

**Raport 2019****cf Anexei 1****Set I: Criterii din HG 551/6.06.2007 privind atestarea institutelor de cercetare**

	<b>Criteriu</b>	<b>Punctaj</b>	<b>NR.</b>	<b>Punctaj cumulat</b>
<b>A</b>	<b>REZULTATELE ACTIVITĂȚII DE CERCETARE-DEZVOLTARE :</b>			
<b>A1</b>	<b>CRITERII PRIMARE DE PERFORMANCE</b>			
<b>1</b>	Lucrări științifice/tehnice în reviste de specialitate cotate ISI* .	<b>30</b>	<b>56</b>	<b>1680</b>
<b>2</b>	Factor de impact cumulat al lucrărilor cotate ISI.	<b>5</b>	<b>201.75</b>	<b>1008.75</b>
<b>3</b>	Citări în reviste de specialitate cotate ISI.	<b>5</b>	<b>1572</b>	<b>7860</b>
<b>4</b>	Brevete de invenție.	<b>30</b>	<b>3</b>	<b>90</b>
<b>5</b>	Citări în sitemul ISI ale cercetarilor brevetate.	<b>5</b>		
<b>6</b>	Produse, servicii, tehnologii rezultate din activități de cercetare, bazate pe brevete, omologări sau inovații proprii. Studii perspective și tehnologice și servicii rezultate din activitatea de cercetare-dezvoltare, comandate de beneficiar	<b>20</b>	<b>0</b>	<b>0</b>
<b>A2</b>	<b>CRITERII SECUNDARE DE PERFORMANCE</b>			
<b>1</b>	Lucrări științifice/tehnice în reviste de specialitate fără cotajie ISI .	<b>5</b>	<b>5</b>	<b>25</b>
<b>2</b>	Comunicări științifice prezentate la conferințe internaționale.	<b>5</b>	<b>74</b>	<b>370</b>
<b>3</b>	Modele fizice, modele experimentale, modele funcționale, prototipuri, normative, proceduri, metodologii, reglementari și planuri tehnice noi sau perfecționate, realizate în cadrul programelor naționale sau comandate de beneficiar.	<b>5</b>	<b>6</b>	<b>30</b>
<b>B</b>	<b>PRESTIGIUL PROFESIONAL</b>			
<b>1</b>	Membri în colectivele de redacție ale revistelor recunoscute ISI (sau incluse în baze internaționale de date) și în colective editoriale internaționale.	<b>20</b>	<b>9</b>	<b>180</b>
<b>2</b>	Membri în colectivele de redacție ale revistelor recunoscute național (categoria B în clasificarea CNCSIS).	<b>10</b>	<b>0</b>	<b>0</b>
<b>3</b>	Premii internaționale obținute prin proces de selecție.	<b>20</b>	<b>0</b>	<b>0</b>
<b>4</b>	Premii ale Academiei Române.	<b>20</b>	<b>0</b>	<b>0</b>
<b>5</b>	Număr conducători de doctorat, membri ai unității de cercetare.	<b>10</b>	<b>3</b>	<b>30</b>
<b>6</b>	Număr de doctori în știință, membri ai unității de cercetare	<b>10</b>	<b>42</b>	<b>420</b>

**Total I = 11693.75****Total I/cerc.atestati 11693.75 /45 = 259.86****Set II: Criterii suplimentare**

1. Capitole în cărți monografice (coordonate de persoane din alte instituții)(nu se consideră lucrările publicate în Proceedings-uri)
  - a) din țara 20p/capitol
  - b) din străinătate 30p/capitol \_\_\_\_\_ 2 cap x 30 = **60 pct**
2. Participare la elaborarea de lucrări de amprentă: atlase, dicționare, encyclopedii, alte lucrări similare
  - a) din țara 20p/lucrare 0
  - b) din străinătate 30p/lucrare 0
3. Cărți de autor publicate (nu cursuri universitare, culegeri probleme, note de laborator, sau editari proceedings-uri conferințe)
  - a) la edituri din țara 40p/carte 0
  - b) la edituri din străinătate 60p/carte 0

4. Carti coordonate (editate) inclusiv Proceedings-suri
- a) in tara 20p
  - b) in strainatate 30p
5. Un contract extrabugetar obtinut de catre institut
- de la organizatii int. 3puncte/10000
  - de la organizatii nat. 1punct/10000 lei \_\_\_\_\_ 0
6. Bonus (pentru diferentierea lucrarilor la pct. A2.1)
- lucrari in reviste non-ISI din strainatate sau reviste ale Academiei se adauga 3 pct \_\_\_\_\_ 4 x 3pct = **12 pct**

**Total II = 142.14**  
**Total general (I+II) = 11835.89**  
**Total general/cerc.atestati(45) = 263.02**

## 1. Plan 2019

**PROGRAMUL DE CERCETARE Nr. 1**  
“Chimie organică teoretică “ – Program priorităr al Academiei Române  
responsabil - dr.ing. Petru Filip

- 1.1. Modele QSAR-QSPR
- 1.1.1. Dezvoltarea de descriptori moleculari pe grafuri bazate pe descrieri de tip “valence bond”
  - 1.1.2. Noi descriptori pentru proprietăți moleculare și programe de evaluare și utilizare a acestora în calcule QSAR-QSPR
- 1.2. Modelarea proceselor chimice prin metode quantice
- 1.2.1. Modelarea prin tehnici *ab initio* a unor mecanisme de reacție
  - 1.2.2. Modelarea fenomenelor de pe suprafața catalizatorilor prin tehnici *ab initio*

**PROGRAMUL DE CERCETARE Nr. 2**  
Chimia hidrocarburilor și a derivaților lor funcționali  
responsabil - dr.ing. Alexandru Razuș

- 2.1 Sinteze și proprietăți în seria unor hidrocarburi nesaturate, cuprinzând sau nu sisteme azulenice, ca atare sau condensate.
- 2.1.1. Condensari McMurry de compusi carbonilici azulenici
  - 2.1.2. Comportare electrochimică a unor sisteme azulenice în condiții oxidative și de reducere  
[Cooperare cu Universitatea Tehnică din Darmstadt, Germania]
  - 2.1.3. Condenzarea bazelor Schiff cu compusi care au în structura lor grupări metilenice active  
[Cooperare cu Universitatea Tehnică din Darmstadt, Germania]
  - 2.1.4. Sinteza și reacțiile unor alchene substituite cu grupări aril, heteroaril și azulenil  
[Cooperare cu Universitatea Tehnică din Darmstadt, Germania]
  - 2.1.5. Sinteze de saruri de azulenpiriliu
- 2.2. Studiul comportării olefinelor și cicloolefinelor în prezența unor catalizatori de metateză.  
[Cooperare internațională cu: Universitatea Liege, Belgia; Academia Bulgara, Institutul de Polimeri; Universitatea Veszprem, Ungaria]

**PROGRAMUL DE CERCETARE Nr. 3**  
Chimia compușilor heteroatomici  
responsabil - dr.ing. Petride Horia

- 3.1. Chiralitate. Inductie chirală și analiza prin RMN” - Proiect priorităr al Academiei Române
- 3.1.1. Tehnici VCD în determinarea configurației absolute a moleculelor chirale
  - 3.1.2. Studiul reacțiilor N-ilidelor. Mecanisme de reacție, izomerie elicoidală
  - 3.1.3. Compuși heterociclici chirali: sinteză, discriminare enantiomerică, determinarea configurației absolute
- 3.2. Compuși heterociclici mezoionici
- 3.2.1. Sinteza și reacțiile compușilor cu structura mezoionica

**PROGRAMUL DE CERCETARE Nr. 4**  
**Materiale noi**  
**responsabil - dr.ing. Mircea Vuluga**

- 4.1. Obținerea unor compozite organic-anorganic direct din sinteză prin reacții pe suport heterogen  
[Colaborare internațională cu Laboratorul de Chimie și Procedee de Polimerizare LCPP-Lyon, Franța. proiectul CNRS 17023]
- 4.2. Noi compusi cu proprietăți tensioactive, bacteriostatice, de cristale lichide și anticorozive având la bază săruri de (bis)-piridinu substituite cu lanțuri alchilice lungi.

**PROGRAMUL DE CERCETARE Nr. 5**  
**Program interdisciplinar de prevenire a fenomenelor cu risc major la scara națională.**  
**Program Fundamental al Academiei Române**  
**responsabil - dr.ing. Petru Filip**

- 5.1. Cataliză heterogenă selectivă în chimia organică  
5.2. Sinteze organice catalizate de schimbători de ioni  
5.3. Conversia biomasei în compuși organici de bază

## 2. Resurse umane

- Cercetători 45 din care	
- CS gr I	9
- CS gr II	9
- CS gr III	19
- Doctori în științe	42

## 3. Formare tineri cercetători

- Conducatori de doctorat	3
- Doctoranți	4 (3 la SD-UPB)
- Postdoctoranți	-

4. S-a dezvoltat sistemul “Parallel Computing” Dell/HP existent prin achiziționarea unei noi unități multiprocesor Dell (blade rack-abil) cu 20 procesoare și 128 GB RAM în valoare de 48000 Lei. În prezent sistemul are 88 procesoare și 440 GB RAM.

## 5. Rezultatele cercetării

### 5.1. Lista de lucrări publicate în reviste indexate pe Web of Science (WoS).

Nr.	Autori, titlu, revistă	Factor Impact
1	Xu, X.; Jerca, F.A.; Jerca, V.V.; Hoogenboom, R., “Covalent poly(2-isopropenyl-2-oxazoline) hydrogels with ultrahigh mechanical strength and toughness through secondary terpyridine metal-coordination crosslinks”, <i>Advanced Functional Materials</i> , <b>2019</b> , DOI: 10.1002/adfm.201904886.	15.621
2	Sadet, A.; Stavarache, Cristina; Bacalum, M.; Radu, M.; Bodenhausen, G.; Kurzbach, D.; Vasos, P.R., “Hyperpolarized water enhances two-dimensional proton NMR correlations: a new approach for molecular interactions”, <i>J. Am. Chem. Soc.</i> , <b>2019</b> , 141(32), p. 12448-12452, DOI: 10.1021/jacs.9b03651.	14.695
3	Xu, X.; Jerca, F.A.; Van Hecke, K.; Jerca, V.V.; Hoogenboom, R., “High compression strength single network hydrogels with pillar[5]arene junction points”, <i>Materials Horizons</i> , <b>2019</b> , DOI: 10.1039/C9MH01401B.	14.356

