

CURRICULUM VITAE

Name: Ramona **Surname:** DANAC

Citizenship: Romanian;

Address: Iasi, Romania;

E-mail: rdanac@uaic.ro

Education:



07/04/2025 Defense of the *Habilitation Thesis* entitled “ Functionalized Organic Scaffolds: from Small Molecules to Macrocycles”. Award of the Habilitation Certificate and the status of PhD supervisor, granted by Ministerial Order No. 6770/25.11.2025, issued by the General Directorate for Higher Education, Ministry of National Education and Scientific Research.

09.2012–12.2012 DAAD Research Stage for Academics and Researchers, Karlsruhe Institute of Technology, Karlsruhe, Germany,

Project title: Rigid Star-Shaped Molecules as Supported Homogeneous Catalysts

2005 – 2007 Marie Curie Fellow, (2 years MEIF-CT-2005-022646, 2005-2007) Chemistry Research Laboratory, University of Oxford, Oxford, UK,

Project title: New Inhibitors of Bacterial and Fungal Cell Wall Biosynthesis

1999 - 2003 Ph. D. Organic Chemistry
Organic Chemistry and Biochemistry Department
Faculty of Chemistry
“Al. I. Cuza” University, Iasi, Romania

Supervisor: Prof. Ioan Druta
Thesis title: Researches in the Field of 1,10-Phenanthroline

1997 – 1999 M.Sc., Heterocyclic Chemistry and Biochemistry
Organic Chemistry and Biochemistry Department
Faculty of Chemistry
“Alexandru Ioan Cuza” University, Iasi, Romania

Supervisor: Prof. Valeriu Sunel
Thesis title: Nitrogen Yperites

1993 – 1997 B.Sc., Department of Chemistry-Physics
Faculty of Chemistry
“Alexandru Ioan Cuza” University of Iasi, Romania

1989 -1993 Medical High School, Iasi, Romania

Professional Experience

2020 – to date	Professor, Chemistry Department, University “Alexandru Ioan Cuza”, Iasi, Romania;
2013 – 2020	Associate professor, Chemistry Department, University “Alexandru Ioan Cuza”, Iasi, Romania;
2006 – 2013	Lecturer, Chemistry Department, University “Alexandru Ioan Cuza”, Iasi, Romania;
2003 – 2006	Research Assistant Department of Organic Chemistry and Biochemistry, University “Al. I. Cuza”, Iasi, Romania.
2001 – 2003	Preparation Assistant Department of Organic Chemistry and Biochemistry, University “Alexandru Ioan Cuza”, Iasi, Romania.

Scientific interest:

- Organic chemistry;
- Structural organic analysis;
- Heterocyclic chemistry;
- Medicinal chemistry;
- Organic semiconductors;
- Fluorescent materials;
- Supramolecular chemistry.

Summary of qualifications:

- Synthesis and characterization of organic compounds;
- Teaching lectures and labs: Organic chemistry; Heterocyclic chemistry; Advances Organic • Synthesis; Structural Analysis of Organic Compounds; Fragrances, Flavoring Compounds and Food Additives.
- Supervising the activity of undergraduate, master and PhD students in Organic Chemistry laboratories.
- Developed skills in organic synthesis and characterization of organic compounds, biological testing.
- Interdisciplinary researcher with a broad range of skills that transcend traditional subdisciplines of chemistry.
- Good computer skills: OS Windows, Microsoft Office, ChemOffice.
- Multilingual: Romanian, English, French.

