

Nume Prenume: **DIACONU Dumitrela**
Gradul didactic: **Asistent universitar doctor**
Instituția unde este titular: **UNIVERSITATEA ALEXANDRU IOAN CUZA DIN IAȘI**
Facultatea: **de CHIMIE**
Departamentul: **CHIMIE ORGANICĂ**

LISTA LUCRĂRILOR ȘTIINȚIFICE

A. Teza de doctorat

Noi compuși hibridi ce conțin azaheterocicluri de cinci și șase atomi: sinteză, structură și aplicații, elaborată sub coordonarea prof. dr. Ionel Mangalagiu la Școala Doctorală de Chimie, Universitatea "Alexandru Ioan Cuza" din Iași, susținută public în data de 12 Februarie 2021. Doctor în Chimie conform O.M. nr. 4387 / 06.06.2021.

B. Cărți și capitole în cărți publicate în ultimii 5 ani (2021-2025)

1. Mangalagiu, V., Dănac, R., Olaru, A.M., [Diaconu, D.](#), Mangalagiu, I.I., Chemistry and Biochemistry: Research Progress Vol. 1, 24 January 2025, Page 160-188, Antimycobacterial activity of nitrogen heterocycles compounds with indolizine skeleton, 2025. <https://doi.org/10.9734/bpi/cbrp/v1/3855>

C. Lucrări indexate ISI/BDI publicate în ultimii 5 ani (2021-2025)

1. Balaes, T., Mangalagiu, V., Antoci, V., Amăriucăi-Mantu, D., [Diaconu, D.*](#), Mangalagiu, I.I.*, Hybrid *bis*-(imidazole/benzimidazole)-pyridine derivatives with antifungal activity of potential interest in medicine and agriculture *via* improved efficiency methods, *Pharmaceuticals*, 18(4), 495, **2025**.
2. [Diaconu, D.](#), Savu, M., Ciobanu, C., Mangalagiu, V., Mangalagiu, I.I., Current strategies in design and synthesis of antifungals hybrid and chimeric diazine derivatives, *Bioorganic & Medicinal Chemistry*, 119, 118069, **2025**.
3. Mangalagiu, V., Dănac, R., [Diaconu, D.*](#), Zbancioc, G., Mangalagiu, I.I.*, Hybrids diazine: recent advancements in modern antimicrobial therapy, *Current Medicinal Chemistry*, 31(19), 2687 – 2705, **2024**.
4. [Diaconu, D.](#), Mangalagiu, V., Dunca, S., Amăriucăi-Mantu, D., Antoci, V., Roman, T., Mangalagiu, I.I., Ultrasound assisted synthesis of hybrid quinoline anchored with 4-R-benzenesulfonamide moiety with potential antimicrobial activity, *Heliyon*, 9, e21518, **2023**.
5. Oniciuc, L., Amariuca-Mantu, D., [Diaconu, D.](#), Mangalagiu, V., Dănac, R., Antoci, V., Mangalagiu, I.I., Benzoquinoline derivatives: an attractive approach to newly small molecules with anticancer activity, *International Journal of Molecular Sciences*, , 24, 8124, **2023**.
6. [Diaconu, D.](#), Antoci, V.; Mangalagiu, V.; Amariuca Mantu, D.; Mangalagiu, I.I., Quinoline–imidazole/benzimidazole derivatives as dual /multi targeting hybrids inhibitors with anticancer and antimicrobial activity, *Scientific Reports*, 12, 16988, **2022**.
7. [Diaconu, D.](#), Amăriucăi-Mantu, D., Antoci, V., Ciorteanu, R., Mangalagiu, V., Mangalagiu, I.I., Design and synthesis of new hybrid pyridine-imidazolium/benzimidazolium salts with antibacterial activity, *Revue Roumaine de Chimie*, 67 (1-2), 89-92, **2022**.

8. **Diaconu, D.**, Amăriucăi-Mantu, D., Mangalagiu, V., Antoci, V., Zbancioc, G., Mangalagiu, I.I., Ultrasound assisted synthesis of hybrid quinoline-imidazole derivatives: a green synthetic approach, *RSC Advances*, 11, 38297-38301, **2021**.

