

## **CURRICULUM VITAE**

### **INFORMAȚII PERSONALE**

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### **EXPERIENȚA PROFESIONALĂ**

#### *ACTIVITATE DE EVALUARE ȘI EXPERTIZĂ*

#### DOMENII DE COMPETENȚĂ

#### ACTIVITATEA ȘTIINȚIFICĂ (vezi ANEXE)

#### EXPERIENȚĂ DE LUCRU ÎN CERCETARE ȘI INSTRUIRE

## **BIRSA MIHAIL LUCIAN**

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### **Membru in comisii de indrumare si evaluare doctorat**

### **Chimie**

#### **CĂRȚI / ARTICOLE PUBLICATE:**

- **Cărți**, cursuri universitare și manuale de lucrări practice: 21
  - **articole științifice** publicate în reviste de specialitate: 58, din care: **23** cu **ISI** in reviste din **străinătate**, **6** cu **ISI** in reviste din **țară**,
- Citări** lucrări indexate/recenzate în baze de date internaționale: **150**;  
**Indice Hirsh = 7**

**DIRECTOR / RESPONSABIL GRANTURI DE CERCETARE / DEZVOLTARE:** cu finanțare internă: 3; cu finanțare externă: 1

**COLABORATOR ÎN GRANTURI DE CERCETARE:** cu finanțare internă: 9; cu finanțare externă: 1.

**2006** – , conferențiar universitar, prin concurs la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie;

**2001 – 2006: lector universitar**, prin concurs, la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie;

**1998 – 2001: asistent universitar**, prin concurs, la Universitatea „Alexandru Ioan Cuza” din Iași, Facultatea de Chimie;

**2000 – 2002**, bursă de cercetare **postdoctorat** la Universitatea Bar-Ilan Israel

EDUCAȚIE

Liceul Industrial Adjud (1984 - 1988).

- Facultatea de Chimie – Universitatea "Al.I. Cuza" Iași, secția chimie, specializarea chimie organică (1990 - 1995); media generală 9,65.

- Tema proiectului de licență: *Noi Compusi Mezoionici cu Sulf*

- Studii Aprofundate la Facultatea de Chimie - Universitatea "Al.I. Cuza" Iași, specializarea "Chimia Heterociclicilor" (1995 - 1996); media generala 10.

- Tema Dizertatiei: *Săruri de 2-Alchiltio- și 2-Dialchilamino-1,3-Ditioliu. Sinteză, Structură și Proprietăți*

- Studii de Doctorat la Universitatea "Al.I. Cuza" Iași, România; Prezentarea publică a tezei de doctorat: 26 Mai 2000.

- Titlul Tezei de Doctorat: *Cercetări asupra Sintezei și Reactivității unor Săruri de 1,3-Ditioliu*; Conducător de Doctorat: Prof. Dr. Candiano Leonte.

**Membru al Fundatiei "Alexander von Humboldt" Germania.**

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Engleză, Germana, Rusa

LIMBI STRĂINE  
CUNOSCUTE

Iași  
16.12. 2013



## MIHAIL LUCIAN BÎRSĂ

### *Lista publicațiilor*

#### **A. Teza de doctorat**

*Cercetări asupra sintezei și reactivității unor săruri de 1,3-ditioliu*, Universitatea “Al.I. Cuza” Iași, 26 Mai 2000; Conducător științific: Prof. dr. Candiano Leonte

#### **B. Cărți / contribuții la cărți**

1. **Birsa, M. L.**, *Introducere în Chimia Organică*, Centrul IDD Universitatea “Al.I. Cuza” din Iași – IAȘI, 2000, 124 pp.
2. Bîcu, E.; **Birsa, M. L.**; Belei, D.; Sarbu, D., *Chimie Organică – Exerciții și Probleme*, Pim, Iași, 2003, 246 pp.
3. Braverman, S.; Cherkinsky, M.; **Birsa, M. L.**, *X=C=X, X=O, S, Se, Te, N, P. CO<sub>2</sub>, COS, CS<sub>2</sub>, Isocyanates, Isothiocyanates, Carbodiimides, Se, Te, P Analogs in Science of Synthesis, Houben-Weyl Methods of Molecular Transformations*, Georg Thieme Verlag, Stuttgart, Vol. 18.2; 2005, pp 55-310.
4. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2003*, Knipe, A. C., Ed., John Wiley & Sons, Chichester, 2007, pp 293-331.
5. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2004*, Knipe, A. C., Ed., John Wiley & Sons, Chichester, 2008, pp. 331-342.
6. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2005*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2008, pp. 249-276.

7. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2005*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2008, pp. 277-285.
8. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2006*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2010, 277-306.
9. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2006*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2010, 307-316.
10. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2007*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2011, 239-264.
11. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2007*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2011, 265-274.
12. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2008*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2011, 253-266.
13. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2008*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2011, 225-252.
14. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2009*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2011, 309-332.
15. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2009*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2011, 333-344.
16. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2010*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2012, 265-284.
17. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2010*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2012, 285-297.
18. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2011*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2014, in press.

19. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2011*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2014, in press.
20. **Birsa, M. L.**, *Carbanions and Electrophilic Aliphatic Substitution in Organic Reaction Mechanisms 2012*, Knipe, A. C. Ed., John Wiley and Sons, Chichester, 2014, in press.
21. **Birsa, M. L.**, *Elimination Reactions in Organic Reaction Mechanisms 2012*, Knipe, A. C. Ed., John Wiley & Sons, Chichester, 2014, in press.

### ***C. Articole în reviste de specialitate***

1. Seliger, H.; Happ, E.; Cascaval, A.; **Birsa, M. L.**, "Alkyl-2-hydroxyaryl ketones. XXX.", *An. St. Univ. "Al.I. Cuza" Iasi*, (1997) **V**, 111-122.
2. Seliger, H.; Happ, E.; Cascaval, A.; **Birsa, M. L.**; Novitschi, G., "Synthesis of some aminated thiazoles", *An. St. Univ. "Al.I. Cuza" Iasi*, (1997) **V**, 123-128.
3. Seliger, H.; Cascaval, A.; **Birsa, M. L.**, "A facile one-step synthesis of some new bis-Mannich-Werner bases of polysubstituted chroman-4-ones", *An. St. Univ. "Al.I. Cuza" Iasi*, (1997) **V**, 129-134.
4. **Birsa, M. L.**, "Dithiolium derivatives. I.", *An. St. Univ. "Al.I. Cuza" Iasi*, (1998) **VI**, 57-64.
5. **Birsa, M. L.**, "Dithiolium derivatives. II.", *An. Stiint. Univ. "Al.I. Cuza" Iasi*, (1999) **VII**, 341-347.
6. **Birsa, M. L.**, "Dithiolium derivatives. III.", *An. Stiint. Univ. "Al.I. Cuza" Iasi*, (1999) **VII**, 349-354.
7. Seliger, H.; Happ, E.; Cascaval, A.; **Birsa, M. L.**; Nicolaescu, T.; Poinescu, I.; Cojocariu, C., "Synthesis and characterization of new photostabilizers from 2,4-dihydroxybenzophenone", *Eur. Polym. J.*, (1999) **35**, 827- 833.
8. **Birsa, M. L.**, "Dithiolium derivatives. IV.", *An. Stiint. Univ. "Al.I. Cuza" Iasi*, (2000) **VIII**, 71-74.