Scientific contribution:

- 78 scientific papers;
- over 100 papers presented at national and international conferences/events;
- 5 book chapter /books co-author;
- 1 patent;

- project manager or PI of 3 research projects and research member in other research projects;
 - long-term expert or short-term expert for institutional projects;
 - Editor in Chief of Acta Chemica Iasi journal from 2017;
 - Reviewer for: Journal of Enzyme Inhibition and Medicinal Chemistry, Tetrahedron, RSC Advances, Biomolecules, Antioxidants, Medicinal Chemistry, Organic&Biorganic Chemistry, Medicinal Chemistry Research, Arabian Journal of Chemistry, Letters in Drug Design and Discovery, Pharmaceuticals, Marine Drugs, Minireviews in Medicinal Chemistry, etc.
-

Selected Publications:

1. R. Ciorteanu, C.I. Ciobanu, N. Cibotariu, S. Shova, V. Antoci, I. I. Mangalagiu, **R. Danac**^{*}, Functionalized Indolizines as Potential Anticancer Agents: Synthetic, Biological and In Silico Investigations, *Int. J. Mol. Sci.*, (2025), **26(17)**, 8368.
2. C. Moldoveanu, I. I. Mangalagiu, G. Zbancioc^{*}, **R. Danac**^{*}, G. Tataringa, A. M. Zbancioc, Anticancer Potential of Azatetracyclic Derivatives: In Vitro Screening and Selective Cytotoxicity of Azide and Monobrominated Compounds, *Molecules*, (2025), **30(3)**, 702.
3. A. Al-Matarneh, N. Simionescu; A. Nicolescu, N. Cibotariu, R. Danac, M. C. Al-Matarneh, I. I. Mangalagiu, Pyrrolo-Fused Phenanthridines as Potential Anticancer Agents: Synthesis, Prediction, and Biological Evaluation, *J. Biochem. Mol. Toxicol.*, (2025), **39(9)**, e70443.
4. C. M. Al Matarneh, A. Nicolescu^{*}, S. Shova, M. Apostu, R. Puf, F. Mocci, A. Laaksonen, I. I. Mangalagiu, **R. Danac**^{*}, Revisiting Fused-Pyrrolo-1,10-Phenanthroline Derivatives: Novel Transformations and Stability Studies, *ChemistryOpen*, (2025), **14(7)**, e202400365.
5. M. C. Al-Matarneh, A. Nicolescu, I.-A. Dascalu, S. Shova, C.-D. Varganici, A. Fifere, R. Danac, I.-C. Marinas, Synthesis of New Zinc and Copper Coordination Polymers Derived from Bis (Triazole) Ligands, *Crystals*, (2024), **14**, 144.
6. V. Mangalagiu, R. Danac, D. Diaconu, G. Zbancioc, I.I. Mangalagiu, Hybrids Diazine: Recent Advancements in Modern Antimicrobial Therapy, *Curr. Med. Chem.*, (2024), **31(19)**, 2687-2705.
7. M.-C. Sardaru, C.-M. Al Matarneh, N. Simionescu, I.I. Mangalagiu, M. Pinteala, **R. Danac**, New Monoquaternary Salts of N-Heterocycles: Synthesis and Antitumor Assesment, *Rev. Roum. Chim.*, (2024), **69(1-2)**, 63-74.
8. C. Doroftei, L. Leontie, **R. Danac**, C.M. Al-Matarneh, A. Carlescu, Exploring Pyrrolo-Phenanthrolines as Semiconductors for Potential Implementation in Organic Electronics, *Materials*, (2023), **16(9)**, 3366.
9. L. Oniciuc, D. Amariuca-Mantu, D. Diaconu, V. Mangalagiu, R. Danac, V. Antoci, I.I. Mangalagiu, Benzoquinoline Derivatives: An Attractive Approach to Newly Small Molecules with Anticancer Activity, *Int. J. Mol. Sci.*, (2023), **24(9)**, 8124.
10. R. M. Amarandi, C.-M. Al Matarneh, L. Popovici, C. I. Ciobanu, A. Neamtu, I. I. Mangalagiu, **R. Danac**^{*}, Exploring Pyrrolo-Fused Heterocycles as Promising Anticancer Agents: An Integrated Synthetic, Biological, and Computational Approach, *Pharmaceuticals*, (2023), **16(6)**, 865.
11. C. Doroftei, A. Carlescu, L. Leontie, R. Danac, C.M. Al-Matarneh, Structural, Electrical and optical properties of pyrrolo[1,2-*i*][1,7] phenanthroline based organic semiconductors, *Materials*, (2022), **15(5)**, 1684.
12. D. Amariuca-Mantu, V. Antoci, M. C. Sardaru, C. M. Al Matarneh, I. Mangalagiu, **R. Danac**^{*}, Fused pyrrolo-pyridines and pyrrolo-(iso)quinoline as anticancer agents, *Phys. Sci. Rev.*, (2023), **8(9)**, 2583-2645.
13. C.M. Al Matarneh^{*}, I. Rosca, S. Shova, **R. Danac**^{*}, Synthesis and properties of new fused pyrrolo-1,10-phenanthroline type derivatives, *J. Serb. Chem. Soc.*, (2021), **86(10)**, 901-915.