4	Xiong, G*; Wang, B.B.; You, L.X; Ren, B.Y.; He, Y.K.; Ding, F.; Dragutan, I.*; Dragutan, V.; Sun, Y.G.* „Hypervalent silicon-based, anionic porous organic polymers with solid microsphere or hollow nanotube morphologies and exceptional capacity for selective adsorption of cationic dyes”, <i>J. Mater. Chem. A</i> , <b>2019</b> , 7(1), pp. 393–404. DOI: 10.1039/c8ta07109h	<b>10.733</b>
5	Van Guyse, J.F.R.; Cools, P.; Egghe, T.; Asadian, M.; Vergaelen, M.; Rigole, P.; Yan, WQ.; Benetti, E.M.; <u>Jerca, V.V.</u> ; Declercq, H.; Coenye, T.; Morent, R.; Hoogenboom, R.; De Geyter, N., “Influence of the aliphatic side chain on the near atmospheric pressure plasma polymerization of 2-alkyl-2-oxazolines for biomedical applications”, <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11(34), p. 31356-31366, DOI: 10.1021/acsami.9b09999.	<b>8.456</b>
6	N. Candu, <u>I. Man</u> , A.Simion, B. Cojocaru, S. M.Coman, C. Bucur, A. Primo, H. Garcia, V. I.Parvulescu, “Nitrogen-doped graphene as metal free basic catalyst for coupling reactions”, <i>Journal of Catalysis</i> , <b>2019</b> , 376,238-247;	<b>7.723</b>
7	Arraez, F.J.; Xu, X.; Van Steenberge, P.H.M.; <u>Jerca, V.V.</u> ; Hoogenboom, R.; D'hooge, D.R, “Macropropagation rate coefficients and branching levels in cationic ring-opening polymerization of 2-ethyl-2-oxazoline through prediction of size exclusion chromatography data”, <i>Macromolecules</i> , <b>2019</b> , 52(11), p. 4067-4078, DOI: 10.1021/acs.macromol.9b00544.	<b>5.997</b>
8	Tudose, M.; Anghel, E.M.; Culita, D.C; Somacescu, S.; Calderon-Moreno, J.; <u>Tecuceanu, V.</u> ; Dumitrascu, <u>F.</u> ; Dracea, O.; Popa, M.; Marutescu, L.; Bleotu, C.; Curutiu, C.; Chifiriuc, M.C. Covalent coupling of tuberculostatic agents and graphene oxide: A promising approach for enhancing and extending their antimicrobial applications” <i>Appl. Surf. Sci.</i> , <b>2019</b> , 471, 553-565. DOI 10.1016/j.apsusc.2018.11.242	<b>5.155</b>
9	<u>Florea, C.A.</u> ; <u>Petride, H.</u> ; “Homolytic Pathway for the RuO4-oxidation of Amines”, <i>Rev.Roum.Chim</i> , <b>2019</b> , 64(5), 461-463, DOI: 10.33224/rrch.2019.64.5.10	0.395
10	M. Duldner, E. Bartha, S. Capitanu, S. Nica, A.E. Coman, R. Tincu, A. Sarbu, P.I. Filip, S. Apostol, S. Garea, “Attempts to Upcycle PET Wastes into Bio-based Long-lasting Insulating Materials”, <i>Revista de Chimie (Bucharest)</i> , <b>2019</b> , 70 (7), 2301-2307	1.605
11	Razus, A.C.; Birzan, L.”Synthesis of azulenic compounds substituted in 1-position with heterocycles” <i>Monatshefte fur Chemie</i> , <b>2019</b> , 150, 139-161, DOI: 10.1007/s00706-018-2294-8.	1.501
12	Razus, A.C.; Birzan, L.; Cristea, M.; Tecuceanu, V.; Draghici, C.; Hanganu, A.; Maganu, M.; Pintilie, L.; Ungureanu E.-M., “New (azulen-1-yldiaz恒基)-heteroaromatic compounds containing 1,2,5-thiadiazol-3-yl moieties” <i>Revista de Chimie</i> , <b>2019</b> , 70(5), 1518-1529.	1.605
13	<u>Florea, C.A.</u> ; <u>Hîrtopeanu, A.</u> ; Stavarache, C.; <u>Petride, H.</u> , “Methanolysis of 1-Cyanoformamidines”, <i>Rev.Roum.Chim.</i> , <b>2019</b> , 64(2), p. 191-197, DOI: 10.33224/rrch.2019.64.2.09	0.395
14	Buica, G.-O.; Ivanov, A.A.; Lazar I.-G.; TATU (ARNOLD), G.-L.; Omocea, C.; <u>Birzan, L.</u> “Colorimetric and voltammetric sensing of mercury ions using 2,2’-(ethane-1,2-diylbis((2-(azulen-2-ylamino)-2-oxoethyl)azanediyl))diacetic acid”, <i>Journal of Electroanalytical Chemistry</i> , <b>2019</b> , 849, 113351 DOI: 10.1016/j.jelechem.2019.113351	3.218
15	<u>Razus, A. C.</u> , <u>Birzan, L.</u> , Cristea, M., Tecuceanu, V., Draghici, C., <u>Hanganu, A.</u> , <u>Maganu, M.</u> , Pintilie, L., Ungureanu, E.M., “New (azulen-1-yldiaz恒基)-heteroaromatic Compounds Containing 1, 2, 5-thiadiazol-3-yl Moieties”, <i>Revista de Chimie</i> , <b>2019</b> , 70 (5), p. 1518-1529	1.605
16	Tanase, C., Cocu, F. G, <u>Draghici, C.</u> , <u>Hanganu, A.</u> , <u>Pintilie, L.</u> , <u>Maganu, M.</u> , Munteanu, C. V. A. , Sova, S., “Secondary Compounds in the Catalytic Hydrogenation of Enone and Allylic Alcohol Prostaglandin Intermediates: Isolation, Characterization, X-Ray Crystallography”, <i>New Journal of Chemistry</i> , <b>2019</b> , 43, p.7582-7599.	3.201
17	Tanase, C., <u>Draghici, C.</u> , <u>Hanganu, A.</u> , <u>Pintilie, L.</u> , <u>Maganu, M.</u> , Volobaeva, A., Sinegubova, E., Zarubaev, V., Neyts J., Jochmans, D., Slita, A., “New HSV-1'- anti-viral 1'-Homocarbocyclic Nucleoside Analogues with an Optically Active Substituted Bicyclo[2.2.1]Heptane fragment as a Glycoside Moiety”, <i>Molecules</i> , <b>2019</b> , 24 (13), p. 2446.	3.098
18	<u>Florea, C.A.</u> ; <u>Hîrtopeanu, A.</u> ; Stavarache, C.; <u>Petride, H.</u> , “RuO4-Mediated Oxidation of Tertiary Amines. Stereoelectronic Effects”, <i>Rev.Roum.Chim.</i> acceptata pentru numărul dedicat memoriei prof. Margareta Avram	0.395
19	Coman, A. G., Paun, A., Popescu, C. C., Hădade, N. D., <u>Hanganu, A.</u> , Chiritoiu, G., Farcasanu, I. C., Matache, M., “A novel adaptive fluorescent probe for cell labelling”, <i>Bioorganic Chemistry</i> , <b>2019</b> , 92, p. 103295, <a href="https://doi.org/10.1016/j.bioorg.2019.103295">https://doi.org/10.1016/j.bioorg.2019.103295</a>	3.926
20	Mocanu, S., Matei, I., Leonties, A., <u>Tecuceanu, V.</u> , <u>Hanganu, A.</u> , Minea, Z., Stancu, A., Popescu, E. I., Ionita, G., “New flexible molecular probes bearing dansyl and TEMPO moieties for host-guest interactions in solution and gels”, <i>New Journal of Chemistry</i> , <b>2019</b> , 43, p. 11233-11240, DOI: 10.1039/C9NJ01554J.	3.201