D. Lucrări publicate în ultimii 5 ani (2021-2025) în reviste și volume de conferințe cu referenți (neindexate)

- Reviste (proceedings)

1. **Diaconu, D.**, Mangalagiu, V., Amăriucăi-Mantu D., Antoci, V., Mangalagiu, I.I., Six-membered heterocyclic sulfonamides: synthesis, characterisation and antimicrobial properties, Abstract in Book of Abstracts of SGEM-VIENA-23 SGEM International Scientific Conferences on Earth & Planetary Sciences, 28 Noiembrie – 1 Decembrie, 2023, Viena, Austria, **2023**. DOI 10.5593/sgem2023V/6.2/s25.45
2. **Diaconu D.**, Mangalagiu, V., Ciorteanu, R., Mangalagiu, I.I. New Materials Based on Quinoline Sulfonamide - Metals with Antimicrobial Activity, Proceedings 31st International Conference on Metallurgy and Materials, 739-744, ISBN: 978-80-88365-06-8, ISSN:2694-9296, DOI: <https://doi.org/10.37904/metal.2022.4495>, **2022**.

- Selecție cu maximum 20 lucrări în volume de conferințe

- 1) **SGEM-VIENA-23 SGEM International Scientific Conferences on Earth & Planetary Sciences, 28 Noiembrie – 1 Decembrie, 2023, Viena, Austria, 2023**
<https://sgemviennagreen.org/>
Diaconu, D., Mangalagiu, V., Amăriucăi-Mantu D., Antoci, V., Mangalagiu, I.I., Six-membered heterocyclic sulfonamides: synthesis, characterisation and antimicrobial properties, Abstract in Book of Abstracts of SGEM-VIENA-23 SGEM International Scientific Conferences on Earth & Planetary Sciences, 28 Noiembrie – 1 Decembrie, 2023, Viena, Austria, 2023. DOI 10.5593/sgem2023V/6.2/s25.45
- 2) **NEW FRONTIERS IN NATURAL PRODUCT CHEMISTRY 2023, 12-13 Octombrie, Chișinău, Republica Moldova**
<https://ichem.md/seminar-stiintific-noi-frontiere-in-chimia-compusilor-naturali>
Diaconu, D., Mangalagiu, V., Amăriucăi-Mantu D., Antoci, V., Dănac, R., Mangalagiu, I.I., 1,3-Dipolar cycloaddition reactions of benzimidazolium-ylides to an activated symmetric alkyne, Abstract in Book of Abstracts of NEW FRONTIERS IN NATURAL PRODUCT CHEMISTRY, pag. 34, 2023.
<https://doi.org/10.19261/nfnpc.2023.ab27> (Poster)
- 3) **NEW FRONTIERS IN NATURAL PRODUCT CHEMISTRY 2023, 12-13 Octombrie, Chișinău, Republica Moldova**
<https://ichem.md/seminar-stiintific-noi-frontiere-in-chimia-compusilor-naturali>
Mangalagiu, V., **Diaconu, D.**, Moldoveanu, C., Zbancioc, G., Dănac, R., Amăriucăi-Mantu, D., Antoci, V., Mangalagiu, I.I., Hybrid and chimeric nitrogen heterocycles with biological activity, Abstract in Book of Abstracts of NEW FRONTIERS IN NATURAL PRODUCT CHEMISTRY, pag. 8, 2023.
<https://doi.org/10.19261/nfnpc.2023.ab01> (Oral presentation)
- 4) **NEW FRONTIERS IN NATURAL PRODUCT CHEMISTRY 2023, 12-13 Octombrie, Chișinău, Republica Moldova**
<https://ichem.md/seminar-stiintific-noi-frontiere-in-chimia-compusilor-naturali>
Mangalagiu, V., **Diaconu, D.**, Mangalagiu, I.I., Quinoline - sulfonamide - complexes with antimicrobial activity, Abstract in Book of Abstracts of NEW FRONTIERS IN NATURAL PRODUCT CHEMISTRY, pag. 33, 2023. <https://doi.org/10.19261/nfnpc.2023.ab26> (Poster)
- 5) **49th IUPAC World Chemistry Congress - IUPAC CHAINS 2023, 20-25 August 2023, The Hague, The Netherlands**
<https://iupac2023.org/>