14. C.M. Al Matarneh, R. M. Amarandi, I. I. Mangalagiu, **R. Danac***, Synthesis and biological screening of new cyano-substituted pyrrole fused (iso)quinoline derivatives, *Molecules*, (2021), **26**, 2066.
15. A.-M. Craciun, A. Rotaru, C. Cojocaru, I.I. Mangalagiu, **R. Danac***, New 2,9-disubstituted-1,10-phenanthroline derivatives with anticancer activity by selective targeting of telomeric G-quadruplex DNA, *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, (2021), **249**, 119318.
16. M.-C. Sardaru, A. M. Craciun, C.-M. Al Matarneh, I. A. Sandu, R. M. Amarandi, L. Popovici, C. I. Ciobanu, D. Peptanariu, M. Pinteala, I. I. Mangalagiu, **R. Danac***, Cytotoxic substituted indolizines as new colchicine site tubulin polymerisation inhibitors, *J. Enz. Inhib. Med. Chem.*, (2020), **35(1)**, 1581-1595.
17. V. Antoci, C. Moldoveanu, **R. Danac**, V. Mangalagiu, G. Zbancioc, Huisgen [3 + 2] Dipolar Cycloadditions of Phthalazinium Ylides to Activated Symmetric and Non-Symmetric Alkynes, *Molecules*, (2020), **25(19)**, 4416.
18. M.-C. Sardaru, O. Carp, E.-L. Ursu, A.-M. Craciun, C. Cojocaru, M. Sillion, V. Kovalska, I. Mangalagiu, **R. Danac**, A. Rotaru, Cyclodextrin Encapsulated pH Sensitive Dyes as Fluorescent Cellular Probes: Self-Aggregation and In Vitro Assessments, *Molecules*, (2020), **25(19)**, 4397.
19. C. Gherasim, A. Airinei*, R. Tigoianu, A.M. Craciun, **R. Danac***, A. Nicolescu, D. L. Isac, I.I. Mangalagiu, Synthesis and photophysical insights on new fused N-heterocyclic derivatives with isoquinoline skeleton, *J. Mol. Liq.*, (2020), **310**, 113196.
20. D. Amariuca-Mantu, V. Mangalagiu, R. Danac, I.I. Mangalagiu, Microwave assisted reactions of azaheterocycles for medicinal chemistry applications, *Molecules*, (2020), **25(3)**, 716.
21. **R. Danac**, A. Pui, I. Corja, R.-M. Amarandi, C.I. Ciobanu, M.-O. Apostu, O. Palamarciuc, New M(II) (M=Mn, Co, Ni, Cu, Zn, Pd) coordinative compounds with 2-formylpyridine S-methyl-isothiosemicarbazide, *J. Mol. Struct.*, (2020), **1207**, 12747.
22. C.M. Al Matarneh, R.M. Amarandi, A.M. Craciun, I.I. Mangalagiu, G. Zbancioc*, **R. Danac***, Design, synthesis, molecular modelling and anticancer activities of new fused phenanthrolines, *Molecules*, (2020), **25**, 527.
23. C.M. Al Matarneh, M.C. Sardaru, M.O. Apostu, I. Rosca, C. I. Ciobanu, I.I. Mangalagiu, **R. Danac**, Synthesis and antibacterial evaluation of new pyrrolo[3',4':3,4]pyrrolo[1,2-a]quinoline and pyrrolo[3',4':3,4]pyrrolo[2,1-a]isoquinoline derivatives, *Studia UBB Chemia*, **LXIV(3)**, (2019), 67-80.
24. L. Popovici, R.M. Amarandi, I.I. Mangalagiu, V. Mangalagiu, **R. Danac**, Synthesis, molecular modelling and anticancer evaluation of new pyrrolo[1,2-b]pyridazine and pyrrolo[2,1-a]phthalazine derivatives, *J. Enz. Inhib. Med. Chem.*, **34(1)**, (2019), 230-243.
25. L. Leontie, **R. Danac**, A. Carlescu, C. Doroftei, G.G. Rusu, V. Tiron, S. Gurlui, O. Susu, Electric and optical Properties of some new functional lower-rim-substituted calixarene derivatives in thin films, *Appl. Phys. A*, **124**, (2018), 355.
26. A. Airinei, R. Tigoianu, **R. Danac**, C.M. Al Matarneh, D.L. Isac, Steady state and time resolved fluorescence studies of new indolizine derivatives with phenanthroline skeleton, *J. Lumin.*, **199**, (2018), 2-12.
27. C. M. Al Matarneh, C. I. Ciobanu, M. O. Apostu, I. I. Mangalagiu, **R. Danac**, Cycloaddition versus amidation in reactions of 2-amino-2-oxoethyl-phenanthroline ylides to activated alkynes and alkenes, *C. R. Chimie*, **21(1)** (2018), 1-8.
28. G. Pricope, E. L. Ursu, M. Sardaru, C. Cojocaru, L. Clima, N. Marangoci, **R. Danac**, I. Mangalagiu, B. C. Simionescu, M. Pinteala, A. Rotaru, Novel cyclodextrin-based pH-sensitive supramolecular host-guest assembly for staining acidic cellular organelles, *Polym. Chem.*, **9**, (2018), 968-975.
29. A.-M. Olaru, V. Vasilache, **R. Danac**, I. I. Mangalagiu, Antimycobacterial activity of nitrogen heterocycles derivatives: 7-(pyridine-4-yl)-indolizine derivatives. Part VII, *J. Enz. Inhib. Med. Chem.*, **32(1)**, (2017), 1291-1298.