9. **Birsa, M. L.**, "Synthesis of some new 4-(2'-hydroxyaryl)-5-methyl-2- (N,N-dialkylamino)-thiazoles", *An. Stiint. Univ. "Al.I. Cuza" Iasi*, (2000) **VIII**, 325-328.
10. **Birsa, M. L.**, "Dithiolium derivatives. V.", *An. Stiint. Univ. "Al.I. Cuza" Iasi*, (2000) **VIII**, 329-334.
11. **Birsa, M. L.**; Tiron, R.; Ignat, L, "Dithiolium derivatives. VI.", *An. Stiint. Univ. "Al.I. Cuza" Iasi*, (2000) **VIII**, 335-340.
12. **Birsa, M. L.**, "A new approach to preparation of 1,3-dithiolium salts", *Synth. Commun.*, (2001) **31**, 1271-1275.
13. Braverman, S.; Cherkinsky, M.; **Birsa, M. L.**; Tichman, S.; Goldberg, I., "Synthesis and structure of novel sulfur bridged cyclic di- and tetraalkynes", *Tetrahedron Lett.*, (2001) **42**, 7485-7488.
14. **Birsa, M. L.**, "Synthesis of some new substituted flavanones and related 4-chromanones by a novel synthetic method", *Synth. Commun.*, (2002) **32**, 115-118.
15. Braverman, S.; Cherkinsky, M.; **Birsa, M. L.**; Zafrani, Y., "Base catalyzed reactivity of sulfur and selenium bridged cyclic alkynes", *Eur. J. Org. Chem.*, (2002), 3198-3207.
16. **Birsa, M. L.**; Cherkinsky, M.; Braverman, S., "Thermal rearrangements of bis-allenyl thiosulfonates", *Tetrahedron Lett.*, (2002) **43**, 9615-9619.
17. **Birsa, M. L.**; Ganju, D., "Synthesis and UV/Vis spectroscopic properties of new [2-(N,N-dialkylamino)-1,3-dithiolium-4-yl]phenolates", *J. Phys. Org. Chem.*, (2003) **16**, 207-212.
18. **Birsa, M. L.**, "Reaction of 4-(2'-hydroxyaryl)-1,3-dithiolium salts with sodium sulfide. A selective synthesis of 2'-hydroxyacetophenones", *Synth. Commun.*, (2003) **33**, 3071-3076.
19. **Birsa, M. L.**, "Synthesis of some 4-(2'-hydroxyaryl)-5-ethyl-2-(N, N-dialkylamino)-1,3-dithiolium salts", *Sulfur Lett.*, (2003) **26**, 155-162.
20. Levi, M. D.; Gofer, Y.; Cherkinsky, M.; **Birsa, M. L.**; Aurbach, D.; Berlin, A., "Electroanalytical features of non-uniformly doped conducting poly-3-(3,4,5-trifluorophenyl)thiophene films", *Phys. Chem. Chem. Phys.* (2003) **5**, 2886-2893.

21. Braverman, S.; Cherkinsky, M.; **Birsa, M. L.**; Gottlieb, H. E., "Facile synthesis and Diels-Alder reactions of 2,6-divinyl-1,4-dithiin", *Synthesis* (2003), 849-852.
22. **Birsa, M. L.**, Hopf, H., "Pseudo-Geminal [2.2]-Paracyclophane As Spacer For Bisallenyl Sulfoxides And Sulfones", *Phosphorus, Sulfur, and Silicon, and the Related Elements* (2005) **180**, 1453-1454.
23. **Birsa, M. L.**, Jones, P. G., and Hopf, H., "Transannular Hydride Migration in *Pseudo-Geminally* Substituted[2.2]Paracyclophanes: A Vinylogous Pinacol Rearrangement", *Eur. J. Org. Chem.* (2005), 3263-3270.
24. **Birsa, M. L.**, Jones, P. G., Braverman, S. and Hopf, H., "*Pseudo-Geminally* Substituted [2.2]Paracyclophanes as Spacer for Bisallenyl Sulfoxides and Sulfones", *Synlett* (2005), 640-642.
25. Tietze, L. F., **Birsa, M. L.**, Cascaval, A., *Anal. Stiint. Univ. Al.I. Cuza Iasi*, (2005) **13**, 91-98.
26. **Birsa, M. L.**, Hopf, H., "Synthesis of  $\alpha,\beta$ -Unsaturated Pseudogeminal [2.2]Paracyclophane Bisketones", *Synlett* (2007), 2753-2756.
27. **Birsa, M. L.**, Asaftei, I. V., "Solvatochromism of mesoionic iodo(1,3-dithiol-2-ylium-4-yl)phenolates", *Monat. Chem.*, (2008) **139**, 1433-1438.
28. Ciobanu, A.S., Goanta, M., Birsa, A., Asaftei, I.V., and **Birsa, M. L.**, "Synthesis of Mesoionic 4-Methyl-2-(1,3-dithiol-2-ylium-4-yl)phenolates", *Anal. Stiint. Univ. Al.I. Cuza Iasi*, (2008) **16**, 61-75.
29. Bacu, E., Vornicu, N., Belei, D., **Birsa, M. L.**, „Cercetari privind activitatea antifungica a unor saruri de *N*-fenacil-2-carbaldoxim-piridiniu” *Conservarea si Restaurarea Patrimoniului Cultural*, (2008) **VIII**, 6-14.
30. Bacu, E., Vornicu, N., Belei, D., **Birsa, M. L.**, „Activitatea antibacteriana a trei saruri de *N*-fenacil- $Y_{(p)}$ -2-carbaldoxim-piridiniu”, *Conservarea si Restaurarea Patrimoniului Cultural*, (2008) **VIII**, 92-99.
31. Asaftei, I. V., Bîlbă, N., **Bîrsă, M. L.**, Luchian, C., „Sorption Properties of MCM-41 Mesoporous Materials”, *Anal. Stiint. Univ. Al.I. Cuza Iasi*, (2008) **16**, 47-60.
32. Asaftei, I. V., Iofcea, Ghe., **Bîrsă, M. L.**, Bîlbă, N., „Aromatisation of the Technical  $C_4/C_4^-$  Fraction Over Zn-MFI Catalysts”, *Acta Chem. Iasi*, (2009) **17**, 5-34.