21	Moroșan, A., Mihaiescu, D. E., Istrati, D., Voicu, G., Radu, M., <u>Hanganu, A.</u> , Stan, R., "Functionalized silica shell magnetic nanoparticles for nanophase peptide synthesis applications", <i>Microporous and Mesoporous Materials</i> , <b>2019</b> , 286, p. 45-56 <a href="https://doi.org/10.1016/j.micromeso.2019.05.018">https://doi.org/10.1016/j.micromeso.2019.05.018</a> .	3.649
22	Barbuceanu, S. F., Olaru, O. T., Socea, L. I., <u>Draghici C.</u> , Saramet, G., Baraitareanu, S., Socea, B., Barbuceanu, F., "S-Alkylated 1,2,4-Triazoles Derivatives Synthesis, spectral analysis and cytotoxicity evaluation", <i>Revista de Chimie</i> , <b>2019</b> , 70(1), p. 13-17.	1.605
23	Apostol, T. V., Barbuceanu, S. F., Olaru, O. T., <u>Draghici, C.</u> , Saramet, G., Socea, B., Enache, C., Socea, L. I., Synthesis, "Characterization and Cytotoxicity Evaluation of New Compounds from Oxazol-5(4H)-ones and Oxazoles Class Containing 4-(4-Bromophenylsulfonyl)phenyl Moiety", <i>Revista de Chimie</i> , <b>2019</b> , 70(4), p. 1099-1107.	1.605
24	Nitulescu, G. M., Matei, L., Aldea, I. A., <u>Draghici</u> , C., Olaru, O. T., Bleotu, C., "Ultrasound-assisted synthesis and anticancer evaluation of new pyrazole derivatives as cell cycle inhibitors", <i>Arabian Journal of Chemistry</i> , <b>2019</b> , 12(6), p. 816-824.	3.298
25	Stavarache, Carmen; Vinotoru, M.; Mason, T., "The Effect of Focused Ultrasound on Magnetic Polyelectrolyte Capsules Loaded with Dye When Suspended in Tissue-Mimicking Gel", <i>Current Drug Delivery</i> , <b>2019</b> , 16(4), p. 355-363, DOI: 10.2174/156720181666190103121313.	1.645
26	<u>Stavarache, Carmen</u> ; Maeda, Y.; Vinotoru, M., "Effects of ultrasounds on neat nitrobenzene", <i>Revista de Chimie</i> , <b>2019</b> , 70(8), p. 3085-3089.	1.605
27	Coman, A.G.; <u>Stavarache, Cristina</u> ; Păun, A.; Codruța, C.P.; Hădade, N.D.; Ioniță, P.; Matache, M., "A novel profluorescent paramagnetic diaza-crown ether: synthesis, characterization and alkaline metal-ion complexation", <i>RSC Adv.</i> , <b>2019</b> , 9, p. 6078-6083, DOI: 10.1039/C8RA09828J.	3.049
28	Sadet, A.; <u>Stavarache, Cristina</u> ; Teleanu, F.; Vasos, P.R., "Water hydrogen uptake in biomolecules detected via nuclear magnetic phosphorescence", <i>Sci. Rep.</i> , <b>2019</b> , 9:17118, DOI:10.1038/s41598-019-53558-8.	4.011
29	Tudose, M.; Culita, D.C.; Voicescu, M.; Musuc, A.M.; Kuncser, A.C.; Bleotu, C.; Popa, M.; Marutescu, L.; Chifiriuc, M.C.; <u>Nicolescu, A.</u> ; <u>Deleanu, C.</u> , "Fluorescent coumarin-modified mesoporous SBA-15 nanocomposite: Physico-chemical characterization and interaction with prokaryotic and eukaryotic cells", <i>Micropor. Mesopor. Mat.</i> , <b>2019</b> , 288, Art. 109583, DOI: 10.1016/j.micromeso.2019.109583.	4.182
30	Grama, A.; Blaga, L.; <u>Nicolescu, A.</u> ; <u>Deleanu, C.</u> ; Militaru, M.; Căinap, S.S.; Pop, I.; Tita, G.; Sîrbe, C.; Fufezan, O.; Vintan, M.A.; Vulturar, R.; Pop, T.L., "Novel Mutation in GALT Gene in Galactosemia Patient with group B Streptococcus Meningitis and acute liver failure", <i>Medicina</i> , <b>2019</b> , 55(4), Art. 91, DOI:10.3390/medicina55040091.	1.467
31	Burlec, A.F.; Pecio, L.; Mircea, C.; Cioanca, O.; Corciova, A.; <u>Nicolescu, A.</u> ; Oleszek, W.; Hancianu, M., "Chemical profile and antioxidant activity of Zinnia elegans Jacq. fractions", <i>Molecules</i> , <b>2019</b> , 24(16), Article Number: 2934. DOI: 10.3390/molecules24162934.	3.060
32	You, L.X; Xie, S.Y.; Xia, C.C.; Wang, S.J.; Xiong, G.; He, Y.K.; <u>Dragutan, I.*</u> ; <u>Dragutan, V.</u> ; Fedin, V.P.; Sun, Y.G.*,, "Unprecedented homochiral 3D lanthanide coordination polymers with triple-stranded helical architecture constructed from a rigid achiral arylidicarboxylate ligand", <i>CrystEngComm</i> , <b>2019</b> , 21(11), pp. 1758-1763. DOI: 10.1039/C8CE01242C	3.382
33	You, L.X; Hao, J.H.; Qi, D.; Xie, S.Y.; Wang, S.J.; Xiong, G.; <u>Dragutan, I.*</u> ; <u>Dragutan, V.</u> ; Ding, F.; Sun, Y.G.*,, "Lanthanide coordination polymers containing 1,3-bis(carboxymethyl) imidazolium as organic ligand: crystal structure and luminescent properties", <i>Inorg. Chim. Acta</i> , <b>2019</b> , 497 (Nov. 01), Art. 119075 (pp. 1-5). DOI: <a href="https://doi.org/10.1016/j.ica.2019.119075">10.1016/j.ica.2019.119075</a>	2.433
34	You, L.X; Guo, Y.; Xie, S.Y.; Wang, S.J.; Xiong, G.; <u>Dragutan, I.*</u> ; <u>Dragutan, V.</u> ; Ding, F.; Sun, Y.G.*,, "Synthesis, structure and luminescence of lanthanide coordination polymers based on the 1,3-Bis(carboxymethyl) imidazolium salt", <i>J. Solid State Chem.</i> <b>2019</b> , 278, Art. 120900 (pp. 1-5). DOI: <a href="https://doi.org/10.1016/j.jssc.2019.120900">10.1016/j.jssc.2019.120900</a>	2.291
35	<u>Dragutan, V.*</u> ; <u>Dragutan, I.</u> ; Demonceau, A.; Delaude, L., "Combining enyne metathesis with long-established organic transformations: A powerful strategy for the sustainable synthesis of bioactive molecules", <i>Beilstein J. Org. Chem.</i> , <b>2019</b> (Invited paper) acceptat	2.600
36	Georgescu, E.; <u>Dumitrascu, F.</u> ; Georgescu, F.; <u>Draghici, C.</u> ; Dumitrescu, D. Microwave-Assisted Synthesis of a Library of Pyrrolo[1,2-c]quinazolines <i>Rev. Chim. (Bucharest)</i> , <b>2019</b> , 70(9), 3094-3099.	1.605
37	<u>Dumitrascu, F.</u> ; Georgescu, F.; Georgescu, E.; Caira, M. R., Chapter Three-Pyrroloquinolines, imidazoquinolines, and pyrroloquinazolines with a bridgehead nitrogen, <i>Adv. . Heterocycl. Chem.</i> , <b>2019</b> , 129, 155-244. DOI: <a href="https://doi.org/10.1016/bs.aihch.2019.01.004">10.1016/bs.aihch.2019.01.004</a> .	4.167
38	<u>Teodorescu, F.</u> ; <u>Slabu, A.I.</u> ; Pavel, O.D.; Zăvoianu, R., "A comparative study on the catalytic activity of ZnAl, NiAl, and CoAl mixed oxides derived from LDH obtained by mechanochemical method in the synthesis of 2-methylpyrazine", <i>Catalysis Communications</i> , <b>2020</b> , 133, DOI: <a href="https://doi.org/10.1016/j.catcom.2019.105829">10.1016/j.catcom.2019.105829</a> .	3.674
39	Gheorghe, D.; Neacsu, A.; Contineanu, I.; Anghel, E.M.; <u>Teodorescu, F.</u> ; Chican, I.E.; Perisanu, S.; Tanasescu, S., "Interplay between composition, structural dynamics and thermodynamic data in amino acid nitrates", <i>Journal of Thermal Analysis and Calorimetry</i> , <b>2019</b> , 138, p. 1233–1242, DOI: <a href="https://doi.org/10.1007/s10973-019-08274-w">10.1007/s10973-019-08274-w</a> .	2.471

40	Duldner, M.; Emeric, B.; Capitanu, S.; Nica, S.; Coman, E.; Tincu, R.; Sarbu, A.; Filip, P.; Apostol, S.; Garea, S., "Attempts to Upcycle PET Wastes into Bio-based Long-lasting Insulating Materials", <i>Revista de Chimie</i> , <b>2019</b> , 70(7), p. 2301-2307.	1.605
41	Rodica Baratoiu, Sorin Mocanu, Iulia Matei, Marioara Bem, Elena Hristea, <u>Victorita Tecuceanu</u> , and Gabriela Ionita, "A Comparison of the Behavior of Monomolecular and Dual Molecular Probes in F127/Cyclodextrin Systems", <i>Macromol. Chem. Phys.</i> , <b>2019</b> , 1800489, DOI: 10.1002/macp.201800489	2.622
42	<u>Madalina Hrubaru, Laszlo Tarko</u> , "A novel method of validation of the QSPRs based on molecular similarity", <i>Rev. Chim. (Bucharest)</i> , <b>2019</b> , 70(3), p. 887-901	1.605
43	<u>Laszlo Tarko</u> , "Novel criteria for elimination of the outliers in QSPR studies, when the 'forward stepwise' procedure is used", <i>J. Math. Chem.</i> , <b>2019</b> , 57 (7), p. 1770-1796	1.882
44	Madalina Hrubaru, Laszlo Tarko, "QSAR studies regarding some not yet synthesized Tacrine derivatives", <i>Rev. Chim. (Bucharest)</i> , <b>2019</b> , 70(8), p. 3077-3084	1.605
45	Xu, X.; Van Guyse, J.F.R.; <u>Jerca, V.V.</u> ; Hoogenboom, R., "Metal ion selective self-assembly of a ligand Functionalized Polymer into [1+1] Macrocyclic and Supramolecular Polymer Structures via Metal-Ligand Coordination", <i>Macromolecular Rapid Communication</i> , <b>2019</b> , 1900305, p. 1-6, DOI: 10.1002/marc.201900305	4.078
46	<u>M.M.Popa, I.C. Man, C.Draghici, S.Sova, M.R.Caira, F.Dumitrascu, D.E.Dumitrescu</u> , "Halogen bonding in 5-iodo-1-arylpypyrazoles investigated in the solid state and predicted by solution $^{13}\text{C}$ -NMR spectroscopy", <i>Crystal Engineering Communication</i> , <b>2019</b> , versiune online	3.382
47	<u>Popa, M.M.; Man, I.C.; Draghici, C.; Shova, S.; Caira, M.C., Dumitrascu, F.; Dumitrescu, D.</u> , Halogen bonding in 5-iodo-1-arylpypyrazoles investigated in the solid state and predicted by solution $^{13}\text{C}$ -NMR spectroscopy, <i>CrystEngComm</i> , <b>2019</b> , Advance Article,	3.38
48	You, L.X.; Zhao, B.B.; Yao, S.X.; Xiong, G.; <u>Dragutan, I.; Dragutan, V.*</u> ; Ding, F.; Sun, Y.G.*,, "Environmentally friendly, clean cross-coupling reactions in water with a new ZIF-supported, reusable nanocatalyst", <i>Dalton Trans.</i> <b>2019</b> acceptat	4.052
49	<u>Dogaru, A.; Liu, J.-L.; Maxim, C.; Marinescu, G.; Clerac, R.; Andruh, M.</u> , "Assembling $\{\text{Cu}^{\text{II}}\text{Ln}^{\text{III}}\text{Os}^{\text{III}}\}$ heterotrimetallic octanuclear complexes and 1D coordination polymers from the same molecular modules", <i>Polyhedron</i> , <b>2019</b> , in press, doi: 10.1016/j.poly.2019.114242	2.284
50	<u>Stecoza, C. E., Drăghici, C., Căproiu, M. T., Gradisteau Pircalabioru, G., Marutescu, L.</u> , "Synthesis and Evaluation of the Antimicrobial and Antibiofilm Activity of Novel Dibenzothiepines", <i>Revista de Chimie</i> , acceptat.	1.605
51	Bordei (Telehoiu), A.T., Nuță, D. C., <u>Căproiu, M. T., Dumitrascu, F.</u> , Zarafu, I., Ioniță, P., Bădiceanu, C. D., Avram S., Chifiriuc, M. C., Bleotu, C., Limban, C., "Design, synthesis and in vitro characterization of novel antimicrobial agents based on 6-chloro-9H-carbazol derivatives and 1,3,4-oxadiazole scaffolds", <i>Molecules</i> , Manuscript ID: molecules-659451.	3.098
<b>Suma factori de impact (inclusiv cele de la 5.1.a)</b>		<b>201.75</b>
<b>Factor de impact mediu</b>		<b>3.603</b>

### 5.1a. Lucrări publicate în reviste indexate pe WoS. in 2018 si aparute cu intirziere - neprinse in raportul pe 2018

Nr.	Autori, titlu, revistă	Factor Impact
52	<u>Floreac, C.A.; Hîrtopeanu, A.; Stavarache, C.; Petridge, H.</u> , "RuO4-mediated oxidation of N-benzylated tertiary amines. Four- and three-membered azacycloalcanes as substrates", <i>Arkivoc</i> , <b>2018</b> , part vii, p. 294-307, DOI: 10.24820/ark.5550190.p010.698.	1.253
53	Gurgu, H., Ștefănescu, E., Nuță, D. C., <u>Căproiu, M. T., Dumitrascu, F.</u> , Chifiruc, M. C., Nițulescu, G. M., Negulescu, F. S., Limban, C., "N-(1-Adamantylcarbamothiolyl)Benzamides: Synthesis, Biological Evaluation and ADME Predictions", <i>FARMACIA</i> , <b>2018</b> , 66(6), p. 963-971, DOI.ORG/10.31925.	1.527
54	Mocanu S.; Ionita G.; Ionescu S.; <u>Tecuceanu V.</u> ; Enache M.; Leonties A.R.; <u>Stavarache Cristina; Matei I.</u> , "New environment-sensitive bis-dansyl molecular probes bearing alkyl diamine linkers: Emissive features and interaction with cyclodextrins", <i>Chem. Phys. Lett.</i> , <b>2018</b> , 713, p. 226-234, DOI: 10.1016/j.cplett.2018.10.044.	1.901
55	Etsè, K.S.; Ngendera, A.; Ntumba, N.T.; Demonceau, A.*; Delaude, L.; <u>Dragutan, I.; Dragutan, V.</u> , "Microwave-Assisted Olefin Metathesis as Pivotal Step in the Synthesis of Bioactive Compounds", <i>Curr. Med. Chem.</i> <b>2017</b> , 24(41), pp. 4538-4578 (41 pp.). DOI: 10.2174/0929867324666170314122820. online Ian. 12, 2018 dar a primit numar de pagina peste un an si nu a mai fost raportat	3.894
56	Marinoiu, A.; Raceanu, M.; Andrilevicius, M.; Tamuleviciene, A.; Tamulevicius,T.; <u>Nica, S.; Bala, D.; Varlam, M.</u> , " Low-cost preparation method of well dispersed gold nanoparticles on reduced graphene oxide and electrocatalytic stability in PEM fuel cell", <i>Arabian Journal of Chemistry</i> , <b>2018</b> , in press, DOI: 10.1016/j.arabjc.2018.12.009.	3.298

