic Days, Chemistry, 26-27 May 2011, Timisoara, Romania, pp. 78, **2011**, (oral presentation).
11. **E.A. Tăculescu**, C. Daia, O. Marinică, *Oleic acid coated hydrophobic and hydrophilic magnetite nanoparticles for bio-applications*, ZAT – Workshop “Multifunctional nanoparticles, magnetically controllable fluids, complex flows and applications”, 2-3 June 2011, Timisoara, Romania, **2011**, (poster)
12. C. Daia, **E.A. Tăculescu**, C. Coca-Podaru, *DLS investigations of spontaneous clustering in magnetic colloids*, ZAT – Workshop “Multifunctional nanoparticles, magnetically controllable fluids, complex flows and applications”, 2-3 June 2011, Timisoara, Romania, **2011**, (poster)
13. N. Crainic, A. Torres Marques, P. J. R. Nóvoa, O. Marinică, N.C. Popa, **E.A. Tăculescu**, C. P. Moreira de Sa, C. Daia, *Particularities concerning the use of magnetic nanofluids to obtain magnetic nanocomposite materials*, ZAT – Workshop “Multifunctional nanoparticles, magnetically controllable fluids, complex flows and applications”, 2-3 June 2011, Timisoara, Romania, **2011**, (poster)
14. I. Crăciunescu, L. Rednic, C. Socaci, A. Nan, R. Turcu, I. Bratu, C. Leostean, C. Coca-Podaru, **A. Tăculescu**, C. Daia, L. Vékás, *Stimuli responsive magnetic nanogels for biomedical applications*, ZAT – Workshop “Multifunctional nanoparticles, magnetically controllable fluids, complex flows and applications”, 2-3 June 2011, Timisoara, Romania, **2011**, (poster)
15. V. Socoliuc, D. Bica, **A. Tăculescu**, C. Daia, L. Vékás, *Spontaneous and magnetically induced loss of colloidal stability in aqueous magnetic nanocolloids*, ZAT – Workshop “Multifunctional nanoparticles, magnetically controllable fluids, complex flows and applications”, 2-3 June 2011, Timisoara, Romania, **2011**, (oral presentation)
16. R. Turcu, A. Nan, I. Craciunescu, L. Rednic, **A. Tăculescu**, C. Daia, C. Podaru, L. Vékás, *Design of polymer based magnetic nanocomposites with tailored properties*, ZAT – Workshop “Multifunctional nanoparticles, magnetically controllable fluids, complex flows and applications”, 2-3 June 2011, Timisoara, Romania, **2011**, (oral presentation)

