

## Listă lucrări Stegarescu (născută Rotar) Olimpia-Adina:

### I. Teză Doctorat:

*Studies on hypervalent organotin compounds* (Cercetari în chimia compușilor staniu-organici hipervalenți) – Conducătorul de doctorat: Prof. Dr. Cristian Silvestru; Organizator: Universitatea Babeș-Bolyai, Cluj-Napoca, România; Data susținerii tezei: 29.06.2007; Data conferirii titlului de doctor: 15.10.2007 în baza Ordinului Ministrului Educației, Cercetării și Tineretului Nr. 2398; Domeniul: CHIMIE

### II. Articole publicate in reviste cotate ISI:

1. A multi-method approach for impact assessment of some heavy metals on *Lactuca sativa L.*, M.L. Soran, A.N. Sîrb, I. Lung, O. Opreș, O. Culicov, A. Stegarescu, P. Nekhoroshkov, D.M. Gligor, *Molecules*, **2023**, 28, 759.  
FI ISI / 2021 = 4,927
2. Application of CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> Nanocomposite for the Removal of Cymoxanil from Aqueous Solution: Isotherm and Kinetic Studies, I. Lung, M.L. Soran, A. Stegarescu, O. Opreș, *Analytical Letters*, **2023**, 56(2), 216-230.  
FI ISI / 2021 = 2,267
3. Testing MWCNT-COOH/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for the removal of ampicillin from synthetic aqueous solutions, I. Lung, A. Stegarescu, O. Opreș, M.L. Soran, *STUDIA UBB CHEMIA*, LXVII, 2022, 4, 141-149.  
FI ISI / 2021 = 0,558
4. Synthesis and Characterization of MWCNT-COOH/Fe<sub>3</sub>O<sub>4</sub> and CNT-COOH/Fe<sub>3</sub>O<sub>4</sub>/NiO Nanocomposites: Assessment of Adsorption and Photocatalytic Performance, A. Stegarescu, H. Cabrera, H. Budasheva, M.-L. Soran, I. Lung, F. Limosani, D. Korte, M. Amati, G. Borodi, I. Kacso, O. Opreș, M. Dan, S. Bellucci, *Nanomaterials*, **2022**, 12(17), 3008.  
FI ISI / 2021 = 5,719 (Drepturi egale primii doi autori)
5. The Effect of Copper Salts on Bioactive Compounds and Ultrastructure of Wheat Plants, O. Culicov, A. Stegarescu, M.L. Soran, I. Lung, O. Opreș, A. Ciorita, P. Nekhoroshkov, *Molecules*, 2022, 27(15), 4835.  
FI ISI / 2021 = 4,927 (Autor de corespondență)
6. Efficient Extraction of Total Polyphenols from Apple and Investigation of Its SPF Properties, O. Opreș, I. Lung, M.L. Soran, A. Stegarescu, T. Cesco, A. Ghendov-Mosanu, P. Podea, R. Sturza, *Molecules*, **2022**, 27(5), 1679.  
FI ISI / 2021 = 4,927 (Autor de corespondență)
7. The Effect of TiO<sub>2</sub> Nanoparticles on the Composition and Ultrastructure of Wheat, M.L. Soran, I. Lung, O. Opreș, O. Culicov, A. Ciorîță, A. Stegarescu, I. Zinicovscaia, N. Yushin, K. Vergel, I. Kacso, G. Borodi, *Nanomaterials*, **2021**, 11(12), 3413.  
FI ISI / 2021 = 5,719
8. Devrinol and triadimefon removal from aqueous solutions using CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite, Lung Ildiko, Soran Maria-Loredana, Stegarescu Adina, Opreș Ocsana, *JOURNAL OF THE IRANIAN CHEMICAL SOCIETY*, **2021**, <https://doi.org/10.1007/s13738-021-02442-2>  
FI ISI / 2021 = 2,271
9. The Impact Assessment of CuO Nanoparticles on the Composition and Ultrastructure of *Triticum aestivum L.*, Lung Ildiko, Opreș Ocsana, Soran Maria-Loredana, Culicov Otilia, Ciorita Alexandra, Stegarescu

Adina, Zinicovscaia Inga, Yushin Nikita, Vergel Konstantin, Kacso Irina, Borodi Gheorghe, Parvu Marcel, *Int. J. Environ. Res. Public Health*, **2021**, 18, 6739 (1-24).  
FI ISI / 2021 = 4,614