### 5.1b. Lucrări publicate in reviste non-ISI

1	Elena Diacu, Adinuta Paun, Veronica Anastasoae, Georgiana-Luiza Arnold-Tatu, <u>Liviu Birzan</u> and Eleonora-Mihaela Ungureanu, “Electroactive properties of a new azulene thioxo-imidazolidin-4-one ligand for modified electrodes”, <i>Journal of Electrochemical Science and Engineering</i> , <b>2020</b> , acceptat Open Access Journal : : ISSN 1847-9286
2	Andrei, M., <u>Draghici, C.</u> , Teodorescu, M., Thermoreversible hydrogels from hydrolytically degradable poly(N-isopropylacrylamide)-poly(ethylene glycol) triblock copolymer and gelatin. <i>UPB Sc. Bull.</i> 81(1) 2019 72.
3	Tanase, C. I., <u>Draghici, C.</u> , <u>Hanganu, A.</u> , Pintilie, L., <u>Maganu, M.</u> , Munteanu, C. V. A, Volobueva, A., Sinegubova, E., Zarubaev, V. V., Neyts, J., Jochmans, D., Slita, A. V., “New Carbocyclic Nucleosides with a Constrained Bicyclo[2.2.1]Heptane Fragment as a Glycoside Moiety”, <i>Proceedings MDPI</i> , <b>2019</b> , 29, 21; doi:10.3390/proceedings2019029021.
4	Pintilie, L., Tănase, C.V., Mihai, E., <u>Maganu, M.</u> , <u>Căproiu, M. T.</u> , “Design, Synthesis, Molecular Docking and Antibacterial Screenig of some Quinolone Compounds”, <i>Proceedings MDPI</i> , <b>2019</b> , 29(1), 2; <a href="https://doi.org/10.3390/proceedings 2019029002">https://doi.org/10.3390/proceedings 2019029002</a> (registering DOI), published: 8 oct. 2039. MDPI.
5	Marinoiu, A.; Morjan, I.; <u>Nica, S.</u> ; Raceanu, M.; Bucura, F.; Enache, S.; Carcadea, E., “Facile synthesis of nitrogen-doped graphene via eco-friendly microwave-assisted process”, <i>Progress of Cryogenics and Isotopes Separation</i> , <b>2019</b> , 22(2), 21-30. ISSN 1582-2575

### 5.1c. Listă de citări în 2019 ale unor articole publicate anterior

Surse : WoS, Scopus, Site edituri, Google Academic

Nr.		Nr. Citari
1	Colectiv Draguțan Valerian	123
2	Colectiv Deleanu Calin, Stavarache Carmen, Hirtopeanu Anca, Stavarache Cristina, Simionescu Bogdana	122
3	Colectiv Razus Alexandru, Birzan Liviu, Cristea Mihaela, Tecuceanu Victorita	80
4	Colectiv RMN Caproiu Teodor, Draghici Constantin, Maganu Maria, Hanganu Anamaria, Hrubaru Madalina	330
6	Colectiv Dumitrascu Florin	40
7	Colectiv Vuluga Mircea, Jercă Valentin Victor, Jercă Florica Adriana, Banu Nicoleta Doriana, Ghibu Emilian	120
8	Colectiv Filip Petru, Doana Irina, Brickner Andreia, Sezonov Ana, Mitan Carmen, Dinoiu Vasile, Tarko Lazlo	180
9	Colectiv Bartha Emeric, <b>Isabela Man</b> , Florina Teodorescu, Slabu Andrei, Robert Tincu	520
10	Colectiv Simona Nica	57
	<b>Total 2019</b>	<b>1572</b>

### 5.1d. Brevete/cereri de brevet

1	Telehoiu (Bordei) A.T., Limban C., Missir A.V., Nuță D.C., Bădiceanu C.D., <u>Dumitrașcu F.</u> , <u>Căproiu M.T.</u> , Chifiriuc M.C., Delcaru C., Zarafu I., Ioniță P., Avram S., Bleotu C., Costea T., Gîrd C., Ancuceanu V.R., Dinu-Pîrvu C.E., “Derivați ai carbazolului, compozitie farmaceutică ce îi conține și utilizarea acestora”, cerere de brevet de invenție nr. A00320/30.05. <b>2019</b> .
2	Vlad Ilinca Margareta, Limban Carmen, Missir Alexandru Vasile, Morusciag Laurențiu, Nuță Diana Camelia, <u>Dumitrașcu Florea</u> , <u>Căproiu Miron Teodor</u> , Chifiriuc Mariana Carmen, Popa Marcela, Mărățescu Luminița Gabriela, Dinu-Pîrvu Cristina Elena, Costea Teodora, Ancuceanu Viorel Robert, Gîrd Cerasela Elena, Anuța Valentina, Velescu Bruno Ștefan, “Derivați ai O-aryl-carbamoiloximino-fluorenului, compozitie farmaceutică ce îi conține și utilizarea acestora”, cerere de brevet A00319/30.05. <b>2019</b> .
3	Vlad Ilinca Margareta, Limban Carmen, Nuță Diana Camelia, Chiriță Cornel, Marineci Dana Cristina, Ștefănescu Emil, <u>Căproiu Miron Teodor</u> , <u>Draghici Constantin</u> , <u>Dumitrașcu Florea</u> , Chifiriuc Mariana Carmen, Mărățescu Luminița, Avram Speranța, Dinu-Pîrvu Cristina Elena, Missir Alexandru Vasile, “O-arylcarbamoiloximino-dibenzo[b,e]oxepine, compozitie farmaceutică ce le conține și utilizarea acestora”, A/00859, 01.11. <b>2018</b> . comunicat după depunerea raportului pe 2018

### 5.2. Carti/capitole de cărți publicate în țară

Lista cărților/capitolelor de carti	

### 5.3. Capitole/capitole de carte publicate în străinătate

Lista Cărților/capitolelor din cărți apărute după depunerea raportului pe 2018	
1	Dragutan, I.; Dragutan, V.*; Demonceau, A., “Organometallic Polymers by Ring-Opening Metathesis

	Polymerization (ROMP) Reactions”, Ch. 5, 11 pp. In: Chemistry Molecular Sciences and Engineering, Elsevier, <b>2018</b> . <a href="https://doi.org/10.1016/B978-0-12-409547-2.14232-5">https://doi.org/10.1016/B978-0-12-409547-2.14232-5</a> Available online 3 December 2018.
2	Marinoiu, A.; Raceanu, M.; Carcdea, E.; Pantazi, A.; Mesterca, R.; Tutunaru, O.; Nica, S.; Bala, D.; Varlam, M.; Enachescu, M., “Noble metal dispersed on reduced graphene oxide and its application in PEM fuel cells”, in “Electrocatalysts for Fuel Cells and Hydrogen Evolution: Theory to Design”, IntechOpen, 2018, London, UK, print ISBN: ISBN 978-1-78984-812-0; online ISBN: 978-1-78984-813-7; doi:10.5772/intechopen.80941.