17. N. Crainic, D. Bica, A. Torres Marques, L. Vékás, P.J. Novoa, N.C. Popa, O. Marinică, P. Vieira, G. Bandur, N. Correia, **E.A. Tăculescu**, C. Daia, C. P. Moreira de Sa, *Application des nanofluides magnetiques dans le science des materiaux nanocomposites magnetisables*; X<sup>ème</sup> Colloque Franco Roumain sur les Polymères, Ecole des Mines de Douai, Les 6-8 September 2011, Douai, France, **2011**, (poster)
18. N. Crainic, A. Torres Marques, N.C. Popa, P.J. Novoa, Oana Marinica, N. Correia, **Alina Tăculescu**, Patricia Perez, Camelia Daia; *Particularities concerning the influence of the magnetic nanofluids in the fabrication process of the nanocomposite materials*; ICCS 16 - 16<sup>th</sup> International Conference on Composite Structures, University of Porto, Faculty of Engineering (FEUP), 28-30 June 2011, Porto, Portugal, **2011**, (oral presentation)
19. I. Craciunescu, A. Nan, C. Socaci, L. Rednic, **A. Tăculescu**, C. Coca-Podaru, C. Daia, L. Vekas, R. Turcu; *Preparation and characterization of magnetic nanogels with temperature responsive core and pH responsive shell*; „International Conference Processes in Isotopes and Molecules” (PIM 2011), 29 September-1 October 2011, pp. 45, Cluj-Napoca, Romania, **2011**, (oral presentation)
20. D. Susan-Resiga, V. Socoliuc, T. Boros, **A. Tăculescu**, O. Marinica, C. Daia, L. Vekas; *Influence of composition on the structure and macroscopic behavior of magnetizable fluids*; „International Conference Processes in Isotopes and Molecules” (PIM 2011), 29 September-1 October 2011, pp. 50, Cluj-Napoca, Romania, **2011**, (oral presentation)
21. **E.A. Tăculescu**, *Synthesis and characterization of iron oxides produced by the combustion method*, Interdisciplinary research and management workshop, 24-25 November 2011, Timisoara, Romania, **2011**, (oral presentation)
22. **E.A. Tăculescu**, *Synthesis of colloidal suspensions using magnetic powders produced by the combustion method*, Workshop - Interdisciplinaritatea și managementul cercetării în studiile doctorale (Interdisciplinary and research management in doctoral studies) 7-8 June 2012, Oradea, Romania, **2012**, (oral presentation)
23. D. Buteică, C. Constantin, **E.A. Tăculescu**, V. Socoliuc, *Nanoparticles used as security for the manufacture of security paper*, Proceedings of the 18<sup>th</sup> International Symposium in the field of Pulp, Paper, Packaging and Graphics, 19-22 June 2012, Zlatibor, Serbia, **2012** (oral presentation)
24. N. Crainic, A. Torres Marques, L. Vékás, P. Jeorge, R. Nóvoa, O. Marinică, N.C. Popa, **E.A. Tăculescu**, C. Daia, L. Marşavina, A. Cernescu, D. Gubencu, F. Mustață, *Magnetic nano-composite materials obtained using magnetic nano-fluids*, Mechanics of Nano, Micro and Macro Composite Structures, Politecnico di Torino, 18-20 June 2012, Torino, Italy, **2012**, (oral presentation)
25. V. Socoliuc, C. Daia, O. Marinică, C. Coca-Podaru, **E.A. Tăculescu**, I. Crăciunescu, R. Turcu, L. Vékás, *Magnetically induced phase separation in aqueous magnetic colloids for biomedical applications*, International Conference „Colloids in Nanomedicine”, 15-17 July 2012, Amsterdam, Netherlands, **2012**, (poster)
26. **E.A. Tăculescu (Moacă)**, M.F Bojin, R. Ianoş, V. Păunescu, C. Păcurariu, *Effects of colloidal suspensions on normal and tumor cell lines*, 9<sup>th</sup> International Conference on Physics of Advanced Materials, 20-23 September 2012, pp. 15, Iași, Romania, **2012**, (poster)
27. **E.A. Tăculescu**, L. Vékás, F. Mustață, O.M. Marinică, M.C. Daia, N. Crainic, Details concerning the use of epoxy soybean oil to obtain magnetic nanofluids, 9<sup>th</sup> International Conference on Physics of

Advanced Materials (ICPAM 9), 20-23 September 2012, pp. S 9-4, Iasi, Romania, **2012**, (oral presentation)