- [Diaconu, D.](#), Amăriucăi-Mantu, D., Mangalagiu, V., Antoci, V., Mangalagiu, I.I., Sulfonamide hybrids with antimicrobial activity, Abstract in Book of abstracts of IUPAC CHAINS 2023, P1-B0057, page 574, **2023**. (Poster)
- 6) **49th IUPAC World Chemistry Congress - IUPAC CHAINS 2023, 20-25 August 2023, The Hague, The Netherlands**
<https://iupac2023.org/>
[Diaconu, D.](#), Amăriucăi-Mantu, D., Mangalagiu, V., Antoci, V., Ciobanu, C., Mangalagiu, I.I., Quinoline-benzimidazole hybrid compounds with anticancer activity, Abstract in Book of abstracts of IUPAC CHAINS 2023, P1-B0037, page 569, **2023**. (Poster)
- 7) **49th IUPAC World Chemistry Congress - IUPAC CHAINS 2023, 20-25 August 2023, The Hague, The Netherlands**
<https://iupac2023.org/>
Mangalagiu, I.I., Mangalagiu, V., [Diaconu, D.](#), Dănac, R., Antimicrobial and anticancer activity of hybrid nitrogen heterocycles, Abstract in Book of abstracts of IUPAC CHAINS 2023, O11-0026, page 143, **2023**. (Oral presentation)
- 8) **49th IUPAC World Chemistry Congress - IUPAC CHAINS 2023, 20-25 August 2023, The Hague, The Netherlands**
<https://iupac2023.org/>
Mangalagiu, V., Antoci, V., [Diaconu, D.](#), Mangalagiu, I.I., Hybrid quinoline derivatives with antimicrobial activity, Abstract in Book of abstracts of IUPAC CHAINS 2023, P1-B0027, page 568, **2023**. (Poster)
- 9) **49th IUPAC World Chemistry Congress - IUPAC CHAINS 2023, 20-25 August 2023, The Hague, The Netherlands**
<https://iupac2023.org/>
Dănac, R., Sardaru, M., Ciorteanu, R., Amărăndi, R.M., Ciobanu, C., [Diaconu, D.](#), Mangalagiu, I.I., New Indolizinic Tubulin Inhibitors with Anticancer Properties, Abstract in Book of abstracts of IUPAC CHAINS 2023, P1-A0052, page 443, **2023**. (Poster)
- 10) **The Adriatic NMR Conference 2023, June 1–4 2023, Mali Ston, Croatia**
<https://adriatic-nmr-conference.hkd.hr/>
Amăriucăi-Mantu, D., Antoci, V., Dănac R., [Diaconu, D.](#), Mangalagiu, V., Zbancioc, G., Moldoveanu, C., Mangalagiu, I.I., Azaheterocycles: synthesis, structure, applications, Abstract in Book of abstracts of Adriatic NMR Conference 2023, page 42. (Oral presentation)
- 11) **International Meet on Pharmaceutics and Drug Delivery Systems, PHARMAMEET-2023, February 09-11, 2023, Porto, Portugal**
<https://www.albedomeetings.com/2023/pharmameet>
[Diaconu, D.](#), Mangalagiu, V., Mangalagiu, I.I., Six and Five Member Ring Azaheterocycles of Interest as Antimicrobials and Anticancer Potential Drugs, Abstract in Book of abstracts of PHARMAMEET2023, page 18, **2023**. (Oral presentation)
- 12) **World Chemistry Forum, 12-14 April, 2023, Budapest, Hungary**
<http://istci.org/wcf2023/>
[Diaconu, D.](#), Amăriucăi-Mantu, D., Mangalagiu, V., Antoci, V., Ciobanu, C., Mangalagiu, I.I., Quinoline-benzimidazole hybrid compounds with anticancer and antimicrobial activity, World Chemistry Forum, pag. 77, 2023. (Poster presentation)
- 13) **World Chemistry Forum, 12-14 April, 2023, Budapest, Hungary**
<http://istci.org/wcf2023/>
Mangalagiu, V., Antoci, V., [Diaconu, D.](#), Mangalagiu, I.I., Chemistry and Antimicrobial Activity of Hybrid Quinoline – Triazole Derivatives, Abstract in Book of Abstracts of World Chemistry Forum, pag. 75, 2023. (Poster presentation)
- 14) **World Chemistry Forum, 12-14 April, 2023, Budapest, Hungary**

<http://istci.org/wcf2023/>

Mangalagiu, V., [Diaconu, D.](#), Mangalagiu, I.I., Hybrid Azaheterocycles with Antimicrobial and Anticancer Activity, Abstract in Book of Abstracts of World Chemistry Forum, pag. 45, 2023. (Oral presentation)

15) **MDPI World Tuberculosis Day, March 24, 2023 (webinar)**

Mangalagiu, V., [Diaconu, D.](#), Amariuca-Mantu, D., Antoci, V., Danac, R., Moldoveanu, C., Zbancioc, Ghe., Mangalagiu, I.I. New (Di-)Azine and (Di-)Azole with antituberculosis activity, MDPI World Tuberculosis Day Webinar 2023, March 24, 2023.