#### 5.4. Lista studiilor, rapoartelor publicate în 2019 pe internet

#### 5.5. Lucrări prezentate la conferințe (75 internaționale, 1 națională)

Nr.	Autori, titlu, conferinta
<b>Internătională</b>	
1	Birzan, L.; Tecuceanu, V.; Cristea, M.; Razus, A.C., “Study of the 1-azulenediazene containing a five member heterocycle by MS spectroscopy” 9th International Conference of the Chemical Societies of the South-East European Countries, Targoviste, ROMANIA, May 8th-11th, 2019 S3_OP_06 (oral presentation)
2	Anastasoiae, V.; Apostol, M.; Enache, L.-B.; Birzan, L.; Ungureanu, E.-M.; Enachescu, M., “Comparison of electrochemical properties of azulene-azothiodiazoles” 9th International Conference of the Chemical Societies of the South-East European Countries Targoviste, ROMANIA, May 8th-11th, 2019, S4_OP_02 (oral presentation)
3	Diacu, E.; Ungureanu, E.-M.; Ivanov, A.A.; Pistol, S.-V.; Anastasoiae, V.; Omocea, C.; Birzan, L.“Study of electroactive properties of a new tetrazole azulene derivative for modified electrodes” 7 th Regional Symposium on Electrochemistry – South East Europe 8 the Kurt Schwabe Symposium Split, Croatia, May 27-30, 2019 p RSE-SEE7 EAS-P-12
4	Anastasoiae, V.; Enache, L.; Omocea, C.; Birzan, L.; Isopescu, R.; Ungureanu, E.-M. Electrochemical behaviour of new (azulen-1-yldiazetyl)-heteroaromatic compounds containing 1,2,5- thiadiazol-3-yl moieties, 7th Regional Symposium on Electrochemistry – South East Europe 8 the Kurt Schwabe Symposium Split, Croatia, May 27-30, 2019 p. RSE-SEE7 EAS-P-13
5	Anastasoiae, V.; Apostoiu, M.; Tat, G.-L.; Birzan, L.; Ungureanu, E.-M.; Enachescu M., “Carbon Based-Nanomaterials for Analytical Applications”-70th Annual Meeting of the International Society of Electrochemistry in Symposium 14 Molecular Electrochemistry: from Fundamentals to Applications, Durban, South Africa, 4 to 9 August 2019, poster s14-011
6	Ungureanu, E.-M.; Buica, G.-O.; Birzan, L.; Enachescu, M., “Azulene-EDTA Ligands for Mercury Detection using CME”, the 70th Annual Meeting of the International Society of Electrochemistry in Symposium 1 Recent Trends in Electroanalysis and Low-Cost Electrochemical Sensors, Durban, South Africa, 4-9 August 2019, poster (S01-013).
7	Anastasoiae, V.; Apostoiu(Popescu), M.; Enache, L.-B.; Birzan, L.; Ungureanu, E.-M.; Enachescu, M., “Azulene-Azothiadiazoles Ligands For Heavy Metals Detection Using CME”, 21st Romanian International Conference On Chemistry And Chemical Engineering, In Section 3: Physical Chemistry; Electrochemistry & Corrosion; Constanta-Mamaia, Romania, September 4 – 7, 2019, Poster (S3 – 158).
8	Enache, L.-B.; Anastasoiae, V.; Birzan, L.; Ungureanu, E.-M.; Enachescu, M., “Surface and electrochemical techniques for characterization of azulene azotetrazoles and heavy metal ions detection”, 21st Romanian International Conference on Chemistry and Chemical Engineering, September 4 – 7, 2019, Constanta- Mamaia, Romania, poster (S3 – 159) in Section 3: Physical Chemistry; Electrochemistry & Corrosion;
9	Omocea, C.; Ungureanu, E.-M.; Birzan, L.; Anastasoiae, V.; Enache, L.-B.; Enachescu, M. “Detection of lead ions by voltammetry on azulene based CMEs”, 21st Romanian International Conference on Chemistry and Chemical Engineering, in Section 3: Physical Chemistry; Electrochemistry & Corrosion, Constanta- Mamaia, ROMANIA, September 4 – 7, 2019, poster (S3 – 367).
10	Pintilie, L., Stefanii A., Tanase, C., Neagu, G., Maganu, M., Caproiu, M. T., “Molecular docking studies of some new quinolone compounds for developing new anticancer agents”, 2nd Molecules Medicinal Chemistry Symposium., Section: In the Pursuit of Novel Drugs and Molecular Targets (sponsored by the IBUB – Drug and Target), <b>2019</b> , 15-17 Mai, Barcelona, Spania.
11	Tanase, C. I., Cocu F., Draghici, C., Hanganu, A., Pintilie, L., Maganu, M., Munteanu, C.V.A., Shova, S., “Secondary Compounds in the Hydrogenation of Enone and Allylic Alcohol Prostaglandin Intermediates: Isolation, Characterization, X-Ray Crystallography. Hydrogenation with a Reduced Amount of 10%Pd/C Catalyst”, 2nd Molecules Medicinal Chemistry Symposium, <b>2019</b> - Facing Novel Challenges in Drug Discovery” 15-17 Mai, Barcelona, Spania.
12	Tanase, C. I., Drăghici, C., Hanganu, A., Pintilie, L., Maganu, M., Munteanu, C. V. A., Volobueva, A., Sinegubova, E., Zarubaev, V. V., Neyts, J., Jochmans, D., “New carbocyclic nucleoside analogues with an optically active substituted bicyclo[2.2.1]heptane fragment as a glycoside moiety linked to the baseby a methylene group” 11th Joint Meeting on Medicinal Chemistry, <b>2019</b> June 27–30, Prague, Czech Republic, Book of Abstracts, L-7 pg. 43
13	Tanase, C. I., Drăghici, C., Hanganu, A., Pintilie, L., Maganu, M., Munteanu, C. V. A., Volobueva, A., Sinegubova, E., Zarubaev, V. V., Neyts, J., Jochmans, D., Slita, A.V., “New carbocyclic nucleosides with a constrained bicyclo[2.2.1]heptanes”, PIROCHEM Editia –XV, Bucuresti, 30-oct-1nov, 2019, Romania.

14	Pintilie, L., Tanase C., Mihai, E., <u>Maganu, M.</u> , Caproiu, M. T., Design, synthesis, molecular docking and antibacterial screening of some quinolone compounds”, <i>PIROCHEM Editia -XV</i> , Bucuresti, 30-oct-1nov, 2019, Romania.
15	Komartin, R. S., Balanuca, B., <u>Hanganu, A.</u> , Stan, R., “Anti-corrosion coatings based on crosslinking epoxidized <i>Lallemandia</i> oil and lignin”, <i>21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering</i> , 4-7 September 2019, Constanta-Mamaia, Romania.
16	<u>Deleanu C.</u> , “Diagnosing rare metabolic diseases by NMR metabolomics. or, is rare indeed so rare?” <i>21<sup>st</sup> Central European NMR Symposium</i> , Belgrad, Serbia, 4-5 septembrie 2019. <i>XXI CEUM Book of Abstracts</i> , p. 18. ISBN: 978-86-7220-100-0. <i>Conferință Plenară Invitată</i>
16	<u>Deleanu, C.</u> , “From medical research to medical diagnosis by NMR spectroscopy”; Adriatic NMR Conference, Mali-Ston, Croatia, 6-9 iunie 2019. <i>Adriatic NMR 2019 Book of Abstracts</i> , p. 21. ISBN: 978-953-6076-56-7. <i>Conferință Plenară</i>
17	<u>Stavarache Cristina</u> ; Sadet A.; Bacalum M.; Radu M.; Bodenhausen G.; Kurzbach D.; Vasos P.R., “Water Exchanging Hydrogens Positions in Biomolecules detected via Long Lived Coherences and Hyperpolarized 2D Cosy”, <i>60<sup>th</sup> Experimental Nuclear Magnetic Resonance Conference</i> , Pacific Grove, California, USA, April 7-12, 2019. <i>Book of Abstracts</i> , p. 36.
18	<u>Stavarache Cristina</u> ; Ghebaur A.; Garea S.; Iovu H., “Mesalamine-loaded mucoadhesive particles with potential application for the treatment of inflammatory bowel disease”, <i>21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering</i> , Mamaia, Constanta, Romania, September 4-7, 2019.
19	<u>Deleanu, C.</u> , <u>Nicolescu, A.</u> , “NMR diagnosis of rare metabolic diseases”, <i>9th International Conference of the Chemical Societies of the South-East European Countries</i> , Targoviste, Romania, 8-11 mai 2019. <i>Book of Abstracts</i> , S3, OP09. ISBN: 978-606-603-209-4.
20	Marinescu M.; Neculae A.; Cinteza L.-O.; Mecu M.-M.; Zalaru C.-M.; <u>Stavarache Cristina</u> ; Popa M.; Chifiriuc M.C., “Synthesis, Antimicrobial Activity and DFT Studies of New Tetrahydropyrimidines”, <i>21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering</i> , Mamaia, Constanta, Romania, September 4-7, 2019.
21	Ailiesei G.; Macsim A.-M. Dorneanu C.; <u>Stavarache Cristina</u> ; <u>Tîrnăcop L.</u> ; <u>Nicolescu A.</u> ; <u>Deleanu C.</u> , “Reproducibility assessment for NMR metabolomics”, <i>International Conference Achievements and perspectives of modern chemistry</i> , Chisinau, Republic of Moldova, October 9-11, 2019. <i>Book of Abstracts</i> , p. 202. ISBN: 978-9975-62-428-2.
22	Macsim, A.-M.; Georgescu, E.; Georgescu, F.; <u>Dumitrascu, F.</u> ; <u>Draghici, C.</u> ; <u>Nicolescu, A.</u> ; <u>Deleanu, C.</u> , “Multicomponent synthesis and NMR characterization of benzo[f]pyrrolo[1,2-a]quinoline derivatives”, <i>International Conference Achievements and perspectives of modern chemistry</i> , Chisinau, Republica Moldova, 9-11 octombrie 2019. <i>Book of Abstracts</i> , p. 228. ISBN: 978-9975-62-428-2.
23	<u>Nicolescu, A.</u> ; Georgescu, A.; Georgescu, F.; <u>Deleanu, C.</u> , “Enamine derivatives of pyrrolo[1,2-a]quinoxalines generated by 1,3-dipolar cycloadditions”, <i>European congress on magnetic resonance (EUROISMAR)</i> , Berlin, Germania, 25-30 august 2019. <i>EUROISMAR 2019 Book of Abstracts</i> , Contribution ID 625, p. 581.
24	<u>Nicolescu, A.</u> ; Usurelu, N.; Blanita, D.; Boiciuc, C.; Hlistun, V.; <u>Deleanu, C.</u> , “Six years NMR monitoring of a galactosemia case”, <i>European congress on magnetic resonance (EUROISMAR)</i> , Berlin, Germania, 25-30 august 2019. <i>EUROISMAR Book of Abstracts</i> , Contribution ID 626, p. 582.
25	Ailiesei, G.; Dorneanu, C.; Macsim, A.-M.; <u>Stavarache, Cristina</u> ; <u>Tîrnacop, L.</u> ; <u>Nicolescu, A.</u> ; <u>Deleanu, C.</u> , “Interlaboratory quantitation assessment for NMR metabolomics”, <i>9th International Conference of the Chemical Societies of the South-East European Countries</i> , Targoviste, Romania, 8-11 mai 2019. <i>Book of Abstracts</i> , S3, P36. ISBN: 978-606-603-209-4.
26	Georgescu, E.: Georgescu, F.; <u>Dumitrascu, F.</u> ; <u>Nicolescu, A.</u> ; Airinei, A.; Tigoianu, R.; <u>Deleanu, C.</u> , “Synthesis and spectroscopic properties of a new fluorescent strigolactone mimic”, <i>9th International Conference of the Chemical Societies of the South-East European Countries</i> , Targoviste, Romania, 8-11 mai 2019. <i>Book of Abstracts</i> , S3, P25. ISBN: 978-606-603-209-4.
27	Georgescu, E.: Georgescu, F.; Oancea, F.; <u>Draghici, C.</u> ; <u>Stavarache, Carmen</u> ; <u>Nicolescu, A.</u> ; <u>Deleanu, C.</u> , “Microwave-assisted multicomponent synthesis of benzo[f]pyrrolo[1,2-a]quinoline derivatives”, <i>9th International Conference of the Chemical Societies of the South-East European Countries</i> , Targoviste, Romania, 8-11 mai 2019. <i>Book of Abstracts</i> , S3, P25. ISBN: 978-606-603-209-4.
28	<u>Dumitrascu, F.</u> ; <u>Dumitrescu, D. G.</u> ; <u>Draghici, C.</u> ; Caproiu, M. T.; <u>Dumitrescu, D.</u> . Aza-NENITZESCU reaction. New findings. <i>9th International Conference of the Chemical Societies of the South-east European Countries (ICOSECS)</i> , MAY 8th-11th 2019, Targoviste, Romania.
28	<u>Dumitrascu, F.</u> ; <u>Draghici, C.</u> ; Popa, O.G.; <u>Dumitrescu, D. G.</u> ; Limban, C.; Dumitrescu, D., The Nitration of the Non-steroidal Anti-inflammatory Drug: Carprofen, <i>21<sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering Countries</i> , September 4th-7th 2019 (RICCCE 21), Mamaia-Constanta, Romania.
29	Ene, F.; Chiva, A.; Dobre, L.; Al Ioanii, C.; Chirīță, I.; Zălaru, C.; <u>Dumitrascu, F.</u> ; <u>Drăghici, C.</u> ; Ferbințeanu, M.; Tărcomnicu, M.I.; Tatia, R.; Moldovan, L.; Chifiriuc, C.M., Novel substituted Mannich bases with antimicrobial activity, <i>16th International Conference “Students for Students”</i> , April 3-7th, 2019, CLUJ, Romania.