10. Synthesis and characterization of Fe@FePt@SiO<sub>2</sub>@NH<sub>2</sub> nanoplatfom for amino acids recognition, Stegarescu Adina, Gutoiu Simona, Lung Ildiko, Opris Ocsana, Leostean Cristian, Pana Ovidiu, Barbu Lucian, Soran Maria-Loredana, *Journal of Nanoparticle Rasearch*, **2021**, 23(4), 1-11.  
FI ISI / 2021 = 2,533 (Drepturi egale 3 autori)
11. Nanocomposite based on Fe<sub>3</sub>O<sub>4</sub>/MnO<sub>2</sub> for biodiesel production improving, Stegarescu Adina, Soran Maria L, Lung Ildiko, Opris Ocsana, Gutoiu Simona, Leostean Cristian, Lazar Mihaela Diana, Kacso Irina, Silipas Teofil-D, Pana Ovidiu, Porav Alin S, *CHEMICAL PAPERS*, **2021**, 75(7), 3513-3520.  
FI ISI / 2021 = 2,146 (Drepturi egale 3 autori)
12. Optimization of extraction conditions of polyphenols, antioxidant capacity and sun protection factor from Prunus spinosa fruits. Application in sunscreen formulation, Opris Ocsana, Soran Maria-Loredana, Lung Ildiko, Stegarescu Adina, Gutoiu Simona, Podea, Razvan, Podea Paula, *JOURNAL OF THE IRANIAN CHEMICAL SOCIETY*, **2021**, 18(10), 2625-2636.  
FI ISI / 2021 = 2,271
13. Evaluation of CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for ibuprofen and paracetamol removal from aqueous solutions, Ildiko Lung, Maria-Loredana Soran\*, A. Stegarescu\*, Ocsana Opris, Simona Gutoiu, Cristian Leostean, Mihaela Diana Lazar, Irina Kacso, Teofil-Danut Silipas, Alin Sebastian Porav, *Journal of Hazardous Materials*, **2021**, 403, 123528.  
FI ISI / 2021 = 14,224 (Autor de corespondență; Drepturi egale doi autori de corespondență)
14. Spin transfer and proximity effects in case of FePt (L1(0)) nanoparticles coated with P3HT, S. Gutoiu, C. Leostean, M.L. Soran, M. Stefan, S. Macavei, D. Toloman, A. Popa, A. Stegarescu, O. Pana, *AIP ADVANCES*, **2020**, 10, 055215.  
FI ISI / 2020 = 1,627
15. Green Synthesis, Characterization and Test of MnO<sub>2</sub> Nanoparticles as Catalyst in Biofuel Production from Grape Residue and Seeds Oil, A. Stegarescu, I. Lung, C. Leoștean, I. Kacso, O. Opris, M. D. Lazăr, L. Copolovici, S. Guțoiu, M. Stan, A. Popa, O. Pană, A. S. Porav, M.L. Soran, *Waste and Biomass Valorization*, **2020**, 11(9), 5003-5013.  
FI ISI / 2020 = 3,703
16. Organotin(IV) pseudohalides. Synthesis and structural characterization, C. Coza, A. Stegarescu, R. Suteu, A. Silvestru, *J. Organomet. Chem.*, **2015**, 777, 71.  
FI ISI / 2015 = 2,336 (Drepturi egale primii doi autori)
17. New Copper(I) Complexes with Organophosphorus Ligands with XPNSO Skeleton, C. Strady, A. Stegarescu, C. Silvestru, A. Silvestru, *Studia Universitatis Babeș-Bolyai, Seria Chimia*, **2013**, LVIII, 4, 243.  
FI ISI / 2013 = 0,136
18. Crystal and molecular structure of potassium 18-crown-6-[2,6-bis(dimethylaminomethyl) phenyl]tin(IV) tetrafluoride, A. Rotar, R.A. Varga, M. Schürmann, C. Silvestru and K. Jurkschat, *Main Group Met. Chem.*, **2011**, 34(3-4), 57.  
FI ISI / 2011 = 0,207
19. Hypervalent Organoselenium(II) Compounds with Organophosphorus Ligands. Crystal and Molecular Structure of [2-(<sup>i</sup>Pr<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>]Se[S<sub>2</sub>PR'<sub>2</sub>] (R' = Ph, O<sup>i</sup>Pr), E. Duhamel, A. Pöllnitz, A. Stegarescu and A. Silvestru, *Z. Anorg. Allg. Chem.*, **2011**, 637, 1355.

FI ISI / 2011 = 1,249

20. Butyltrichlorido{2-[(diisopropylammonio)methyl]phenyl}tin(IV) dichloromethane monosolvate, A. Rotar, R. A. Varga and M. Staninska, *Acta Crystallogr., Sect.E*, **2011**, E67, m56.  
FI ISI / 2011 = 0,347
21. Group 12 metal aryl selenolates. Crystal and molecular structure of [2-(Et<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>]<sub>2</sub>Se<sub>2</sub> and [2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>Se]<sub>2</sub>M (M = Zn, Cd), A. Pollnitz, A. Rotar, A. Silvestru, C. Silvestru and M. Kulcsar, *J. Organomet. Chem.*, **2010**, 695, 2486.  
FI ISI / 2010 = 2,205
22. New triarylphosphane chalcogenides. Crystal and molecular structure of [2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>]<sub>3</sub>P=E (E = S, Se) and [2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>]<sub>2</sub>PhP=S, A. Rotar, A. Covaci, A. Pop and A. Silvestru, *Rev. Roum. Chim.*, **2010**, 55(11-12), 823.  
FI ISI / 2010 = 0,311
23. Diorganotin(IV) compounds containing 2-(Et<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub> moieties: Configurational stability in solution and solid state structures, A. Rotar, R. A. Varga, K. Jurkschat and C. Silvestru, *J. Organomet. Chem.*, **2009**, 694, 1385.  
FI ISI / 2009 = 2,347
24. Crystal and molecular structure of [2,6-(Me<sub>2</sub>NCH<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>]<sub>2</sub>SnF<sub>2</sub>, an intramolecularly coordinated diorganotin difluoride, A. Rotar, M. Schürmann, R. A. Varga, C. Silvestru and K. Jurkschat, *Z. Anorg. Allg. Chem.*, **2008**, 634, 1533.  
FI ISI / 2008 = 1,102
25. New organophosphorus ligands with SPNSO skeleton and their copper(I) complexes. Crystal and molecular structures of (SPPPh<sub>2</sub>)(O<sub>2</sub>SPh)NH, (Ph<sub>3</sub>P)<sub>2</sub>Cu[(SPPPh<sub>2</sub>)(O<sub>2</sub>SMe)N] and (Ph<sub>3</sub>P)<sub>2</sub>Cu[(SPPPh<sub>2</sub>)(O<sub>2</sub>SC<sub>6</sub>H<sub>4</sub>Me-4)N]·0.5C<sub>6</sub>H<sub>5</sub>CH<sub>3</sub>, A. Pop, A. Rotar, C. Rat, A. Silvestru, *Inorg. Chim. Acta*, **2008**, 361, 255.  
FI ISI / 2008 = 1,94
26. Substitutional disorder in a hypervalent diorganotin(IV) dihalide, A. Rotar, R. A. Varga and C. Silvestru, *Acta Crystallogr., Sect.E*, **2008**, E64, m45.  
FI ISI / 2008 = 0,367
27. New copper(I) and copper(II) tetraorganodichalcogenoimidodiphosphinates. Crystal and molecular structure of the first monothioimidodiphosphinato copper(I) complex, Cu<sub>4</sub>[(OPMe<sub>2</sub>)(SPPPh<sub>2</sub>)N]<sub>4</sub>·6CH<sub>2</sub>Cl<sub>2</sub>, A. Rotar, O. Moldovan, S. I. Farcas, R. A. Varga, C. Silvestru, A. Silvestru, *Studia Universitatis Babeş-Bolyai, Seria Chimia*, **2007**, LII, 1, 81.  
FI ISI / 2007 = 0
28. Intramolecular interactions in bis[bis{2-(dimethylaminomethyl)phenyl}stannol]oxide, A. Rotar, R. A. Varga and C. Silvestru, *Acta Crystallogr., Sect.C*, **2007**, C63, m355.  
FI ISI / 2007 = 0,719
29. Hypercoordinated Organotin(IV) Halides Containing 2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub> Groups: {2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>]<sub>2</sub>SnX<sub>2</sub> (X = F, Cl, Br, I) and {2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>}R<sub>2</sub>SnX (R = Me, Ph; X = F, Cl, Br, I) and Their Solution Behaviour and Solid-State, Hydrogen-Bonding-Based Supramolecular Architecture, R. A. Varga, A. Rotar, M. Schürmann, K. Jurkschat, C. Silvestru, *Eur. J. Inorg. Chem.*, **2006**, 1475.  
FI ISI / 2006 = 2,597