33. Goanta, M., Ciobanu, A.S., Birsa, A., Asaftei, I.V., and **Birsa, M. L.**, "Synthesis of 4-(3-Bromo-2-Hydroxy-5-Methylphenyl)-2-Dialkylamino-1,3-Dithiolium Chlorides", *Acta Chem. Iasi*, (2009) **17**, 35-48.
34. **Birsa, M. L.**, Hopf, H., "A New Way to Generate Functionalized Bridges in [2.2]Cyclophanes", *Synlett* (2009), 3000-3002.
35. Birsa, A., Ignat, L., Hopf, H., **Birsa, M. L.**, " [2.2]Paracyclophanes: The Interaction of *Pseudo-Geminal* Bispropargylic Alcohols with Sulfur Halides", *Acta Chem. Iasi*, (2009) **17**, 187-196.
36. Belei, D., Bicu, E., **Birsa, M. L.**, " 1,3-Dipolar Cycloaddition Reactions of *N*-Acetylazido-2-chlorophenothiazine", *Acta Chem. Iasi*, (2009) **17**, 197-207.
37. Belei, D., Bicu, E., Jones, P. G., **Birsa, M. L.**, " A New Synthetic Methodology for the Pyrrolidine Ring", *Synlett*, (2010), 931-933.
38. **Birsa, M. L.**, Hopf, H., "A New Bridge in [2.2]Cyclophanes: The Addition of  $\text{Se}_2\text{Cl}_2$  to *Pseudo-Geminally* Substituted Bispropargylic Alcohols", *Heteroatom Chem.* (2010) **21**, 126-130.
39. Sarbu, L. G., Birsa, A., Ignat, L., Hopf, H., **Birsa, M. L.**, " [2.2]Paracyclophanes: The Interaction of *Pseudo-Geminal* Bisacetylene with Electrophiles", *Acta Chem. Iasi*, (2010) **18**, 69-76.
40. Sarbu, L. G., Birsa, A., Hopf, H., **Birsa, M. L.**, "Heteroatom Bridged [2.2]Paracyclophanes As Eneidyne Analogs", *Acta Chem. Iasi*, (2010) **18**, 186.
41. Abuhaie, C. M., Belei, D., **Birsa, M. L.**, Bîcu, E., "Nouveaux composés de type pyridino- et indolizino-phenothiazines a potentialité pharmacologique", *Acta Chem. Iasi*, (2010) **18**, 129.
42. Gosav, S., **Birsa, M. L.**, "Exploratory analysis on some flavonoids with anti-invasive activity using molecular descriptors and principal component analysis", *Acta Chem. Iasi*, (2010) **18**, 150-151.
43. Gosav, S., Praisler, M., **Birsa, M. L.**, "Exploratory analysis on some flavonoids with anti-invasive activity using molecular descriptors and cluster analysis", *Annals of "Dunarea de Jos" University of Galati, Mathematics, physics, theoretical mechanics*, (2010), **33**, 302-307.