30. N.-L. Marangoci, L. Popovici, E.-L. Ursu, **R. Danac**, L. Clima, C. Cojocaru, A. Coroaba, A. Neamtu, I.I. Mangalagiu, M. Pinteala, A. Rotaru, Pyridyl-indolizine derivatives as DNA binders and pH-sensible fluorescent dyes, *Tetrahedron*, **72**, (2016), 8215-8222.
31. **R. Danac**, L. Leontie, A. Carlescu, S. Shova, V. Tiron, G. G. Rusu, F. Iacomi, S. Gurlui, O. Şuşu, Gh. I. Rusu, Electric Conduction Mechanism of Some Heterocyclic Compounds, 4,4'-Bipyridine and Indolizine Derivatives in Thin Films, *Thin Solid Films*, **612**, (2016), 358-368.
32. C.M. Al Matarneh, M.O. Apostu, I.I. Mangalagiu, **R. Danac**, Reactions of ethyl cyanofornate with cycloimmonium salts: a direct pathway to fused or substituted azaheterocycles, *Tetrahedron*, **72**, (2016), 4230-4238.
33. C.M. Al Matarneh, I. I. Mangalagiu, S. Shova, **R. Danac**, Synthesis, structure, antimycobacterial and anticancer evaluation of new pyrrolo-phenanthroline derivatives, *J. Enz. Inhib. Med. Chem.*, **31(3)**, (2016), 470-480.
34. C.M. Al Matarneh, C. I. Ciobanu, I. I. Mangalagiu, **R. Danac**, Design, synthesis and antimycobacterial evaluation of some new azaheterocycles with 4,7-phenanthroline skeleton. Part VI, *J. Serb. Chem. Soc.* **81(2)**, (2016), 133-140.
35. R. Postolache, R. Danac, A. Pui, New Coordinative Compounds with 4-(4'-pyridyl)pyridinium Disubstituted Monoylides, *Croat. Chem. Acta*, **88(3)**, (2015), 207-211.
36. **R. Danac**, C. M. Al Matarneh, S. Shova, T. Daniloaia, M. Balan, I.I. Mangalagiu, New indolizines with phenanthroline skeleton: synthesis, structure, antimycobacterial and anticancer evaluation, *Bioorg. Med. Chem.*, **23**, (2015), 2318-2327.
37. R. Rusu, A. Szumna, N. Rosu, C. Dumea, **R. Danac**, New Triazole Appended *tert*-Butyl Calix[4]arene Conjugates: Synthesis, Hg²⁺ Binding Studies, *Tetrahedron*, **71**, (2015), 2922-2926.
38. **R. Danac**, T. Daniloaia, V. Antoci, V. Vasilache, I. I. Mangalagiu, Design, Synthesis and Antimycobacterial Activity of Some New Azaheterocycles: Phenanthroline with *p*-halo-benzoyl Skeleton. Part V, *Lett. Drug Des. Discov.*, **12**, (2015), 14-17.