30. Structure and *in vitro* antibacterial activity of  $\text{BuSnCl}_{3-n}[(\text{OPPh}_2)(\text{SPPPh}_2)\text{N}]_n$  ( $n = 1, 2$ ), A. Rotar, A. Silvestru, C. Silvestru, J. E. Drake, M. B. Hursthouse, M. E. Light, L. Bunaciu and P. Bunaciu, *Appl. Organomet. Chem.*, **2005**, 19, 555.  
FI ISI / 2005 = 1,19
31. Synthesis, spectroscopic characterization, and structural studies of new Cu(I) and Cu(II) complexes containing organophosphorus ligands, and crystal structures of  $(\text{Ph}_3\text{P})_2\text{Cu}[\text{S}_2\text{PMe}_2]$ ,  $(\text{Ph}_3\text{P})_2\text{Cu}[(\text{OPPh}_2)_2\text{N}]$ ,  $\text{Cu}[(\text{OPPh}_2)_2\text{N}]_2$ , and  $\text{Cu}[(\text{OPPh}_2)(\text{SPPPh}_2)\text{N}]_2$ , A. Silvestru, A. Rotar, J. E. Drake, M. B. Hursthouse, M. E. Light, S. I. Farcas, R. Rösler and C. Silvestru, *Can. J. Chem.*, **2001**, 79, 983.  
FI ISI / 2001 = 1,144

### III. Brevete de Invenție:

*I cerere de brevet:* M.L.Soran, I. Lung, O.I. Opriș, A.O. Stegarescu, R. Podea " Procedeu de fabricare a emulsiei cosmetice naturale cu factor de protecție solară" Cerere brevet A/00323 din 09.06.2020

### IV. Proiecte ce cercetare in calitate de director, membru, burse de cercetare, precum si activitatea academica:

#### ACTIVITATEA ACADEMICĂ:

În perioada în care am activat la Facultatea de Chimie și Inginerie Chimică, o parte din atribuțiile mele au constat în îndrumarea studenților în laborator pentru elaborarea lucrărilor de licență/master/doctorat. De asemenea, am făcut parte din 2 Comisii de Îndrumare a Doctoranzilor (Mitea Raluca - Teza susținută în 2013; Barbul Ioana - Teza susținută în 2012).

#### BURSE DE CERCETARE ȘI VIZITE DE CERCETARE-DOCUMENTARE:

Apr.-Iulie 2003 – Bursă Erasmus (Departamentul de Chimie Anorganică, Universitatea Zaragoza, Spania (Prof. Dr. Antonio Laguna)  
Sep-Oct 2011 – Vizită de cercetare / fonduri din Proiectul PD-443/2010/A.Stegarescu, Universitatea Tehnică Dortmund, Dortmund, Germania (Prof. Dr. Klaus Jurkschat)  
Mai-Iulie 2005 – Bursă Leonardo da Vinci, RO/2004/PL93192/S/2004, Coordonator proiect Prof. Dr. Cristian Silvestru)  
2 Nov- 30 Nov 2011 – Vizită de cercetare / fonduri din Proiectul PD-443/2010/A.Stegarescu

#### GRANTURI ACADEMICE: Competență managerială (director de proiect):

**Director de proiect (PD)** 2010 – 2012 (PD\_443/2010 Compuși organometalici și coordinați ai staniului – precursori pentru materiale electronice).  
Grant CNCSIS PD / Contract Nr. 158 / 29.07.2010 Cod CNCSIS 443/1 Aug 2010- 2012 suma finanțată: ~ 67.966 Euro (5 lei/euro) (339.834,65 RON)  
[http://uefiscdi.gov.ro/userfiles/file/PROIECTE%20PD%20COMPETITIA%202009/REZULTATE%20PD\\_DO%20MENIU%201\\_2\\_FINAL.pdf](http://uefiscdi.gov.ro/userfiles/file/PROIECTE%20PD%20COMPETITIA%202009/REZULTATE%20PD_DO%20MENIU%201_2_FINAL.pdf)