28. L. Vékás, V. Socoliuc, F. Bălănean, **E.A. Moacă**, C. Daia, D. Susan-Resiga, O. Marinică, N.C. Popa, T. Borbath, T. Boros, R. Turcu, *Hydrophobic and hydrophilic magnetite nanoparticles: non-polar and polar magnetic nanofluids designed for magnetic carriers manufacturing*, International Conference „ImagineNano”, 23-26 April 2013, Bilbao, Spain, **2013**, (oral presentation)
29. D. Buteică, C. Constantin, **E.A. Tăculescu**, V. Socoliuc, *Researches and implementation of a new security systems of paper for value documents printing using nanoparticles as security elements*, 11<sup>th</sup> Conference on colloid and surface chemistry, 9-11 May 2013, Iasi, Romania, **2013**, (oral presentation)
30. N. Crainic, A. Torres-Marques, L. Vékás, P. Novoa, N.C. Popa, O. Marinică, **E.A. Tăculescu** (married Moacă), *Mechanic and magnetic properties of the nanocomposite materials obtained using magnetic nano-fluids*, International Conference and Composites Structure 17, 17-21 June 2013, Porto, Portugalia, **2013**, (oral presentation)
31. D. Buteică, C. Constantin, V. Socoliuc, **E.A. Tăculescu (căș. Moacă)**, O. Marinică, *Hârtie securizată cu nanoparticule magnetice (Security paper with magnetic nanoparticles)*, The 7<sup>th</sup> International Symposium on Advanced Technologies for the Pulp, Paper and Corrugated Board Industry, 3 – 6 September 2013, Braila, Romania, **2013** (oral presentation)
32. **E.A. Moacă**, M.F. Bojin, R. Ianoș, V. Păunescu, C. Păcurariu, V. Cișmașiu, *In vitro toxicity of colloidal suspensions based on combustion synthesized Fe<sub>3</sub>O<sub>4</sub> nanoparticles on tumor and normal cell lines*, The 8<sup>th</sup> Edition of Symposium with international participation: New trends and strategies in the chemistry of advanced materials with relevance in biological systems, technique and environmental protection, 04-05 June 2015, pp. 87, Timisoara, Romania, **2015** (poster)
33. A. Ghițu, **E.A. Moacă**, C.A. Dehelean, *Antioxidant activity assessment of Melissa Officinalis extracts*, The 5<sup>th</sup> Annual Symposium Timisoara Medical Education Days (TIMMED), 03-05 November 2016, Timisoara, Romania, **2016** (poster)
34. F. Ardelean, **E.A. Moacă**, D.S. Antal, S. Drăgan, *Japanese knotweed - an invasive species as a source of phytochemicals with antioxidant activity*, 8<sup>th</sup> Congress of Phytotherapeutic Doctors in Romania, 19-20 May 2017, Sibiu, Romania, **2017** (oral presentation)
35. R. Ianoș, R. Băbuță, R. Lazău, E. Muntean, C. Păcurariu, A. Dabici, **A. Moacă**, *Single-step synthesis of LaAl<sub>0.95</sub>Cr<sub>0.05</sub>O<sub>3</sub> pigments and their nir-reflective properties*, New Trends and Strategies in the Chemistry of Advanced Materials with Relevance in Biological Systems, Technique and Environmental Protection, 10<sup>th</sup> Edition, 08-09 June 2017, Timisoara, Romania, **2017** (oral presentation)
36. R. Ianoș, E. Muntean, R. Lazău, R. Băbuță, **A. Moacă**, C. Păcurariu, A. Dabici, R. Istratie, *Combustion synthesis of near-infrared reflective brown pigments based on iron-doped lanthanum aluminate*, 19<sup>th</sup> International Conference on Materials, Methods & Technologies, 26-30 June 2017, Elenite, Bulgaria, **2017** (poster)
37. R. Lazău, R. Ianoș, E. Muntean, R. Cornea, **A. Moacă**, R. Băbuță, C. Păcurariu, A. Dabici, *Co and Cr – doped ZnAl<sub>2</sub>O<sub>4</sub> NIR-reflective pigments obtained via combustion synthesis*, 19<sup>th</sup> International Conference Materials, Methods and Technologies–Bulgaria, 26-30 June 2017, Elenite, Bulgaria, **2017** (poster)

38. M. Nicolov, C. Soica, R. Roman, R. Ambrus, I. Zupko, **E.A. Moacă**, I. Ledeti, D. Coricovac, C. Farcaș, C.A. Dehelean, *Analysis of monosolvates of betulinc acid with vitamin C*, International Conference of Medicinal Plants Research (ICMPR-2018), 26 March 2018, Warsaw, Poland, Book of Abstracts pp. 19, Ref. code ICMPR-2018-22-036, Published by: APCO Practical Education and Research Organization, Warsaw, Poland, **2018** (poster)
39. D.S. Antal, **A. Moacă**, D. Cionchi, F. Ardelean, A. Chis, A. Dragomirescu, C. Dehelean, *Tissue localization of secondary metabolites and antioxidant activity of Elettaria cardamomum vegetative parts grown in Europe*, International Conference of Medicinal Plants Research (ICMPR-2018), 26 March 2018, Warsaw, Poland, Book of Abstracts pp. 71, Ref. code ICMPR-2018-22-034, Published by: APCO Practical Education and Research Organization, Warsaw, Poland, **2018** (poster)
40. **E.A. Moacă**, D. Coricovac, C. Dehelean, C. Păcurariu, *Oleic Acid Double Coated Iron Oxide Nanoparticles As New Relevant Biocompatible Nanoparticles with a Particular Mechanism of Activity*, 10<sup>th</sup> Congress of Toxicology in Developing Countries (CTDC 10), 12<sup>th</sup> Congress of the Serbian Society of Toxicology (12<sup>th</sup> SCT); 18-21 April 2018, Belgrad Serbia, Book of Abstracts pp. 145; ISBN: 978-86-917867-1-7, Editor: Vesna Matovic, **2018** (poster)
41. A. Ghițu, **E.A. Moacă**, C. Farcaș, D. Coricovac, C. Dehelean, Ș. Avram, C. Danciu, *FTIR characterization and cytotoxic effects of Melissa officinalis L. Ethanolic extracts against MDA-MB 231 breast cancer cell line*, Days of the „Victor Babes” University of Medicine and Pharmacy Timisoara, **2018** (poster)