44. Gosav, S., **Birsa, M. L.**, "Stepwise discriminant analysis applied in QSAR modeling of flavonoids with anti-invasive activity", *Annals of "Dunarea de Jos" University of Galati, Mathematics, physics, theoretical mechanics*, (2010), **33**, 59-65.
45. Sarbu, L. G., **Birsa, M. L.**, "Synthesis of Iodine Containing Mesoionic 2-(1,3-Dithiolium)phenolates", *Acta Chem. Iasi*, (2011) **19**, 125-135.
46. Belei, D., Bicu, E., Jones, P. G., **Birsa, M. L.**, "A Selective Synthesis of Enamines vs. Aziridines", *J. Heterocycl. Chem.*, (2011) **48**, 129-134.
47. **Birsa, M. L.**, Jones, P. G., Hopf, H., "Orthogonal  $\pi$ -Bridges in [2.2]Paracyclophanes", *Synlett*, (2011), 259-261.
48. Sarbu, L. G., Birsa, A., Hopf, H., **Birsa, M. L.**, "New Bridges In [2.2]Paracyclophanes: The Interaction Of Chalcogenide Halides With *Pseudo-Geminal* Triple Bonds", *Phosphorus, Sulfur, and Silicon, and the Related Elements* (2011) **186**, 1246-1250.
49. **Birsa, M. L.**,\* Jones, P. G., Hopf, H. "[2.2]Paracyclophanes with New Bridges", *Synfacts*, **2011**, 387.
50. Gosav, S., Praisler, M., **Birsa, M. L.** *Int. J. Mol. Sci.*, "Principal Component Analysis Coupled with Artificial Neural Networks" (2011) **12**, 6668-6684.
51. Belei, D., Abuhaie, C., Bicu, E., Jones, P. G., Hopf, H., **Birsa, M. L.**, "A Direct Synthesis of Octahydropyrrolo[2,1,5-*cd*]indolizin-6-one Derivatives", *Synlett*, **2012**, 545-548.
52. Paul Chirita, Cristian G. Hrib and Lucian M. Birsa, *5-Bromo-4-(3,5-dibromo-2-hydroxyphenyl)-2-(piperidin-1-yl)-1,3-dithiol-2-ylum bromide*, *Acta Cryst.* (2013). **E69**, o1097.
53. Laura G. Sarbu, Cristian G. Hrib and Lucian M. Birsa, *rac-1-(5-Bromo-2-hydroxyphenyl)-1-oxopropan-2-yl morpholine-4-carbodithioate*, *Acta Cryst.* (2013). **E69**, o1169.
54. Lucian G. Bahrin, Cristian G. Hrib and Lucian M. Birsa, *4-Bromo-2-[5-methyl-2-(morpholin-4-yl)-1,3-thiazol-4-yl]phenol*, *Acta Cryst.* (2013). **E69**, o1170.