**Director de proiect (TD)** 2004 – 2005 (TD\_104/2004 Cercetări asupra unor noi compuși hipervalenți organostaniu cu legătură Sn-E (E = O, S, Se, Te)).  
Grant CNCSIS T<sub>D</sub> / Contract Nr. 33374 / Tema 11 / Cod CNCSIS 104 / 2004-2005 suma finanțată: ~ 3552 Euro (5 lei/euro) (17.760 RON)  
[http://www.cnscis.ro/userfiles/file/granturi/Granturi%20finalizate%2031%20dec%202005/com\\_1\\_tip\\_TD.htm](http://www.cnscis.ro/userfiles/file/granturi/Granturi%20finalizate%2031%20dec%202005/com_1_tip_TD.htm)

#### MEMBRU în echipele a 16 proiecte de cercetare:

<b>INTERACȚIUNI INTRA- ȘI INTERMOLECULARE ÎN COMPUȘI ORGANOMETALICI. COMBINAȚII HIPERVALENTE NEUTRE ȘI IONICE</b> Grant CNC SIS tip A, 1998-2000 <i>Director proiect:</i> Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract Nr. 16 / Tema 86 Contract Nr. 32575 / Tema 76/280 Contract Nr. 32575 / Tema 45/312	Membru în echipă (Student)	1998 - 2000
<b>COMPUȘI ORGANOMETALICI CU LEGĂTURĂ M-E (M = Sn, Bi; E = M, calcogen) STABILIZAȚII PRIN GRUPĂRI ORGANICE CU BRAȚE PENDANTE</b> Grant CNC SIS tip A, 2003-2005 <i>Director proiect:</i> Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract Nr. 33965 / Tema 40/Cod CNC SIS 1713 Contract Nr. 33374 / Tema 122/Cod CNC SIS 1713 Contract Nr. 33374 / Tema 82/Cod CNC SIS 1713	Membru în echipă (Doctorand)	2003 - 2005
<b>CHIMIA COMBINAȚIILOR ORGANOMETALICE HIPERVALENTE – COMPUȘI MOLECULARI ȘI ASOCIAȚII SUPRAMOLECULARE</b> Grant CNC SIS tip C, 2001-2002 <i>Director proiect:</i> Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Cod CNC SIS C-282	Membru în echipă (Doctorand)	2001 - 2002
<b>CERCETĂRI ÎN CHIMIA COMPUȘILOR STANIU-ORGANICI</b> Grant CERES, 2002-2004 <i>Director proiect:</i> Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract Nr. 32 / 12.11.2002	Membru în echipă (Doctorand)	2002 - 2004
<b>COMPLECȘI DE INCLUZIUNE AI UNOR DERIVAȚII AI METALELOR TRANZITIONALE CU CICLODEXTRINE</b> Grant CERES, 2004-2006 <i>Director proiect:</i> Conf. dr. Anca Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract Nr. 4-62 / 2004	Membru în echipă (Doctorand)	2004 - 2006
<b>COMPUȘI ORGANOMETALICI HIPERVALENȚII AI ELEMENTELOR DIN GRUPELE PRINCIPALE (Sn, Pb, Sb, Bi, Se, Te) - HYPORGMET</b> Grant MEC – Programul Cercetare de Excelență, 2005-2008 Director proiect: Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract CEx-D11-16 / 04.10.2005	Membru în echipă (Doctorand)	2005 - 2008
<b>CHIMIA ORGANOMETALICĂ A COMPUȘILOR CU LEGĂTURĂ HOMO ȘI HETERO METAL-METAL - HOHEORGMET</b> Grant MEC – Programul Cercetare de Excelență, 2006-2007 Director proiect: Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract nr: 19 / 2006	Membru în echipă (Doctorand)	2006 - 2007
<b>CONTRIBUȚII LA CHIMIA COMPUȘILOR ORGANOMETALICI HIPERVALENȚII AI METALELOR DIN GRUPELE 14 (Sn, Pb), 15 (Sb, Bi) ȘI 16 (Se, Te) - DESIGN, STRUCTURĂ, REACTIVITATE</b> Grant CNC SIS tip A, 2006-2008 <i>Director proiect:</i> Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract 85GR/23.05.2007, Cod CNC SIS 709	Membru în echipă (Doctorand)	2006 - 2008
<b>COMPUȘI STANIU(IV)-ORGANICI CU LEGĂTURI METAL-METAL SIMPLE SAU MULTIPLE</b> Grant CEEX Modul: II, 2006-2008 <i>Director proiect:</i> Lector dr. Richard A. Varga, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract nr. 1435 / 07.04.2006, Cod 63	Membru în echipă (Doctorand)	2006 - 2008
<b>COMPUȘI ORGANOMETALICI HIPERVALENȚII AI MERCURULUI, SELENIULUI ȘI TELURULUI - SINTEZĂ, CARACTERIZARE STRUCTURALĂ ÎN SOLUȚIE ȘI STARE SOLIDĂ, REACTIVITATE</b> Programul Cercetare de Excelență, 2006-2008 <i>Director proiect:</i> Prof. dr. Cristian Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract CEx-18	Cercetător postdoctoral	1 dec. 2007 – 1 apr. 2008