39. **R. Danac**, L. Leontie, M. Girtan, M. Prelipceanu, A. Graur, A. Carlescu, G.I. Rusu, On the d.c. electric conductivity and conduction mechanism of some stable disubstituted 4-(4-pyridyl)pyridinium ylides in thin films, *Thin Solid Films*, **556**, (2014), 216-222.
40. C. Rimbu, **R. Danac**, A. Pui, Antibacterial Activity of Pd(II) Complexes with Salicylaldehyde-amino Acids Schiff Bases Ligands, *Chem. Pharm. Bull.*, **62(1)**, (2014), 12-15.
41. **R. Danac**, I. Mangalagiu, Antimycobacterial activity of nitrogen heterocycles derivatives: bipyridine derivatives. Part III, *Eur. J. Med. Chem.*, **74**, (2014), 664-670.
42. R. Postolachi, **R. Danac**, N. J. Buurma, A. Pui, M. Balan, S. Shova, C. Delanu, New Cycloimmonium Ylide Ligands and their Palladium (II) Affinities, *RSC Advances*, **3**, (2013), 17260-17270.
43. L. Leontie, **R. Danac**, M. Girtan, A. Carlescu, A.P. Rambu, G.I. Rusu, Electron transport properties of some new 4-*tert*-butylcalix[4]arene derivatives in thin films, *Materials Chemistry and Physics*, **135**, (2012), 123-129.
44. **R. Danac**, L. Leontie, A. Carlescu, G.I. Rusu, DC Electric Conduction Mechanism of Some Newly Synthesized Indolizine Derivatives in Thin Films, *Materials Chemistry and Physics*, **134**, (2012), 1042-1048.
45. **R. Danac**, R. Rusu, A. Rotaru, A. Pui, S. Sova, New Conjugates of Calix[4]arenes Bearing Bipyridine and Indolizine Heterocycles, *Supramolecular Chemistry*, **24(6)**, (2012), 424-435.
46. L. Leontie, **R. Danac**, N. Apetroaei, G.I. Rusu, Study of electronic transport properties of some new N-(*p*-R-phenacyl)-1,7-phenanthroline bromides in thin films, *Materials Chemistry and Physics*, **127**, (2011), 471-478.
47. L. Leontie, **R. Danac**, I. Druta, A. Carlescu, Electron transport properties of some newly synthesized nonsymmetrical bisindolizines in thin films, *Synthetic Metals*, **160 (23-24)**, (2010), 2526-2533.
48. L. Leontie, **R. Danac**, I. Druta, A. Carlescu, G. I. Rusu, Newly synthesized fused heterocyclic compounds in thin films with semiconductor properties, *Synthetic Metals*, **160**, (2010), 1273-1279.

