
Curriculum vitae Europass

Informații personale

Nume / Prenume **Danac Ramona**
Pozitie **Profesor universitar**
Loc de munca **Universitatea Alexandru Ioan Cuza din Iasi**
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Experiența profesională

Perioada	2020 – prezent
Funcția și postul ocupat	Profesor universitar
Nume și adresa angajatorului	Departamentul de Chimie, Universitatea “Al I. Cuza”, Iasi, Romania;
Perioada	2013 – 2020
Funcția și postul ocupat	Conferentiar universitar
Nume și adresa angajatorului	Departamentul de Chimie, Universitatea “Al I. Cuza”, Iasi, Romania;
Perioada	2006 – 2013
Funcția și postul ocupat	Lector universitar
Nume și adresa angajatorului	Departamentul de Chimie, Universitatea “Al I. Cuza”, Iasi, Romania;
Perioada	2003 – 2006
Funcția și postul ocupat	Asistent universitar
Nume și adresa angajatorului	Departamentul de Chimie, Universitatea “Al I. Cuza”, Iasi, Romania;
Perioada	2001 – 2003
Funcția și postul ocupat	Preparator universitar
Nume și adresa angajatorului	Departamentul de Chimie, Universitatea “Al I. Cuza”, Iasi, Romania;

Educatie si formare

Perioada	09.2012–12.2012
Calificarea/diploma obtinuta Numele și tipul instituției de învățământ	Stagiu de cercetare DAAD pentru cadre didactice si cercetatori; Institutul Tehnologic Karlsruhe, Germania, titlul proiectului: “Molecule rigide in forma de stea ca suport pentru cataliza omogena”. (Prof. Stefan Bräse)
Perioada	01.11. 2005 –31.10. 2007
Calificarea/diploma obtinuta Numele și tipul instituției de învățământ / furnizorului de formare	Stagiu postdoctoral Marie Curie EIF, Chemistry Research Laboratory, Universitatea Oxford, Marea Britanie, titlul proiectului: “Noi inhibitori ai biosintezei peretilor celulelor bacteriene si fungice”, Coordonator grup: Dr. Antony Fairbanks (MEIF-CT-2005-022646, 2005-2007).
Perioada	1999 - 2003
Calificarea/diploma obtinuta Numele și tipul instituției de învățământ Nivelul în clasificarea națională sau internațională	Stagiu de doctorat; Organic Chemistry Organic Chemistry and Biochemistry Department Faculty of Chemistry “Al. I. Cuza” University, Iasi, Romania Coordonator stiintific: Prof. Ioan Druta Titlul tezei: Cercetari in domeniul 1,10-fenantrolinei
Perioada	1997 – 1999
Calificarea/diploma obtinuta Numele și tipul instituției de învățământ / furnizorului de formare	M.Sc., Heterocyclic Chemistry and Biochemistry Organic Chemistry and Biochemistry Departmen Faculty of Chemistry “Al. I. Cuza” University, Iasi, Romania Coordonator stiintific: Prof. Valeriu Sunel Thesis title: Nitrogen Yperites
Perioada	1993 – 1997
Calificarea/diploma obtinuta Numele și tipul instituției de învățământ	B.Sc., Specializarea: Chimie - Fizica Facultatea de Chimie, Universitatea “Al I. Cuza”, Iasi, Romania
Perioada	1989 -1993
Calificarea/diploma obtinuta Numele și tipul instituției de învățământ	Liceul Sanitar Iasi, Romania

Interesul științific:

- ♦ Chimia organica
 - ♦ Analiza structurala organica
 - ♦ Chimia heterociclorilor
 - ♦ Chimie medicinala
 - ♦ Semiconductori organici
 - ♦ Materiale avansate cu proprietati fluorescente
 - ♦ Chimie supramoleculara
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Contribuția științifică:

- ♦ 78 articole științifice, dintre care 67 publicate in reviste internaționale cotate ISI;
 - ♦ autor sau co-autor a 100 de prezentări la conferințe sau alte evenimente științifice;
 - ♦ co-autor a 5 cărți/capitole de carti;
 - ♦ co-autor a unui brevet national;
 - ♦ director sau PI pentru trei proiecte (contracte) de cercetare și membru în 11 proiecte de cercetare derulate în perioada 1999 – 2021;
 - ♦ expert pe termen lung sau scurt in cadru a patru proiecte de dezvoltare institutionala;
 - ♦ editor sef al revistei Acta Chemica Iasi din 2017;
 - ♦ referent la jurnale precum: Tetrahedron, RSC Advances, Biomolecules, 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, Biomolecules, International Journal of Molecular Sciences, etc.
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Lista articolelor stiintifice publicate (selectie):

1. 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.
2. 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.
3. 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.
4. 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.
5. 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.