<b>COMPUȘI SELENIU- ȘI TELUR-ORGANICI ÎN CHIMIA COORDINATIVĂ – COSETEORG.</b> Program CEEEX, 2006-2008 <i>Director proiect:</i> Prof. Dr. Anca Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca Contract nr. 11-55/2006	Membru în echipă (Asistent cercetare, CSIII)	2006-2008
<b>LIGANZI SELENIU-ORGANICI ȘI COMPLECȘI AI ACESTORA CU METALE TRANZIȚIONALE. SINTEZĂ, CARACTERIZARE STRUCTURALĂ, PROPRIETAȚI CATALITICE.</b> Program PNII-ID, 2009-2011 <i>Director proiect:</i> Prof. Dr. Anca Silvestru, Facultatea de Chimie și Inginerie Chimică, Universitatea Babeș-Bolyai, Cluj-Napoca, Contract nr. 2404/2009	Membru în echipă (CSIII)	2009-2010
<b>CORE-SHELL COMPOSITE NANOPARTICLES BASED ON Fe AND Pt HAVING ADJUSTABLE MAGNETIC, DISPERSIVE AND FUNCTIONAL PROPERTIES</b> Program PNII-ID, 2009-2011 <i>Director proiect:</i> CSI Dr. Ovidiu-Ioan Pana, Institutul National de Cercetare-Dezvoltare pentru Procese Izotopice si Moleculare, Cluj-Napoca Contract PN-II-ID-PCE-2011-3-0876	Membru în echipă (CSIII)	2011-2015
<b>MIEZURI MAGNETICE SINTERIZATE CU DENSITATE MARE DE FLUX MAGNETIC PRODUSE DIN PULBERI PSEUDO CORE-SHELL/CORE-SHELL PENTRU APLICATII LA FRECVENTE MEDII SI INALTE</b> <i>Responsabil proiect:</i> CSI Dr. Ovidiu-Ioan Pana, Institutul National de Cercetare-Dezvoltare pentru Procese Izotopice si Moleculare, Cluj-Napoca Contract PED 116/2017	Membru în echipă (CSIII)	2016-2017
<b>CREȘTEREA CAPACITĂȚII DE TRANSFER TEHNOLOGIC ȘI DE CUNOȘȚINȚE A INCDTIM CLUJ ÎN DOMENIUL BIOECONOMIEI TTC-ITIM</b> Contractul de finanțare nr. 18/01.09.2016 <b>PRODUSE COSMETICE CU ACTIVITATE FOTOPROTECTOARE, PE BAZA DE EXTRACTE DIN PLANTE</b> <i>Director proiect:</i> CSI Dr. Maria-Loredana Soran, Institutul National de Cercetare-Dezvoltare pentru Procese Izotopice si Moleculare, Cluj-Napoca Contract subsidiar 269/08.06.2018	Membru în echipă (CSIII)	2018-2020
<b>PAES APPROACHES FOR THIN FILMS SURFACES AND INTERFACES STUDIES</b> <i>Responsabil proiect:</i> CSI Dr. Ovidiu-Ioan Pana, Institutul National de Cercetare-Dezvoltare pentru Procese Izotopice si Moleculare, Cluj-Napoca Contract: ELI-17 / 2020	Membru în echipă (CSIII)	2020-prezent

## V. Lucrări comunicate la conferințe internaționale:

1. Synthesis and characterization of nanocomposites based on carbon nanostructures used for decontamination of aqueous solutions, Soran M.L., Lung I., Stegarescu A., Opreș O., Polianciuc S.I., *The 21<sup>st</sup> International Conference "LIFE SCIENCES FOR SUSTAINABLE DEVELOPMENT"* 15-17 septembrie, 2022, Cluj-Napoca, Romania. (poster)
2. The assessment of influence of some abiotic stress factors on the elemental content of lettuce, Culicov O., Lung I., Soran M.L., Stegarescu A., Opreș O., Strelkova L., Nekhoroshkov P., *The IV International Scientific Forum "Nuclear Science and Technologies"*, 26-30 septembrie, 2022, Almaty, Republica Kazakhstan. (poster)
3. The impact assessment of metal/metal salts on onion, Soran M.L., Culicov O., Lung I., Stegarescu A., Opreș O., *The 6<sup>th</sup> edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences*, 6-10 iunie, 2022, Brașov, România. (poster)
4. The antibacterial properties of nanocomposites based on carbon nanotubes and metal oxides, Soran M.L., Lung I., Stegarescu A., Opreș O., Culicov O., Ciorîță A., *The 6<sup>th</sup> edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences*, 6-10 iunie, 2022, Brașov, România. (poster)