16) **Sustainable Chemistry Congress, London, United Kingdom, March 29 - 31, 2023**

<https://archive.oxfordglobal.com/wp-content/uploads/2022/11/Sustainability-Series-Agenda-at-a-Glance-2023.pdf>

Mangalagiu, V., [Diaconu, D.](#), Mangalagiu, I.I., Ultrasounds assisted reactions applied in the quinoline derivatives. A green approach, Sustainable Chemistry Congress, Londra, UK, March 29 - 31, 2023. (Oral presentation)

17) **International Meet On Medicinal Chemistry, Drug Discovery & Drug Delivery-MEDCHEMMEET 2022, June 23-25, 2022. Copenhagen, Denmark**

<https://www.albedomeetings.com/2022/medchemmeet>

Mangalagiu, V., [Diaconu, D.](#), Amariuca-Mantu, D., Antoci, V., Mangalagiu, I.I., Hybrid five and six membered ring nitrogen heterocycles with antimicrobial and anticancer activity, MEDCHEMMEET 2022-International Meet On Medicinal Chemistry, Drug Discovery & Drug Delivery, June 23-25, 2022. Copenhagen, Denmark. (Poster presentation, P4- pag. 3).

18) **International Meet On Medicinal Chemistry, Drug Discovery & Drug Delivery-MEDCHEMMEET 2022, June 23-25, 2022. Copenhagen, Denmark**

<https://www.albedomeetings.com/2022/medchemmeet>

Mangalagiu, I.I., Mangalagiu V., Amariuca Mantu, D., Antoci V., [Diaconu, D.](#), New azaheterocycles derivatives: design, synthesis and applications, MEDCHEMMEET 2022- International Meet On Medicinal Chemistry, Drug Discovery & Drug Delivery, June 23-25, 2022. Copenhagen, Denmark. (Oral presentation, OP- pag. 8).

19) **22nd Tetrahedron Symposium - Catalysis for a Sustainable World, 28 Iunie-1 Iulie 2022, Lisabona, Portugalia**

<https://www.elsevier.com/events/conferences/tetrahedron-symposium>

[Diaconu, D.](#), Amăriucăi-Mantu, D., Mangalagiu, V., Antoci, V., Dunca, S.I., Mangalagiu, I.I., M²⁺ complexation of hybrid quinoline-sulfonamide derivatives: an useful approach for increasing antimicrobial activity, Abstract in Book of Abstracts of 22nd Tetrahedron Symposium, P2.33, 2022. (Poster)

20) **31st International Conference on Metallurgy and Materials METAL 2022, 18-19 Mai 2022, Brno, Cehia,**

<https://www.metalconference.eu/cz/>

[Diaconu D.](#), Mangalagiu, V.; Mangalagiu, I.I. New Materials Based on Quinoline Sulfonamide - Metals with Antimicrobial Activity, Abstract in Book of abstracts of METAL 2022 - 31st International Conference on Metallurgy and Materials, PE13- pag. 68, 2022. (Poster)

E. Brevete obținute în întreaga activitate

1. Mangalagiu, I.I.; Amăriucăi-Mantu, D.; Antoci, V.; Zbancioc, Ghe.; Moldoveanu, C.; [Cucu, D.](#); Dănac, R.; Mangalagiu, V.: *Obtaining class of anthracene-imidazole compounds with anti-tuberculosis effect by performing N-alkylation imidazole and benzimidazole with 9-chloromethyl-anthracene, and subjecting intermediates to quaternization/Procedeu pentru obținerea unei noi clase de compuși antracen-imidazolici cu activitate antituberculoasă*, Patent RO (Oficiul de Stat pentru

Inventii si Marci-OSIM), no. RO134192-A0/2020, Derwent Primary Accession Number: 2020-605892,
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