30	Tătulescu, A.; Cojocaru, V.; Pătrașcu, B.; Zălariu, C.; Dumitrascu, F.; Drăghici, C.; Tarcomnicu, I.; Marinescu, M.; Tatia, R.; Moldovan, L., Novel Substituted Pyrazole Hybrids With Anti-Tumor Activity , 21st Romanian International Conference on Chemistry and Chemical Engineering Countries, September 4th-7th 2019 (RICCCE 21), Mamaia-Constanta, Romania.
31	Chiva, A.; Ene, F.; Dobre, L.; Al Ioanii, C.; Chiriță, I.; Buta, C.; Radu, M.; Zălariu, C.; Dumitrascu, F.; Drăghici, C.; Ferbințeanu, M.; Marinescu, M.; Târcomnicu, M.I.; Tatia, R.; Moldovan, L., Novel substituted haloaminopyrazoles with anti-tumor activity, 9th International Conference of the Chemical Societies of the South-east European Countries (ICOSECS), MAY 8th-11th 2019, Targoviste, Romania.
32	Zalaru, C.; Dumitrascu, F.; Draghici, C.; Cintea, L. O.; Marinescu, M.; Tarcomnicu, I.; Cimpoesu, M.; Tatia, R.; Moldovan, L.; Novel substituted heterocycles hybrids with anti-tumor activity, 2 <sup>nd</sup> International Conference on Emerging Technologies in Materials Engineering (EmergeMAT), 06-08 November 2019 –Bucharest, Romania,
33	Tincu, R.; Drăghici, C.; Slabu, A.; Duldner, M.; Coman, A.E.; Bartha, E., „Towards an improved synthesis of 5-hydroxymethylfurfural from fructose”, 9 <sup>th</sup> International Conference of the Chemical Societies of the South-East European Countries (ICOSECS9), Târgoviște, România, 8-11 mai 2019
34	Tincu, R.; Drăghici, C.; Slabu, A.; Duldner, M.; Coman, A.E.; Bartha, E., „5-Hydroxymethylfurfural synthesis in biphasic solvent systems”, 21 <sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering (RICCCE21), Mamaia, România, 4-7 septembrie 2019
35	Slabu, A.; Pavel, O.D.; Teodorescu, F.; „A comparative study on the catalytic activity of mixed oxides derived from LDH in the synthesis of methylpyrazine”, 21 <sup>st</sup> Romanian International Conference on Chemistry and Chemical Engineering (RICCCE21), Mamaia, România, 4-7 septembrie 2019
36	Tincu, R.; Slabu, A.; Maganu, M; Stavarache, C.; Duldner, M.; Bartha, E., „Metal containing ionic liquids as catalyst for synthesis of polyester polyols from pet wastes”, 13 <sup>th</sup> Students' Congress of SCTM, Skopje, Macedonia, 19-21 septembrie 2019
37	Slabu, A.; Pavel, O.D.; Teodorescu, F.; „Catalytic activity of mixed oxides derived from LDH in the synthesis of methylpyrazine: a comparative study”, 13 <sup>th</sup> Students' Congress of SCTM, Skopje, Macedonia, 19-21 septembrie 2019
38	Tincu, R.; Slabu A.; Maganu, M.; Drăghici, C.; Duldner, M.; Coman, A.E.; Bartha, E., „PET wastes recycling using various glycols and metal containing ionic liquids”, International Conference “Achievements and Perspectives of Modern Chemistry”, Chișinău, Republica Moldova, 9-11 octombrie 2019
39	Tincu, R.; Slabu, R.; Maganu, M.; Drăghici, C.; Duldner, M; Coman, A.E.; Bartha, E.; „Attempts to obtain 5-hydroxymethylfurfural”, International Conference “Achievements and Perspectives of Modern Chemistry”, Chișinău, Republica Moldova, 9-11 octombrie 2019
40	Slabu, A.; Pavel, O.D.; Teodorescu, F., „Alkylpyrazines synthesis over Zn/Al mixed oxide obtained by mechanochemical method”, International Conference “Achievements and Perspectives of Modern Chemistry”, Chișinău, Republica Moldova, 9-11 octombrie 2019
41	Slabu, A.; Teodorescu, F.; „Vapour phase synthesis of alkylpyrazines used as flavouring products”, 9 th International Conference of the Chemical Societies of the South-East European Countries (ICOSECS9), Târgoviște, România, 8-11 mai 2019
42	I.C. Traistaru (Man), S.G. Soriga, DFT study of gold clusters on graphene for Suzuki-Miyaura coupling, The 12th International Symposium of the Romanian Catalysis Society, 5-7 Iunie 2019, Bucuresti, Romania
43	I.C Man, S.G. Soriga, DFT study of gold nanoplatelet facets/edges reactivity in Suzuki-Miyaura coupling, 12th European conference on computational and theoretical chemistry, 1-5 septembrie 2019, Perugia, Italia
44	N.Candu, I. Man, A.Simion, H.Garcia. V.Parvulescu, Suzuki-Miyaura reaction catalyzed by gold nanoparticles on graphene, International Conference Catalysis and Organic Synthesis,15-20 septembrie, Moscova,Rusia.
45	Carmen-Irena Mitan, Petru Filip, Calin Deleanu, Robert Moriarty, Constantin Draghici, Miron-Teodor Caproiu, Emerich Bartha, Prediction of the vicinal constant couplings $^3J_{HH}$ and torsional angles $\theta_{HnHn+1}$ from the $^{13}C$ -NMR chemical shifts, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, ANYL 172.
46	Carmen-Irena Mitan, Emerich Bartha, Constantin Draghici, Miron-Teodor Caproiu, Petru Filip, Robert Moriarty, Torus circles on relationships between vicinal constant couplings $^3J_{HH}$ , $^1H$ and $^{13}C$ -chemical shifts and external torsional angles, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, ANYL 92.
47	Carmen-Irena Mitan, Emeric Bartha, Constantin Draghici, Miron-Teodor Caproiu, Petru Filip, Robert Moriarty, Topology and life: golden ratio on pentagon surface, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, CARB 36.
48	Carmen-Irena Mitan, Emeric Bartha, Constantin Draghici, Miron-Teodor Caproiu, Petru Filip, Robert Moriarty, Euler-Huckel approach in prediction of the conformational parameters, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, CARB 37.
49	Carmen-Irena Mitan, Robert M. Moriarty, Petru Filip, Emeric Bartha, Constantin Draghici, Miron Teodor Caproiu, Golden ratio and tetrahedral angles. Relationships between the $^{13}C$ -chemical shift and tetrahedral angles, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, ANYL 93.
50	Carmen I. Mitan, Robert M. Moriarty, Petru Filip, Emeric Bartha, Constantin Draghici, Miron Teodor Caproiu, Geometry and energy. Relationships between the $^{13}C$ -NMR chemical shift and tetrahedral angles, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, Sci-Mix ANYL 291.

51	Carmen-Irena Mitan, Emeric Bartha, Petru Filip, Constatin Draghici, Miron Teodor Caproiu, Robert Moriarty, Relationships between vicinal constant couplings $^3J_{HH}$ , $^1H$ and $^{13}C$ -chemical shifts and torsional angles, 257 <sup>th</sup> ACS National Meeting in Orlando, Florida, March 31- April 4, 2019, ANYL 392.
52	Marinoiu, A.; Dogaru, A.; Stanica, E.; Varlam, M.; Nica, S., "Preparation of azulene-decorated reduced graphene oxide hybrid materials", 9th International Conference of the Chemical Societies of the South-East European Countries (ICOSECS9), Targoviste, Romania, 8 – 11.05.2019, book of abstracts S3_P_30, ISBN 978-606-603-209-4.
53	Stoica , R. D.; Jinga, L.-I.; Stoica, R.; Bala, D.; Nica, S., "Antitumoral activity of novel redox active azulene-containing chalcones", 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), Constanta-Mamaia, Romania, 4 – 7.09.2019, <a href="http://riccce21.chimie.upb.ro/doc/program.pdf">http://riccce21.chimie.upb.ro/doc/program.pdf</a> , S1-358.
54	Marinoiu, A.; Dogaru, A.; Carcdea, E.; Enache, S., Nica, S. "Facile synthesis of covalent functionalized reduced graphene oxide with azulenes for ORR reaction", 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), Constanta-Mamaia, Romania, 4–7.09.2019, <a href="http://riccce21.chimie.upb.ro/doc/program">http://riccce21.chimie.upb.ro/doc/program</a> , S6-249.
55	Dogaru, A.; Marinescu, G.; Maxim, C.; Shova, S.; Clerac, R.; Andruh, M.; "3d-5d-4f heterometallic octanuclear complexes and 1D coordination polymers assembled from the same lego pieces ", 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), Constanta-Mamaia, Romania, 4–7.09.2019, <a href="http://riccce21.chimie.upb.ro/doc/program.pdf">http://riccce21.chimie.upb.ro/doc/program.pdf</a> , S6-24.
56	Anăstasoae, Veronica; Enache, Laura; Cristea, Mihaela; Isopescu, Raluca; Stanciu, Gabriela; Ungureanu, Eleonora-Mihaela "Electrochemical properties of substituted thioxothiazolidin-azulene" RSE-SEE 7, Split, Croatia, May 27-30, 2019. Oral presentation
57	Jerca, F.A.; Jicerca, V.V.; Vuluga, D.M.; Hoogenboom, R., "Poly(2-isopropenyl-2-oxazoline) as versatile platform for multi-functional materials", 15th International Symposium "Priorities of Chemistry for a Sustainable Development" PRIOCHEM, Bucuresti, Romania, 30 Octombrie-1 Noiembrie 2019. Conferinta invitata
58	Mitran, R.-A.; Lincu, D.; Jicerca, V.V.; Berger, D.; Matei, C., "High temperature nanocomposite phase change materials containing mesoporous silica matrices", 15th International Symposium "Priorities of Chemistry for a Sustainable Development" PRIOCHEM, Bucuresti, Romania, 30 Octombrie-1 Noiembrie 2019. Prezentare orala
59	Ghibu, E.; Banu, N.D.; Iordache, T.V.; Vuluga, D.M.; Stan, R.; Jicerca, V.V.; Jicerca, F.A., "Poly(2-isopropenyl-2-oxazoline) hydrogels as drug delivery systems", 21st Romanian International Conference on Chemistry and Chemical Engineering (RICCCE 21), Constanta, Romania, 4-7 Septembrie 2019. Prezentare orala
60	Arraez, F.J.; Van Steenberge, P.H.M.; Xu, X.; Jicerca, V.V.; Hoogenboom, R.; D'hooge, D.R., "Model-based study of 2-oxazolines CROP with special attention to side reactions", 8th PhD-Workshop on Polymer Reaction Engineering, Hamburg, Germania, 14-16 Iunie 2019. Prezentare orala
61	Jicerca, V.V.; Jicerca, F.A.; Hoogenboom, R., "Design of multi-stimuli responsive polymers using poly(2-isopropenyl-2-oxazoline) platform" European Polymer Congress, Heraklion, Grecia, 09-14 Iunie 2019. Prezentare orala
62	Van Steenberge, P.H.M.; Arraez, F.J.; Xu, X.; Jicerca, V.V.; Hoogenboom, R.; D'hooge, D.R., "Designing functional poly (2-oxazoline) materials based on chemical technology tools", 13th International Workshop on Polymer Reaction Engineering (PRE2019), Hamburg, Germania, 11-14 Iunie 2019. Prezentare orala
63	Arraez, F.J.; Xu, X.; Van Steenberge, P.H.M.; Jicerca, V.V.; Hoogenboom, R.; D'hooge, D.R., "How side reactions can influence poly(2-oxazoline) synthesis for polymer therapeutics and hydrogels", Belgium Polymer Group Annual Meeting, Houffalize, Belgia, 27-28 Mai 2019. Prezentare orala
64	Jicerca, V.V.; Jicerca, F.A.; Spiridon, C.M.; Banu, N.D.; Ghibu, E.; Vuluga, D.M., "Non-linear optical applications or drug controlled release from poly-2-oxazoline matrix", Sixth International Workshop on Advanced Nano- and Biomaterials and Their Device Applications, Cluj, Romania, 12-16 Mai 2019. Conferinta invitata
65	Jicerca, V.V.; Jicerca, F.A.; Hoogenboom, R., "Poly(2-isopropenyl 2-oxazoline) hydrogels: promising materials in the biomedical field", Frontiers in Polymer Science, Budapest, Ungaria, 5-8 Mai 2019. Prezentare orala
66	Xu, X.; Jicerca, V.V.; Hoogenboom, R., "Green light photoswitchable poly(2-isopropenyl-2-oxazoline) supramolecular hydrogels", 257th ACS National Meeting & Exposition, Orlando, Florida, SUA, 31 Martie- 4 Aprilie 2019. Prezentare orala
67	Merckx, R.; Jicerca, V.V.; Swift, T.; Thienpont, H.; Hoogenboom, R., "The development of dye-labeled poly(2-ethyl-2-oxazoline)s architectures for light harvesting applications", Chemical Research in Flanders, Blankenberge, Belgia, 14-16 Octombrie, 2019. Poster
68	Merckx, R.; Jicerca, V.V.; Swift, T.; Thienpont, H.; Hoogenboom, R., "Forster resonance energy transfer: Importance of positioning fluorophores upon a polymeric scaffold in terms of FRET efficiency", Chemical Research in Flanders, Blankenberge, Belgia, 14-16 Octombrie, 2019. Poster
69	Merckx, R.; Jicerca, V.V.; Swift, T.; Thienpont, H.; Hoogenboom, R., "The development of dye-labeled Poly(2-ethyl-2-oxazoline)s architectures for light harvesting applications", International Symposium on Dyes & Pigments, Modern Colorants; The Synthesis and Applications of $\pi$ -Systems, Sevilia, Spania, 8-11 Septembrie 2019. Poster
70	Jicerca, F.A.; Jicerca, V.V.; Hoogenboom, R., "In vitro study of side-chain hydrolysis in thermoresponsive (co)polymethacrylamides with ester pendent groups", European Polymer Congress, Heraklion, Grecia, 09-14 Iunie 2019. Poster