5. Evaluation of copper salts consequence on *Triticum aestivum*, Soran M.L., Culicov O., Lung I., Ciorîță A., Opriș O., Stegarescu A., Zinicovscaia I., Yushin N., Vergel K., *International Conference Condensed Matter Research at the IBR-2*, 25-29 aprilie, 2022, Dubna, Rusia. (poster)
6. The variation of the bioactive compounds content in lettuce grown in the presence of heavy metals salts, A. Sârb, M.L. Soran, I. Lung, A. Stegarescu, O. Opriș, O. Culicov, D. Gligor, *The 7<sup>th</sup> International Conference Ecological & Environmental Chemistry 2022 (EEC – 2022)*, 3-4 Martie 2022, Chișinău, Moldova. (poster)
7. Utilization of nanomaterials based on carbon nanotubes for tartrazine removal from water. Isotherms and kinetic studies. M.L. Soran, I. Lung, A. Stegarescu, O. Opriș, *The 7<sup>th</sup> International Conference Ecological & Environmental Chemistry 2022 (EEC – 2022)*, 3-4 Martie 2022, Chișinău, Moldova. (poster)
8. Application of CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite for the removal of cymoxanil from aqueous solution, I. Lung, M.L. Soran, A. Stegarescu, O. Opriș, *The 7<sup>th</sup> International Conference Ecological & Environmental Chemistry 2022 (EEC – 2022)*, 3-4 Martie 2022, Chișinău, Moldova. (poster)
9. The influence of heavy metals salts on the growth of lettuce, M.L. Soran, I. Lung, O. Culicov, A. Stegarescu, O. Opris, L. Strelkova, P. Nekhoroshkov, A. Sergeeva, *The 6<sup>th</sup> Green and Sustainable Chemistry Conference – Online*, 16-18 November 2021, Elsevier. (poster cu prezentare orala online)
10. Process for manufacturing natural cosmetic emulsion with sun protection factor, M.L. Soran, I. Lung, O. Opriș, A. Stegarescu, R. Podea, *19<sup>th</sup> edition of the International Exhibition of Research, Innovations and Inventions PRO INVENT*, 20-22 October 2021, Cluj-Napoca. (poster cu prezentare orala online)
11. Application of nanocomposites to grape wastes processing for improve biodiesel production, Adina Stegarescu, Maria-Loredana Soran, Ildiko Lung, Ocsana Opriș, Simona Guțoiu, Ovidiu-Ioan PANĂ, *International Conference INTELLIGENT VALORISATION OF AGRO-INDUSTRIAL WASTES*, 7-8 October 2021, Chișinău, Moldova. (poster)
12. Polyphenols extraction from blackthorn berries and their application in sunscreen formulation, O. OPRİȘ, M. L. SORAN, I. Lung, A. Stegarescu, S. Guțoiu, R. Podea, P. Podea, R. Sturza, A. Ghendov-Moșanu, *International Conference INTELLIGENT VALORISATION OF AGRO-INDUSTRIAL WASTES*, 7-8 October 2021, Chișinău, Moldova. (poster)
13. Application of nanocomposites based on CNT-COOH as adsorbents for the removal of tartrazine from aqueous solutions, ML Soran, I Lung, O Opriș, A Stegarescu, “*13<sup>th</sup> International Conference – Processes in Isotopes and Molecules (PIM 2021)*”, 22 – 24 September 2021, Cluj-Napoca, România. (poster)
14. CNT-COOH/MnO<sub>2</sub>/Fe<sub>3</sub>O<sub>4</sub> nanocomposite as adsorbent for the removal of pesticides from their aqueous solution, I. Lung, M.L. Soran, A. Stegarescu, O. Opriș, “*13<sup>th</sup> International Conference – Processes in Isotopes and Molecules (PIM 2021)*”, 22 – 24 September 2021, Cluj-Napoca, România. (poster)
15. Synthesis and characterization of Fe<sub>3</sub>O<sub>4</sub>/MnO<sub>2</sub> nanocomposite for improving of biodiesel production, A Stegarescu, ML Soran, I Lung, O Opriș, S Guțoiu, C Leoștean, MD Lazar, I Kacso, TD Silipas, O Pană, AS Porav, “*13<sup>th</sup> International Conference – Processes in Isotopes and Molecules (PIM 2021)*”, 22 – 24 September 2021, Cluj-Napoca, România. (poster)
16. New emerging magnetic properties of FePt@SiO<sub>2</sub> nanocomposites, M S Gutoiu, L Soran, A Stegarescu, C Leostean, S Macavei, L Barbu, V Pop, D Benea, R Hirian, O Pana, “*13<sup>th</sup> International Conference – Processes in Isotopes and Molecules (PIM 2021)*”, 22 – 24 September 2021, Cluj-Napoca, România. (poster)
17. Impact assessment of copper salts on various plants, Lung I, Culicov O, Stegarescu A, Opriș O, A. Ciorîță, Soran ML, Inga Zinicovscaia, Nikita Yushin, Konstantin Vergel, 28th International Seminar on Interaction of

Neutrons with Nuclei: «Fundamental Interactions & Neutrons, Nuclear Structure, Ultracold Neutrons, Related Topics», 24-28 May 2021, Dubna, Rusia. (poster)

**18.** Comparison of the effect of soil amendment of biogenic and chemical obtained CuO NPs on bioactive compounds and elemental accumulation in wheat, Ildiko LUNG, Ocsana OPRIȘ, Maria – Loredana SORAN, Otilia Ana CULICOV, Alexandra CIORÎȚĂ, Adina STEGARESCU, Inga ZINICOVSCAIA, Nikita YUSHIN, Konstantin VERGEL, Irina KACSO, Gheorghe BORODI, Marcel PARVU, *The 6th International Conference „Advances in engineering & management – ADEM 2020”*, 10-11 December 2020, Drobeta-Turnu Severin, Romania. (poster)

**19.** Carbon nanotubes/metal oxide nanocomposites –preparation, characterization and possible applications in water decontamination, Adina STEGARESCU, Maria-Loredana SORAN, Ildiko LUNG, Cristian PORAV, Diana LAZAR, Gheorghe BORODI, Ovidiu PANA, *Euroasia congress on scientific researches and recent trends-VII*, 7-8 December 2020, Baku, Azerbaijan. (prezentare orală)

**20.** The influence of CuO nanoparticles and copper sulphate and nitrate salt on composition and ultrastructure of wheat, Maria – Loredana SORAN, Otilia Ana CULICOV, Ildiko LUNG, Ocsana OPRIȘ, Adina STEGARESCU, *Euroasia congress on scientific researches and recent trends-VII*, 7-8 December 2020, Baku, Azerbaijan. (prezentare orală)

**21.** The influence of nanoparticles based on Cu and Ti on bioactive compounds from wheat, Ildiko LUNG, Ocsana OPRIȘ, Otilia CULICOV, Adina STEGARESCU, Alexandra CIORÎȚĂ, Stelian PINTEA, Simona GUȚOIU, Inga Zinicovscaia, Nikita Yushin, Konstantin Vergel and Maria – Loredana SORAN, *18th International Conference – Life Science for Sustainable Development*, 26-28 September 2019, Cluj-Napoca, Romania. (poster)