49. A. Rotaru, I. Druta, E. Avram, **R. Danac**, Synthesis and properties of fluorescent 1,3-substituted mono and biindolizines”, *Arkivoc*, 13, (2009), 287-299.
50. E. van Dijkum, **R. Danac**, D.J. Hughes, R. Wood, A. Rees, B. L. Wilkinson and A. J. Fairbanks, Synthesis of glucose derivatives modified at the 4-OH as potential chain-terminators of cellulose biosynthesis; herbicidal activity of simple monosaccharide derivatives, *Organic & Biomolecular Chemistry*, 7, (2009), 1097-1105.
51. **R. Danac**, L. Ball, S. J. Gurr and A. J. Fairbanks, Synthesis of UDP-GlcNAc Derivatives Modified at OH-3 as Potential Chain Terminators of Glucan Biosynthesis, *Carbohydr. Res.*, 343, (2008), 1012-1022.
52. L. Leontie, **R. Danac**, I. Druta and G.I. Rusu, Electronic transport properties of 1-(p-R-phenacyl)-4- {[1'-ethylcarboxylate)-(3'-p-R'-phenacyl)]-7'-indoliziny]pyridinium bromides in thin films, *Thin Solid Films*, 516(7), (2008), 1599-1603.
53. M. Prelipceanu, O. S. Prelipceanu, L. Leontie, **R. Danac**, Photoelectron spectroscopy investigations of pyrrolo[1,2-a][1,10]phenanthroline derivatives, *Physics Letters A*, 368(3-4), (2007), 331-335.
54. T. Muller, **R. Danac**, L. Ball, S. J. Gurr and A. J. Fairbanks, Synthesis of UDP-GlcNAc Derivatives Modified at OH-4 as Potential Chain Terminators of Chitin Biosynthesis, *Tetrahedron: Asymmetry*, 18, (2007), 1299-1307.
55. **R. Danac**, L. Ball, S. J. Gurr, T. Muller and A. J. Fairbanks, Carbohydrate Chain Terminators: Rational Design of Novel Carbohydrate-Based Antifungal Agents, *ChemBioChem*, 8, (2007), 1241-1245.
56. L. Leontie, **R. Danac**, I. Druta, Electrical conduction mechanism in N-(p-R-phenacyl)-4,5-diazafluorenum-9-one bromides thin films, *Synthetic Metals*, 155(2-4), (2006), 224-229. (1.788)
57. L. Leontie, **R. Danac**, Optical properties of some new synthesized organic semiconductors in thin films, *Scripta Materialia*, 54(2), (2006), 175-179.
58. L. Leontie, I. Druta, **R. Danac**, and G.I. Rusu, On the electronic transport properties of pyrrolo[1,2-a]phenanthroline derivatives in thin films, *Synthetic Metals*, 155(1), (2005), 138-145. (ISI 1.788)
59. L. Leontie, I. Druta, **R. Danac**, M. Prelipceanu, G.I. Rusu, Electrical properties of some new high resistivity organic semiconductors in thin films, *Progress in Organic Coatings*, 54(3), (2005), 175-181.
60. **R. Danac**, M. Constantinescu, A. Rotaru, C. Ghirvu, I. Druta, Synthesis of Novel 4,5-Diazafluoren-9-one Derivatives and Theoretical Study of 3+2 Cycloaddition Reactions, *J. Heterocycl. Chem.*, 41, (2004), 983-996.
61. A. Rotaru, **R. Danac**, I. Druta, Synthesis of New Non-Symmetrical 7,7'-Bisindolizines by the Direct Reaction of 4,4'-Bipyridinium-Ylides with Dimethyl Acetylenedicarboxylate, *J. Heterocycl. Chem.*, 41, (2004), 893-897.
62. M. Irimia, G. Lisa, **R. Danac**, N. Aelenei, I. Druta, Physico-Chemical Characterization of Some Diquaternary Salts of 4,4'-Bipyridyl, *Croat. Chem. Acta*, 77 (4), (2004), 587-591.
63. L. Leontie, I. Druta, **R. Alupoae**, G. I. Rusu – On the electronic transport in some new synthesized high resistivity organic semiconductors in thin films, *Mat. Sci. Eng.*, B100 (2003) 252-258.
64. **R. Danac**, A. Rotaru, G. Drochioiu, I. Druta - Synthesis of novel phenanthroline derivatives by 3+2 dipolar cycloaddition reaction, *J. Heterocycl. Chem.*, 40, 283 (2003).