71	Merckx, R.; <u>Jerca, V.V.</u> ; Swift, T.; Hoogenboom, R., “The development of dye-labeled poly(2-ethyl-2-oxazoline)s architectures for light harvesting applications”, Belgium Polymer Group Annual Meeting, Houffalize, Belgia, 27-28 Mai 2019. Poster
72	<u>Jerca, F.A.</u> ; <u>Jerca, V.V.</u> ; Hoogenboom, R., ”In vitro assessment of the chemical stability of poly(2-isopropenyl 2-oxazoline)”, Frontiers in Polymer Science, Budapest, Ungaria, 5-8 Mai 2019. Poster
73	Xu, X.; <u>Jerca, V.V.</u> ; Hoogenboom, R., “Well-defined star-shaped poly(2-oxazolines)” 257th ACS National Meeting & Exposition, Orlando, Florida, SUA, 31 Martie- 4 Aprilie 2019. Poster
74	Ghibu, E.; Banu, N.D.; Iordache, T.V.; <u>Vuluga, D.M.</u> ; Stan, R.; <u>Jerca, V.V.</u> ; <u>Jerca, F.A.</u> , “Hydrogels materials based on poly(2-isopropenyl-2-oxazoline) for controlled drug release”, Congresul International al Universitatii “APOLLONIA”, Editia a XXIX-a, Iasi, Romania, 28 Februarie-3 Martie 2019. Poster
<b>Nationale</b>	
1	Marinoiu, A.; <u>Dogaru, A.</u> ; Carcdea, E.; <u>Nica, S.</u> , “Covalent functionalization of reduced graphene oxide with azulenes”, Zilele Universității „Alexandru Ioan Cuza” din Iași, Conferința FACULTĂȚII DE CHIMIE-IasiChem 2019, Iasi, Romania, 31.10. – 01.11. 2019, <a href="http://www.chem.uaic.ro/files/File/2019-2020/zu-2019/iasichem-2019-program.pdf">http://www.chem.uaic.ro/files/File/2019-2020/zu-2019/iasichem-2019-program.pdf</a>

## 6. Lista manifestărilor științifice organizate în 2019 de institut (denumire, participare, perioada, locul de desfășurare)

1	Workshop stiintific romano-belgian “Synthèse et applications catalytiques de complexes métalliques porteurs de ligands dérivés de la caféine”, organizat la CCO in perioada 24 aug.-6 sept. 2019. Participanti: Prof. Lionel Delaude (Belgia), Prof. Anna Maj (Polonia), <u>Dragutan Valerian</u> , <u>Dragutan Ileana</u> , <u>Hrubaru Madalina</u> , <u>Cristea Mihaela</u> (Romania).
2	Conferinta „New Applications of Metal-Organic Frameworks (MOFs) in Catalytic Hydrogenation Reactions”, organizata la CCO pe 27.08.2019. Conferentiar: Prof. Dr. Anna MAJ, Faculty of Chemical Technology and Engineering, UTP University of Science and Technology, Bydgoszcz, Poland. Participanti: Prof. Lionel Delaude (Belgia), Prof. Anna Maj (Polonia), <u>Vuluga Mircea</u> , <u>Dragutan Valerian</u> , <u>Dragutan Ileana</u> , <u>Hrubaru Madalina</u> , <u>Birzan Liviu</u> , <u>Cristea Mihaela</u> , <u>Hirtopeanu Anca</u> , <u>Mitan Carmen</u> , <u>Man Isabela</u> , <u>Draghici Constantin</u> , <u>Florea Cristina</u> , <u>Teodorescu Florina</u> si colectivul, <u>Magana Maria</u> , etc. (Romania).

## 7. Contracte de cercetare câștigate în baza expertizei acumulate și aflate în derulare în 2019

Nr.	Coordonator/resp. CCO	Proiect	buget CCO 2019 Lei
1	Deleanu Calin	Contract Nr. 4 / 2018, “Mimarea mecanismelor viului prin abordări ale chimiei supramoleculare, în cinci dimensiuni”, 5DnanoP, PN-III-P4-ID-PCCF-2016-0050, Coordonator ICMPP.	101111
2	Teodorescu Florina	Contract nr. 60/2017, “Arome alimentare naturale specifice, pe baza de tehnologie durabila de valorificare a pirazinelor”, FLAVO PYRA TECH, cod PN-III-P3-3.5-EUK-2016-0040, CCO partener	120000
3	Isabela C. Traistaru (Man)	Contract nr. 89/2018, “Studiu DFT și evaluare catalitică a nanoparticolelor metalice pe substrat grafenic modificat pentru reducerea electrochimică a oxigenului și reacția de cuplare C-C”, GraphDoSuCat, cod PN-III-P1-1.1-TE-2016-2191 , Centrul de Chimie Organica	250303
4	Jerca Florica Adriana	Nr.70PCCDI/2018 ”Contingenta Hazardurilor CBRN si Imbunatatirea Mijloacelor de Securitate Nationala”, SECURE-NET, PN-III-P1-1.2-PCCDI-2017-0395, partener 4, responsabil partener Adriana Jerca	193725
5	Jerca Florica Adriana	Nr. 224/30/10/2019 Proiect de mobilitate PN-III-P1-1.1-MC-2019-1272, Jerca Florica Adriana	18150
6	Jerca Valentin Victor	Nr. 225/30/10/2019, Proiect de mobilitate PN-III-P1-1.1-MC-2019-1257, Jerca Valentin Victor	18150
Total 2019			701439

Aceste contracte au generat 6 documentatii in cadrul PNCDI-III in anul 2019.

## 8. Lista de proiecte noi depuse

	Tip Progr .	Cod apel	Titlu proiect	Director/respon sabil proiect	Coordonator/ Parteneri	Buget Total/CCO Lei/€
1	PED	PN-III-P2-2.1-PED-2019-4408	Synthesis of new azulene ligands and their testing for modified electrodes in view of metal ion detection	Liviu BÎRZAN	CCO“C.D. Nenițescu” UPB	600000 / 380000
2	PED	PN-III-P2-2.1-PED-2019-2488	Dezvoltarea si evaluarea preclinica a unui nou inhibitor dual al AND Girazei si al Topoizomerazei IV. (DUALINHIBITOR)	Miron Teodor CAPROIU	I.C.C.F. BUCURESTI CCO“C.D.Nenițescu” UniBuc	600000 / 150000
3	PED	PN-III-P2-2.1-PED-2019-2488	Sintiza si caracterizarea biologica a unor noi derivati de bis-tetrahidroacridine (bis-tacrine) cu posibila actiune in boala Alzheimer. (THAAD)	Madalina HRUBARU	CCO“C.D. Nenițescu” I. N.C. D. pt Știinte Biologice	600000 / 450000
4	PED	PN-III-P2-2.1-PED-2019-0940	O strategie mai scurta pentru sinteza aminelor norbornanice optic active, intermediari cheie pentru obtinerea de nucleozide carbociclice cu activitate potentiala antivirala/anticanceroasa (NORBORNAM)	Anamaria HANGANU	I.C.C.F. București CCO"C.D.Nenițescu" ICMM"PETRU PONI"	600000 / 100000
5	PED	PN-III-P2-2.1-PED-2019-3891	Procedeu de extractie asistat ultrasonic si tehnici analitice adecate pentru valorificarea avansata a speciilor de canepa cultivate in Romania. (SONO-HEMP)	Carmen STAVARACHE	CCO"C.D.Nenițescu" S.C. Brado Agri s.r.l.	600000 / 450000
6	PED	PN-III-P2-2.1-PED-2019-3421	Extinderea portofoliului de alimente personalizate pentru fenilcetonurie (PKUFOOD)	Deleanu CALIN	IBA	600000 / 250000
7	PED	PN-III-P2-2.1-PED-2019-4201	Tehnologie inovativa de obtinere a materialelor nanocompozite pe baza de elastomeri termoplastici modificati prin metateza. (NANCOMET)	Dragutan VALERIAN	CCO"C.D.Nenițescu" ICECHIM București UPB - ECOMET	600000 / 200000
8	PED	PN-III-P2-2.1-PED-2019-3513	Noi polimeri termorigizi cu structura de cristale lichide termotrophe, din deseuri de PET si materiale regenerabile, pentru acoperiri avansate. (TROPCORE)	Emeric BARTHA	CCO"C.D.Nenițescu" ICECHIM	600000/ 305000
9	PED	PN-III-P2-2.1-PED-2019-4561	Metoda biocatalitica in mediul de solvent eutectic pentru producerea derivatilor naturali ai mentolului ca arome de interes pentru industria alimentara. (BIOMENTH)	Florina TEODORESCU	UniBuc CCO"C.D.Nenițescu" Natural Ingredients SRL	600000/ 200000
10	PED	PN-III-P2-2.1-PED-2019-4170	Unghiuri diedre $\theta_{HnHn+1} [deg]$ calculate din constante de Rezonanta Magnetica Nucleara cu modelul mathematic 3-manifold. (PNCDI III, SP 2.1)	Carmen-Irena MITAN	I.C.C.F. București	446379
11	PED	PN-III-P2-2.1-PED-2019-2079	Asocierea procesului de adsorbție cuantică cu sinteza de noi rețele metal-organice (MOF) pentru a dezvolta o tehnologie nouă de separare izotopică (HYSO-MOF)	Simona NICĂ	UniBuc CCO“C.D. Nenițescu” ICSI, Rm. Valcea	600000 / 150000
12	PED	PN-III-P2-2.1-PED-2019-2079	Materiale organice de tip "AZZURE" pe baza de azo si bisazo-functionalitati pentru dispozitive optoelectronice (AZZURE)	Simona NICĂ	UPB CCO“C.D. Nenițescu”	600000 / 250000