**22.** Optimization of bioactive compounds extraction from garlic for improvement of antioxidant and antifungal properties, Ildiko LUNG, Iuliana VASIAN, Doina Iulia Rotaru, Ioana Alina COLOSI, Adina STEGARESCU, Ocsana OPRIȘ, Maria – Loredana SORAN, *18th International Conference – Life Science for Sustainable Development*, 26-28 September 2019, Cluj-Napoca, Romania. (poster)

**23.** Optimization of bioactive compounds extraction from garlic for improvement of antioxidant and antifungal properties, Ildiko LUNG, Iuliana VASIAN, Doina Iulia Rotaru, Ioana Alina COLOSI, Adina STEGARESCU, Ocsana OPRIȘ, Maria – Loredana SORAN, *18th International Conference – Life Science for Sustainable Development*, 26-28 September 2019, Cluj-Napoca, Romania

**24.** The influence of nanoparticles based on Cu and Ti on bioactive compounds from wheat, Ildiko LUNG, Ocsana OPRIȘ, Otilia CULICOV, Adina STEGARESCU, Alexandra CIORÎȚĂ, Stelian PINTEA, Simona GUȚOIU, Inga Zinicovscaia, Nikita Yushin, Konstantin Vergel and Maria – Loredana SORAN, *18th International Conference – Life Science for Sustainable Development*, 26-28 September 2019, Cluj-Napoca, Romania. (poster)

**25.** Optimization of the berries extracts with antioxidant activity, I Lung, M L Soran, O Opris, A Stegarescu, S Gutoiu, M Stan, R Podea, „*12th International Conference – Processes in Isotopes and Molecules (PIM 2019)*”, 25 – 27 September 2019, Cluj-Napoca, România. (poster)

**26.** Magnetic nanocomposite based on half-metals and semiconductors: structural, microstructural and magnetic properties, I O Pana, S Gutoiu, A Stegarescu, M L Soran, C Leostean, S Pinte, O Opris and M Suci, „*12th International Conference – Processes in Isotopes and Molecules (PIM 2019)*”, 25 – 27 September 2019, Cluj-Napoca, România. (poster)

**27.** Preparation and characterization of magnetic nanocomposites based on CNT/Fe<sub>3</sub>O<sub>4</sub>, with sorption properties, A. Stegarescu, M. L. Soran, I. Lung, O. Opris, S. Guțoiu, S. Porav, D. Lazăr, S. Pinte, C. Leostean,



- O. Pană, „12th International Conference – Processes in Isotopes and Molecules (PIM 2019)”, 25 – 27 September 2019, Cluj-Napoca, România. (poster)
- 28.** MnO<sub>2</sub>/GO – preparation and characterization, M L Soran, O Opriș, I Lung, A. Stegarescu, S Guțoiu, S Porav, D Lazăr, S Pinteă and O Pană, „12th International Conference – Processes in Isotopes and Molecules (PIM 2019)”, 25 – 27 September 2019, Cluj-Napoca, România. (poster)
- 29.** Optimization of the total polyphenols extraction from Hippophae rhamnoides using central composite design, Lung I., Soran M.L., Opriș O., Stegarescu A., Guțoiu S., Ghendov-Moșanu A., *The 4th International Conference “Modern Technologies in the Food Industry” MTFI – 2018*, 18-20 October 2018, Chișinău, Republica Moldova. (poster)
- 30.** Preparation of MnO<sub>2</sub>/carbon nanotubes with sorption properties, Manuela Stan, Ildiko Lung, Adina Stegarescu, Ocsana Opris, Simona Gutoiu, Maria-Loredana Soran, Teofil-Danut Silipas, Cristian Leostean, Ovidiu Pana, Mihaela Diana Lazar, Alin Sebastian Porav, *The Fifth Edition of International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences “IC-ANMBES 2018”*, 23 May – 25 May 2018, Brasov, Romania. (poster)
- 31.** Preparation of MnO<sub>2</sub> nanocatalyst used for biofuel production, Soran M.L., Lung I., Stegarescu A., Leostean C., Opriș O., Lazăr M.D., Copolovici L., Stan M., Pană O., Porav A.S., *11th International Conference – Processes in Isotopes and Molecules (PIM 2017)*, 27 – 29 September 2017, Cluj-Napoca, România.
- 32.** Functionalization of iron/platinum nanoparticles with core-shell structure, A. Stegarescu, M.L. Soran, S. Guțoiu, I. Lung, O. Pană, *11th International Conference – Processes in Isotopes and Molecules (PIM 2017)*, 27 – 29 September 2017, Cluj-Napoca, România.
- 33.** Synthesis and thermal decomposition studies of new tin(IV) complexes containing NCE ligands (E = Se, S) and dithiocarbamates: molecular precursors for tin sulfides, A. Stegarescu and I Barbul, *Conferinta Internationala “Procese Izotopice si Moleculare”*, Cluj-Napoca (Romania), 25-27 Sept. 2013. (poster).
- 34.** Organotin(IV) compounds with intramolecular coordination – an Overview, R. A. Varga, A. Rotar, I. Barbul, C. Silvestru, *Zilele Academice Clujene - Actualități clujene în chimie*, Cluj-Napoca (Romania), 4 Iun. 2010. (prezentare orală).
- 35.** Multinuclear NMR characterization of hypervalent organotin(IV) compounds, A. Stegarescu, R.A. Varga, I. Barbul and C. Silvestru, *11<sup>th</sup> Central and Eastern European NMR Symposium and 11<sup>th</sup> Central and Eastern Bruker Users Meeting*, Cluj-Napoca (Romania), 4-6 October, 2009.
- 36.** New triarylphosphine selenides and their late transition metal complex, A. Silvestru, A. Rotar, A. Covaci and A. Pop, *38<sup>th</sup> International Conference on Coordination Chemistry*, Jerusalem (Israel), 20-25 July, 2008. (poster)
- 37.** New hypervalent organoselenium derivatives. Synthesis, structural characterization and reactivity, A. Pollnitz, A. Rotar, A. Nicolescu, C. Deleanu and A. Silvestru, *XXIII International Conference on Organometallic Chemistry*, Rennes, (France), 13-18 July, 2008. (poster)
- 38.** Hypervalent organotin(IV) derivatives containing [2-(<sup>i</sup>Pr<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>] groups. Synthesis and characterization, A. Rotar, M. Staninska, R. A. Varga, D. Kovala-Demertzi and C. Silvestru, *XXIII International Conference on Organometallic Chemistry*, Rennes, (France), 13-18 July, 2008. (poster)
- 39.** New hypervalent organotin(IV) derivatives. Synthesis and characterization, A. Rotar, R. A. Varga and C. Silvestru, *The 12<sup>th</sup> International Conference on the Coordination and Organometallic Chemistry of Germanium, Tin and Lead*, Galway (Ireland), 9-13 July, 2007. (poster)