55. NECULAI CATALIN LUNGU, ION SANDU, PAUL CHIRITA, MIHAIL LUCIAN BIRSA, *New Water Soluble 1,3-Dithiolium Salts*, Rev. Chim. (Bucharest), **64**, 697 (2013).
56. RODICA BUHACEANU, NECULAI CATALIN LUNGU, NORINA FORNA, IULIEAN VASILE ASAFTEI, PAUL CHIRITA, MIHAIL LUCIAN BIRSA, *A New Class of Mesoionic 4-(1,3-Dithiol-2-ylum)phenolates*, Rev. Chim. (Bucharest), **64**, 802 (2013).
57. RODICA BUHACEANU, NECULAI CATALIN LUNGU, NORINA FORNA, IULIEAN VASILE ASAFTEI, PAUL CHIRITA, MIHAIL LUCIAN BIRSA, *The Influence of Bromine Substituent on Optical Properties of Some 1,3-Dithiolium Derivatives*, Rev. Chim. (Bucharest), **64**, 960 (2013).
58. LUCIAN GABRIEL BAHRIN, NECULAI CATALIN LUNGU, NORINA FORNA, ION SANDU, MIHAIL LUCIAN BIRSA, *Zwitterionic 3-(1,3-Dithiol-2-ylum)phenolates*, Rev. Chim. (Bucharest), **64**, 1343 (2013).
59. LAURA GABRIELA SARBU, NECULAI CATALIN LUNGU, NORINA FORNA, MIHAIL LUCIAN BIRSA, *Synthesis of 4-(2-Hydroxyphenyl)-2-dialkylamino-1,3-dithiolium Salts and Corresponding Mesoionic Derivatives*, Rev. Chim. (Bucharest), **64**, 1404 (2013).
60. DALILA BELEI, NORINA CONSUELA FORNA, ION SANDU, MIHAIL LUCIAN BIRSA, *Novel Mesoionic 2-Methyl-4-(1,3-Dithiol-2-ylum)phenolates*, Rev. Chim. (Bucharest), **65(1)**, 000 (2014).
61. LUCIAN GABRIEL BAHRIN, LUCIAN MIHAIL BIRSA, *Synthesis of New Flavanone-Dithiocarbamic Acid Esters from 2,5-Dihydroxyacetophenone*, Rev. Chim. (Bucharest), **65(1)**, 000 (2014).
62. CATALIN NECULAI LUNGU, LUCIAN GABRIEL BAHRIN, IULIEAN VASILE ASAFTEI, NORINA CONSUELA FORNA, ION SANDU, MIHAIL LUCIAN BIRSA, *Phenacyl 3-Methylpiperidinyl Carbodithioates as Building Blocks for 1,3-Dithiolium Derivatives*, Rev. Chim. (Bucharest), **65(2)**, 000 (2014).
63. LUCIAN GABRIEL BAHRIN, LUCIAN MIHAIL BIRSA, *Synthesis of Novel Iodine-containing Tricyclic Flavanones*, Rev. Chim. (Bucharest), **65(2)**, 000 (2014).

64. LAURA GABRIELA SARBU, CATALIN NECULAI LUNGU, IULIEAN VASILE ASAFTEI, ION SANDU, MIHAIL LUCIAN BIRSA, *New Evidence for the Mesoionic Character of 2-(1,3-Dithiol-2-ylidene)phenolates*, *Rev. Chim. (Bucharest)*, **65(3)**, 000 (2014).
65. LUCIAN GABRIEL BAHRAIN, BOGDAN FLORIN CRACIUN, ION SANDU, MIHAIL LUCIAN BIRSA, *Synthesis of Novel 1,3-Dithiol-2-ylidene Derivatives from the Corresponding Mesoionic Compound*, *Rev. Chim. (Bucharest)*, **65(3)**, 000 (2014).
66. LAURA GABRIELA SARBU, ELENA BICU, HENNING HOPF, MIHAIL LUCIAN BIRSA, "[2.2]Paracyclophane Substituted Indolizines", *Rev. Chim. (Bucharest)*, **65(4)**, 000 (2014).
67. Gosav, S., **Birsa, M. L.**, "Multivariate study of flavonoids active against caco-2 colon carcinoma", *Rom. Rep. Phys.*, (2013) **66(2)**, 000.

#### **D. Brevete de inventie**

1. Gulea A., Țapcov V., **Birsa, M. L.**, Gînju D., Jalbă A., Graur V., Julea F., "Inhibitor al leucemiei mieloide umane în bază de {bis[2-(3,5-dibromo-2-hidroxifenil)-2-oxoetil-piperidin-1-carboditioato(1-)O,O']cupru}", Brevet de invenție MD Nr 4190. 2012. Publ BOPI 12/2012. P. 21-22.

#### **E. Contribuții publicate la conferințe academice**

1. Braverman, S.; Cherkinsky, M.; **Birsa, M. L.**, "Tandem Isomerization and Cycloaromatization of Macrocyclic Sulfur and Selenium Bridged Di- and Tetraalkynes", The 67<sup>th</sup> Annual Meeting of the Israel Chemical Society, Jerusalem, January 29-30, 2002, Abstracts p 228.
2. **Birsa, M. L.**, Hopf, H., "Pseudo-Geminal [2.2]-Paracyclophane As Spacer For Bisallenyl Sulfoxides And Sulfones", The 21<sup>st</sup> International Symposium on Organic Chemistry of Sulfur, Madrid, July 4-9, 2004, Abstract p 144.