6. 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. 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.
12. 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.
13. 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.
14. 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.
15. C.M. Al Matarneh, C.I. Ciobanu, V. Mangalagiu, Gh. Zbancioc*, R. Danac*, Microwave Assisted Synthesis of Six Member Ring Azaheterocycles and Their Antimycobacterial and Anticancer Evaluation, *Rev. Chim.*, (2020), 71(3), 287-293.
16. D. Amariuca-Mantu, V. Mangalagiu, R. Danac, I.I. Mangalagiu, Microwave assisted reactions of azaheterocycles for medicinal chemistry applications, *Molecules*, (2020), 25(3), 716.
17. **R. Danac**, A. Pui, I. Corja, R.-M. Amarandi, C.I. Ciobanu, M.-O. Apostu, O. Palamarcuic, New M(II) (M=Mn, Co, Ni, Cu, Zn, Pd) coordinative compounds with 2-formylpyridine S-methyl-isothiosemicarbazide, *J. Mol. Struct.*, (2020), **1207**, 12747.
18. 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, 16p.
19. 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 Chimia*, **LXIV(3)**, (2019), 67-80.
20. 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.
21. 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, 12 p.

22. 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.
23. 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.
24. 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.
25. 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.
26. 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.
27. **R. Danac**, L. Leontie, A. Carlescu, S. Shova, V. Tiron, G. G. Rusu, F. Iacomì, S. Gurlui, O. Șuşu, 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.
28. C.M. Al Matarneh, M.O. Apostu, I.I. Mangalagiu, **R. Danac**, Reactions of ethyl cyanoformate with cycloimmonium salts: a direct pathway to fused or substituted azaheterocycles, *Tetrahedron*, **72**, (2016), 4230-4238.
29. 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.
30. R. Postolache, R. Danac, A. Pui, New Coordinative Compounds with 4-(4'-pyridyl)pyridinium Disubstituted Monoylides, *Croat. Chem. Acta*, **88(3)**, (2015), 207-211.
31. **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.
32. 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.
33. **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.
34. C. Rimbu, **R. Danac**, A. Pui, Antibacterial Activity of Pd(II) Complexes with Salicylaldehyde-amino Acids Schiff Bases Ligands, *Chemical and Pharmaceutical Bulletin*, **62(1)**, (2014), 12-15.
35. **R. Danac**, I. Mangalagiu, Antimycobacterial activity of nitrogen heterocycles derivatives: bipyridine derivatives. Part III, *Eur. J. Med. Chem.*, **74**, (2014), 664-670.
36. 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.
37. 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, *Mater. Chem Phys.*, **135**, (2012), 123-129.
38. **R. Danac**, L. Leontie, A. Carlescu, G.I. Rusu, DC Electric Conduction Mechanism of Some Newly Synthesized Indolizine Derivatives in Thin Films, *Mater. Chem Phys.*, **134**, (2012), 1042-1048.
39. **R. Danac**, R. Rusu, A. Rotaru, A. Pui, S. Sova, New Conjugates of Calix[4]arenes Bearing Bipyridine and Indolizine Heterocycles, *Supramol. Chem.*, **24(6)**, (2012), 424-435.

40. 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, *Mater. Chem Phys.*, **127**, (2011), 471-478.
41. L. Leontie, **R. Danac**, I. Druta, A. Carlescu, Electron transport properties of some newly synthesized nonsymmetrical bisindolizines in thin films, *Synth. Metals*, **160 (23-24)**, (2010), 2526-2533.
42. R. Gradinaru, A. Luca, I. Cretescu, **R. Danac**, Fluorescent conjugates: pH stability, dye-DNA interaction and biological activity, *Rev. Chim. (Bucharest)*, **61(9)**, (2010), 903-906.
43. L. Leontie, **R. Danac**, I. Druta, A. Carlescu, G. I. Rusu, Newly synthesized fused heterocyclic compounds in thin films with semiconductor properties, *Synth. Metals*, **160**, (2010), 1273-1279.
44. M. Dumitras, N. Apostolescu, A. Luca, **R. Danac**, Thermal degradation of some new 7-(4'-pyridyl)-indolizine derivatives, *Acta Chem. Iasi*, **17**, (2009), 209-218.
45. A. Rotaru, I. Druta, E. Avram, **R. Danac**, Synthesis and properties of fluorescent 1,3-substituted mono and biindolizines", *Arkivoc*, **13**, (2009), 287-299.
46. 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.
47. **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.
48. 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.
49. 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.
50. 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.
51. **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.
52. L. Leontie, **R. Danac**, I. Druta, Electrical conduction mechanism in N-(p-R-phenacyl)-4,5-diazafluorene-9-one bromides thin films, *Synthetic Metals*, **155(2-4)**, (2006), 224-229.
53. L. Leontie, **R. Danac**, Optical properties of some new synthesized organic semiconductors in thin films, *Scripta Materialia*, **54(2)**, (2006), 175-179.
54. 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.
55. 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.

Lista carti/capitole de carte publicate:

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 pag.) (ISBN: 978-606-8363-09-7x2).

3. Roxana-Maria Amarandi, Maria Cristina Al-Matarneh, **Ramona Danac**, Alcaloizi indolici naturali, Editura Universitatii „Alexandru Ioan Cuza” Iasi, **2017** (172 pag.) (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).

Brevete:

1. Mangalagiu, I.I.; Amăriucăi-Mantu, D.; Antoci, V.; Zbancioc, Ghe.; 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

03.11.2025

Prof. dr. Ramona Danac