List of Proceedings:

1. V. Antoci, D. Amariuca-Mantu, V. Mangalagiu, **R. Danac**, I.I. Mangalagiu, Design, synthesis, and anticancer evaluation of fused 1,2-diazine derivatives, *Proceedings*, 2019, 22(1), 26. <https://doi.org/10.3390/proceedings2019022026>

List of published books/ book chapters:

1. **Ramona Danac**, Mihaela Roman, Problems of Organic Structural Analysis, Sedcomlibris, Iasi, 2006. (ISBN: 973-670-156-5).
2. Ionel Mangalagiu, **Ramona Danac**, Costel Moldoveanu, Gheorghita Zbancioc, Judiciary Chemistry and Toxicology. Judiciary Separatology, „AIT –SRL Laboratory”Ed., Bucuresti **2011**. (217 pages) (ISBN: 978-606-8363-09-7x2).
3. Roxana-Maria Amarandi, Maria Cristina Al-Matarneh, **Ramona Danac**, Natural indolic alkaloids, Editura Universitatii „Alexandru Ioan Cuza” Iasi, **2017** (172 pages) (ISBN: 978-606-714-401-7).
4. **Ramona Danac**, Dorina Amariuca-Mantu, Vasilichia Antoci, Gheorghita Zbancioc, Violeta Mangalagiu, Ionel I. Mangalagiu, Microwave assisted reactions for synthesis of bioactive azaheterocycles:, capitol de carte in: *Current Advances in Chemistry and Biochemistry*, vol. 3, Book Publisher International, **2021**, 17-50. (ISSN: 978-93-90768-91-2 (eBook))
5. D. Amariuca-Mantu, V. Antoci, M. C. Sardaru, C. M. Al Matarneh, I. Mangalagiu, **R. Danac***, Fused pyrrolo-pyridines and pyrrolo-(iso)quinoline as anticancer agents, in *Heterocyclic Anticancer Agents*, Ed. Bimal Krishna Banik and Bubun Banerjee, De Gruyter, Berlin/Boston, **2022**, 185-247. (ISBN: 978-3-11-073926-8).
6. Violeta Mangalagiu, **Ramona Danac**, Anda-Mihaela Olaru, Dumitrelea Diaconu, Ionel I. Mangalagiu, Antimycobacterial Activity of Nitrogen Heterocycles Compounds with Indolizine Skeleton, in *Chemistry and Biochemistry: Research Progress Vol. 1*, Ed. Oscar Jaime Restrepo Baena, BP International, London, **2025**, 160–188. (ISBN 978-93-49238-76-3 (Print). ISBN 978-93-49238-38-1 (eBook)). <https://doi.org/10.9734/bpi/cbrp/v1/3855>

List of editorials:

1. A. Mermer, I.E. Orhan, G. Ye, N. A. Kumar, R. Danac, Editorial: Five-membered ring heterocyclic compounds as anticancer drug candidates, *Front. Chem.*, (2025), **13**, 1599140. <https://doi.org/10.3389/fchem.2025.1599140>

Patents:

1. Mangalagiu, I.I.; Amăriucăi-Mantu, D.; Antoci, V.; Zbancioc, G.; Moldoveanu, C.; Cucu, D.; Dănac, R.; Mangalagiu, V.: Process for obtaining a novel class of anthracene-imidazole compounds with antituberculosis activity/Procedeu pentru obținerea unei noi clase de compuși antracen-imidazolici cu activitate antituberculoasă, patent no. RO134192-A0/2020, Oficiul de Stat pentru Invenții și Mărci, Property Rights Owner: Universitatea „Alexandru Ioan Cuza” din Iași, România