3. S. Braverman, M. Cherkinsky, H. E. Gottlieb, **M. L. Birsa**, H. Hopf, “*Synthesis and Cycloaromatization of Sulfur Bridged pseudo-gem-Bis-ethynyl[2.2]paracyclophane*”, The 70<sup>th</sup> Annual Meeting of the Israel Chemical Society, Bar-Ilan, February 14-16, 2005, Abstracts p 153.
4. **Birsa, M. L.**, Keynote lecture on “*Synthesis and Reactivity of Sulfur and Selenium Bridged Di- and Tetraalkynes*”, International Symposium on Organic Chemistry, Sofia, December 9-12, 2006, Abstracts p 18.
5. **Birsa, M. L.**, Ciobanu, A. S., Vornicu, N., Bicu E., “*New mesoionic phenothiazinyl derivatives*”, The 41<sup>st</sup> IUPAC Congress, Torino, August 4-11, 2007, Abstract p 56.
6. **Steluta Gosav**, Mihail Lucian Bîrsă, Exploratory analysis on some flavonoids with anti-invasive activity using molecular descriptors and principal component analysis, 1<sup>ER</sup> Colloque Franco-Roumain de Chimie Medicinale, 7-8 oct 2010, Iasi, Romania.
7. **Steluța Gosav**, Mihail Lucian Bîrsă, QSAR modeling of anti-invasive activity of flavonoid compounds using chemometric methods, XI<sup>th</sup> International Conference on Molecular, September 17-21, 2011, Wroclaw-Kudova Zdroj, Polonia.
8. **Steluța Gosav**, Mirela Praisler, Mihail Lucian Bîrsă, Principal component analysis coupled with artificial neural networks – a combined technique identifying small molecular structures using a concatenated spectral database, XI<sup>th</sup> International Conference on Molecular, September 17-21, 2011, Wroclaw-Kudova Zdroj, Polonia.
9. **Steluța Gosav**, Mirela Praisler, Mihail Lucian Bîrsă, Importance and Sensitivity of GC-FTIR Spectra – Optimisation of ANN System Identifying Bioactive Compounds, 10<sup>th</sup> International Conference on Global Research and Education, 26-28 sept 2011, Sucevita, Romania.
10. **Steluța Gosav**, Mihail Lucian Bîrsă, SDA method applied on some flavonoid compounds with anti-invasive activity, International Conference on Global Research and Education, 26-28 sept 2011, Sucevita, Romania.
11. **Steluta Gosav**, Mihail Lucian Birsa, Lucian Gabriel Bahrin, Georgiana Parfene, Rodica Dinica, Spectroscopic characterization, antimicrobial activity and DFT calculations of novel flavanones, Second International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences (IC-ANMBES), May 24-27, 2012, Brasov, Romania.
12. **Steluta Gosav**, Mihail Lucian Birsa, Multivariate study of flavonoids active against HT-29 colon carcinoma, Second International Conference on Analytical and Nanoanalytical Methods for Biomedical and Environmental Sciences IC-ANMBES, May 24-27, 2012, Brasov, Romania.
13. **S. Gosav**, D. Maftai and M.L. Birsa, Experimental (FTIR and NMR spectra) and theoretical (DFT) study of novel flavanones, 31st European Congress on Molecular Spectroscopy, 26-31 August 2012, Cluj-Napoca, Romania.

## F. Granturi si Contracte de cercetare

Grant postdoctoral al Fundatiei Alexander von Humboldt, RUM-1113505

Director contract de cercetare: 3

1. Contract CEEEX modul II, ET 5902 / 18.09.2006
2. Contract PN II – IDEI cod 2095 / 2008
3. Contract PN II – PARTENERIATE nr 51/2011

Participant la contracte de cercetare: 9, din care

7 contracte Tip A cu Ministerul Educației Naționale:

1. 1998 - CNSU 33/91
2. 1999 - CNCSIS 32/184
3. 2001 – CNCSIS 11/948;
4. 2002 - CNCSIS 55/304;
5. 2003 - CNCSIS 122/304;
6. 2005 - CNCSIS 5/1483;
7. 2006 - CNCSIS 7/1483.

1 contract CEEX, Modul I CERES 2CEx06-11-105 / 25.10.2006

1 contract international tip BILATERAL RO-FR