40. Supramolecular architectures in hypercoordinated organotin(IV) halides, R. A. Varga, A. Rotar, C. Silvestru, *Supramolecular Chemistry from design to applications SUPCHEM*, Cluj-Napoca, Romania, 12-15 April 2007. (poster)
41. Copper metallacycles based on organophosphorus ligands. A. Silvestru, A. Rotar, A. Pop and S. Farcas, *11<sup>th</sup> International Symposium on Inorganic Ring System*, Oulu, Finland, 30.7-4.8.2006. (poster)
42. New hypervalent organotin(IV) derivatives containing [2-(Et<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>] groups. Synthesis and characterisation. A. Rotar, R. A. Varga and C. Silvestru, *5<sup>th</sup> International Conference of the Chemical Societies of the South-East European Countries*, Ohrid, (Macedonia), Sept. 10-14, 2006. (poster)
43. New hypercoordinated organotin(IV) halides containing the N,C,N-coordinating pincer-type ligand [2,6-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>3</sub>]-. Synthesis and characterisation. A. Rotar, C. Silvestru, U. Zachwieja, K. Jurkschat, *XXII International Conference on Organometallic Chemistry*, Zaragoza, (Spain), 23-28 July, 2006. (poster)
44. New hypervalent compounds containing [2-(Me<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>], [2-(Et<sub>2</sub>NCH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>] and [2-{O(CH<sub>2</sub>)<sub>4</sub>NCH<sub>2</sub>}C<sub>6</sub>H<sub>4</sub>] groups, A. Rotar, C. Silvestru, *The IV<sup>th</sup> International Conference "Isotopic and Molecular Processes"*, Cluj-Napoca (Romania), 22-24 Sept. 2005. (poster)
45. Hypervalent organotin(IV) derivatives containing different bridging units, R. A. Varga, A. Rotar, C. Silvestru, *The IV<sup>th</sup> International Conference "Isotopic and Molecular Processes"*, Cluj-Napoca (Romania), 22-24 Sept. 2005. (poster)
46. 47. Copper(I) and copper(II) complexes - precursors for inclusion compounds with cyclodextrine, A. Silvestru, A. Rotar, C. Sarbu, and S. Farcas, *The IV<sup>th</sup> International Conference "Isotopic and Molecular Processes"*, Cluj-Napoca (Romania), 22-24 Sept. 2005. (poster)
47. New hypervalent organotin(IV) derivatives: synthesis and characterization, A. Rotar, R. A. Varga, C. Silvestru, *The XV<sup>th</sup> FE<sup>2</sup>CHEM Conference on Organometallic Chemistry*, Budapesta (Ungaria), 08-08 Sept. 2005. (poster)
48. New hypervalent organotin(II) and -tin(IV) derivatives containing [2,6-(Me<sub>2</sub>NCH<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>] and organophosphorus ligands, A. Rotar, A. Silvestru and C. Silvestru, *Advanced Spectroscopies on Biomedical and Nanostructured Systems*, Cluj-Napoca (Romania), 19-22 Sept. 2004. (poster)
49. New hypervalent organotin(II) and -tin(IV) derivatives. Synthesis and characterisation, A. Rotar, R. A. Varga and C. Silvestru, *A III-a Conferinta Internationala "Procese Izotopice si Moleculare"*, Cluj-Napoca (Romania), 25-27 Sept. 2003. (poster)
50. New organotin(IV) derivatives containing organophosphorus ligands. Crystal and molecular structure of BuSnCl<sub>x</sub> [(OPPh<sub>2</sub>)(SPPPh<sub>2</sub>)N]<sub>3-x</sub> (x=1,2), A. Rotar, J. E. Drake, A. Silvestru and C. Silvestru, *3<sup>rd</sup> International Conference of Chemical Societies of the South-Eastern European Countries on "Chemistry in the New Millennium – an Endless Frontier"*, Bucharest (Romania), Sept. 2002. (poster)

## VI. Lucrări comunicate la conferințe naționale:

1. Noi derivați staniu(IV)-organici cu liganzi fosfor-organici, A. Rotar and C. Silvestru, la *A XXVIII-a Conferinta Nationala de Chimie*, Calimanesti-Caciulata, 06-08 Oct. 2004 Vâlcea, România. (poster)

**Număr total de citări** (excluzând auto-citările, conform ISI Web of Science) = **263**

<https://www.webofscience.com/wos/author/record/726719>

Data

17.01.2023

Semnatura,