## B. PROJECTS, GRANTS AND RESEARCH CONTRACTS

1. PN-II (NANOMAGPOLI), ctr. no. 71-068/2007

*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

Period: 2007-2010

2. PN-II (BIMAPAFLU), ctr. no. 71-083/2007

*Advanced magnetic nanostructures 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

Period: 2007-2010

3. PN-II (CFEEL), ctr. no. 21-043/2007

*Functional compatibility of special electrical equipment, whit 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  
Period: 2007-2010

4. PN-II ERA-NET (MAFINCO), ctr. no. 7-018/2009

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

Project Coordinator: Politehnica University of Timisoara, CNISFC

Partner 1: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research,  
Laboratory of Magnetic Liquid

Project Responsible: Dr. Ladislau VÉKÁS, CS 1

Period: 2009-2011

5. FP7 (MAGPRO<sup>2</sup>LIFE)

*Advanced Magnetic nanoparticles deliver smart processes and products for life*

Project Coordinator: SOLAE Co., Denmark

Partner 11: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research,  
Laboratory of Magnetic Liquid

Project Responsible: Dr. Ladislau VÉKÁS, CS1

Period: 2009-2013

6. ID\_76 *Surface and Interface Science: physics, chemistry, biology and applications*

Project Coordinator: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced  
Research, Laboratory of Magnetic Liquid

Project Manager: Dr. Victor SOFONEA, CS1

Period: 2012-2013

7. FP7 (RPF'S FP 2009 – 2010, Cyprus)

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

Project Coordinator: Cyprus University

Partner 2: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced Research,  
Laboratory of Magnetic Liquid

Project Responsible: Dr. Ladislau Vékás, CS1

Period: 2013-2014

8. PN-II-PT-PCCA-2011-3.2-0538-MagNanoMicroSeal, ctr. no. 157/2012

*Magnetic nanofluids and magnetizable nano-micro composites fluids with high magnetization: applications  
in rotating seals for high pressures and hard operating conditions, respectively magnetorheological control  
devices*

Project Coordinator: Romania Academy Timisoara Branch, Center of Technical, Fundamental and Advanced  
Research, Laboratory of Magnetic Liquid

Project Manager: Dr. Ladislau VÉKÁS, CS1

Period: 2012-2015

9. PN-II-RU-TE-2014-4-1587, ctr. no. 142 din 01/10/2015

*Smart reflexes nanopigments in the near infra-red obtained by the combustion method intended for thermo  
reflective coatings (cold)*

Project Coordinator: Politehnica University of Timisoara

Project Manager: Dr. Ianoş Robert Gabriel

Period: 2015-2017

10. PN-II-RU-TE-2014-4-0514, ctr. no. 60 din 01/10/2015

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

Project Coordinator: Politehnica University of Timisoara

Project Manager: Dr. Stoia Marcela Elena

Period: 2015-2017

11. PN-III-P2-2.1-BG-2016-0354, ctr. no. 115/2016

*Betulin based formulations and gold nanoparticles in the fight against aging skin*

Project Coordinator: "Victor Babes" University of Medicine and Pharmacy Timisoara

Project Manager: Dr. Șoica Codruța Marinela

Period: 2016-2018

12. PN-III-P4-ID-PCE-2016-0765, ctr. no.169/01.08.2017

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

Project Coordinator: Politehnica University of Timisoara

Project Manager: Dr. Cornelia Păcurariu

Period: 2017-2019

13. CNFIS-FDI-2018-0159, ctr. no. 35/16.05.2018

*Center for the development of practical abilities in medicinal plants field*

Project Coordinator: „Victor Babes” University of Medicine and Pharmacy Timisoara

Project Manager: Prof.univ.dr.farm. Cristina Dehelean

Period: 16.05.2018 - 15.12.2018

**Date**

**January, 2019**

**Lecturer PhD. Elena-Alina Moacă**