13	PED	PN-III-P2-2.1-PED-2019-0745	Noi conjugate pe baza de polioxazolina pentru terapia imuno-chimica a cancerului (POXADOX)	Valentin Victor JERCA	CCO“C.D. Nenițescu” INCDMM Cantacuzino	600000 / 300000
14	PED	PN-III-P2-2.1-PED-2019-0874	Nanovehicule pe baza de poli (2-oxazoline) ca sisteme inteligente cu eliberare multipla de medicamente (NANOPAOx)	Florica Adriana JERCA	CCO“C.D. Nenițescu” Univ.Apollonia din Iasi	600000 / 301000
15	PED	PN-III-P2-2.1-PED-2019-3172	Tratament modulat al canepei pentru reducerea variației calității fibrelor - tehnologie de laborator (SteadyHemp)	Dumitru Mircea VULUGA	CCO“C.D. Nenițescu” UniBuc S.C. Brado Agri s.r.l.	600000 / 300000
16	TE	PN-III-P1-1.1-TE-2019-0582	Senzori "naked-eye" de recunoastere anionică - sinteză și investigații spectroscopice (COHYAZ)	Anamaria Hanganu	CCO“C.D. Nenițescu”	450000
17	TE	PN-III-P1-1.1-TE2019-1947	Designul nanocatalizatorilor de dimensionalitate redusa folosind calcule DFT pentru degajarea si reducerea electrochimica a oxigenului	Isabela C. TRAISTARU (MAN)	CCO“C.D. Nenițescu”	450000
18	TE	PN-III-P1-1.1-TE-2019-0538	Materiale cu raspuns in infrarosu apropiat in eliberarea de medicamente pentru implanturi oculare	Florica Adriana JERCA	CCO“C.D. Nenițescu”	450000
19	TE	PN-III-P1-1.1-TE-2019-1696	Dezvoltarea de micelle fotosensibile pe baza de poli(2-oxazoline) ca platforma teranostica pentru imbunatatirea eliberarii de medicament in terapia cancerului	Valentin Victor JERCA	CCO“C.D. Nenițescu”	450000
20	PD	PN-III-P1-1.1-PD-2019-0294	Radicali organici conjugati: ansambluri organice si interactii magnetice de schimb in complexi heterospin (TEMPAZUL)	Georgeta-Andreea DOGARU	CCO“C.D. Nenițescu”	250000
21	PD	PN-III-P1-1.1-PD-2019-1088	Îmbunătățirea cuantificării metaboliștilor prin spectroscopie RMN (MARQUANT)	Alina NICOLESCU	CCO“C.D. Nenițescu”	250000
22	PTE	PN-III-P2-2.1-PTE-2019-0385	Compatibilizarea ambalajelor din sticla cu uleiuri esențiale din soiuri autohtone de Lavandula in vederea conservării principiilor biologic active	Florina TEODORESCU	Nat. Ingredients SRL CCO“C.D. Nenițescu” UPB	427500/ 95000
23	PTE	PN-III-P2-2.1-PTE-2019-0355	Tehnologie ecologica de obtinere a unor poliester-poliooli pentru spume poliuretanice stropite din deseurile de PET si materii prime regenerabile	Petru FILIP	ICPAO CCO“C.D. Nenițescu” ICECHIM	1485400/ 300000
24	M-ERA-NET	PaOINT-NEO	Poly(2-oxazoline)-based INTerferon conjugates, alternative strategy for myeloproliferative NEOplasms treatment	Valentin Victor JERCA	INCDMM Cantacuzino CCO“C.D. Nenițescu” Institute Gustave Roussy “Hématopoïèse normale et pathologique”	500,000 €/ 100,000 €
25	AR – CNR Italia	AR, nr. 2790 din 27.06.2019	Development of teranostic carbonic anhydrase inhibitors for the diagnosis and treatment of hypoxic tumors	Simona NICÀ	Istituto di Biostrutture e Bioimmagini CNR Napoli CCO“C.D. Nenițescu”	4000 €

#### 9. Membrii în colectivele de redacție ale unor reviste indexate WoS sau colective editoriale internationale:

1. Petru Filip - Editor Sef - Revista de chimie
2. Căproiu Teodor - Membru colegiu de redacție - Revista de Chimie
3. Vuluga Mircea - Membru colegiu de redacție - Materiale Plastice Valerian Drăguțan:
4. Editorial Board of International Journal of Organic Chemistry (SCIRP, USA; since 2011)
5. Editorial Board of Open Journal of Inorganic Chemistry (SCIRP, USA; since 2011)
6. Editorial Board of Journal of Chemical Science and Technology (Hong Kong, since 2012)
7. Editorial Board of International Journal of Chemistry and Material Science (USA, since 2012)
8. Editorial Board of Advances in Chemical Science (China, since 2012)
9. Editorial Board of Studies in Chemical Process and Technology (ASSE, USA, since 2012)

## 10. Cooperări internaționale

1	Dragutan Valerian Dragutan Ileana	Prof. Lionel Delaude, Univ. Liège, Belgia. Perioada: 2019-2021 “Synthèse et applications catalytiques de complexes métalliques porteurs de ligands dérivés de la caféine”
2	Dragutan Valerian Dragutan Ileana	Prof. Lionel Delaude, Univ. Liège, Belgia. Proiect depus la Academia Romana pentru anul 2020. “Applications of Ruthenium Alkylidene Catalysts in Olefin Metathesis Reactions”
3	Mircea Vuluga	École normale supérieure de Lyon, Laboratoire de Chimie, Dr Chantal ANDRAUD, director si Dr Patrice BALDECK, pentru microscopie confocala, microscopie SHG
4	Mircea Vuluga	University of Angers, Institute of Sciences and Molecular Technologies of Angers, Prof Bouchta SAHRAOUI, pentru stocare optica de date (gratings, imaging, holography)
5	Floreia Dumitrașcu	Department of Chemistry, University of Cape Town, Rondebosch 7701, South Africa, Prof. Mino Caira
6	Victor Jerca	Univ Ghent, Dept Organic & Macromolar Chemistry, Supramolecular Chemistry Group, Prof. Richard Hoogenboom
7	Calin Deleanu	Institutul Mamei și Copilului Chișinău, R. Moldova; Bruker Biospin, Rheinstetten, Germania; Institutul de Chimie Macromoleculară “Petru Poni”, Iași – Screening neonatal prin spectroscopie RMN pentru determinarea incidenței bolilor metabolice rare în Republica Moldova. Contract de colaborare nr. 5 / 7.12.2018 (valabil până la 5.12.2021).
8	Calin Deleanu	Institutul Norvegian de Sănătate Publică – Determinarea biomarkerilor asociați expunerii persoanelor la compuși polifluoroalichilici (PFA). Acord de colaborare nr. reg. 297 / 11.09.2019 (valabil până la 31.12.2021).
9	Teodorescu Florina	Instituto Politecnico de Broganca, Portugal, tematica : Pirazine - compusi heterociclici cu azot
10	Isabela Man (Traistaru)	Jan Rossmeisl; Universitatea din Copenhaga, Danemarca; DFT,catalizatori (oxizi metalici), oxidarea apei – articol submis impreuna (S. Divanis, T. Kultusoy, I.M.I. Boye, I.Man, J.Rossmeisl, Oxygen Evolution Reaction: A perspective on a decade of atomic scale simulations, Chemical Science)
11	Isabela Man (Traistaru)	Ionut Tranca; Universitatea din Eindhoven,Olanda ;metode DFT, catalizatori, oxidarea apei (oxizi metalici), reducerea oxigenului(grafena dopata cu azot) – articol submis impreuna (I.C.Man, S.Soriga, I.Tranca, First principle studies of oxygen reduction reaction on N doped graphene: impact of N concentration, position and co-adsorbate effect, Applied Surface Science)
12	Simona Nica	Dr. Andrew J. Hall - Senior lecturer/ Director of Innovation Interim Head: Chemistry & Drug Delivery Group Universities of Greenwich and Kent, UK – sinteza si studii spectroscopice ale unor sisteme .
13	Simona Nica	Dr. Vincenzo Alterio - Denomination Istituto di Biostrutture e Bioimmagini CNR, Napoli, Development of teranostic carbonic anhydrase inhibitors for the diagnosis and treatment of hypoxic tumors

## 11. Premii obținute (4)

1. Calin Deleanu: Premiul Societății de Chimie din Romania si Medalia “Petru Poni”
2. Emeric Bartha: Premiul Societății de Chimie din Romania si Medalia „C. D. Nenițescu”
3. Nicoleta Doriana Banu: Diploma de Onoare a Societatii de Chimie din Romania
4. Simona Nica : Diploma de Onoare a Societatii de Chimie din Romania

Director,

Dr.ing. Dumitru Mircea VULUGA

**TABEL\***  
**cu rezultatele Centrului de Chimie Organică „Costin D. Nenițescu” al Academiei Romane pentru anul 2019**

Nr. Crt.	Institutul/Centrul	Resurse umane					Articole publicate			Cărți/capitole			Premii		Citări ale lucrărilor anterioare în 2019	Conferințe organizate/conferințe susținute	Rapoarte de interes public	Brevete de invenții
		Nr cercet.	Cond. doct.	Dr.	Drd.	Post-Doc.	Reviste ISI străinătate	Reviste ISI România	Reviste România B+	în străinătate	EAR	în țară	în străinătate	în AR				
	Centrul de Chimie Organică „Costin D. Nenițescu”	45	3	42	4	0	43	13	0	2	0	0	0	0	1572	2 / 75	6	3

Director,

Dr.ing. Dumitru Mircea VULUGA