



Școala Doctorală de Chimie

Instituția Organizatoare de Studii Universitare de Doctorat (IOSUD)

Rezultatele activității științifice ale studenților doctoranzi din SD CHEM pentru anul 2025

Articole științifice publicate in extenso în reviste cotate Web of Science cu factor de impact

- 1) Al-Matarneh A., Simionescu N., Nicolescu A., Cibotariu N., Danac R., Al-Matarneh M. C., Mangalagiu I. I., Pyrrolo-fused phenanthridines as potential anticancer agents: Synthesis, prediction, and biological evaluation, *Journal of Biochemical and Molecular Toxicology*, 39, 70443/1-17, **2025**, <https://doi.org/10.1002/jbt.70443>, Zona galbenă: Q2
- 2) Simionescu N., Al-Matarneh A., Mangalagiu I. I., Cibotariu N., Uritu C. M., Al-Matarneh C. M., Pinteala M., Reinvestigating Pyrrol-2-One-Based Compounds: From Antimicrobial Agents to Promising Antitumor Candidates, *Pharmaceuticals* 18, 1813-1832, **2025**, <https://doi.org/10.3390/ph18121813>, Zona roșie: Q1
- 3) Ciorteanu, R., Ciobanu, C.I., Cibotariu, N., Shova, S., Antoci, V., Mangalagiu I.I., Danac, R., Functionalized Indolizines as Potential Anticancer Agents: Synthetic, Biological and In Silico Investigations, *International Journal of Molecular Science*, 26, 8368, **2025**, <https://doi.org/10.3390/ijms26178368>, Zona roșie: Q1
- 4) Ciorteanu, R., Danila, A., Ciobanu, C.I., Radu, I., Mangalagiu I.I., Danac, R., Efficient Synthesis of Unsymmetrical 7,7'-Biindolizines, *Molbank*, **2025**(4), M2074, **2025**, <https://doi.org/10.3390/M2074>, Zona albă: Q4
- 5) Ciorteanu, R., Danila, A., Ciobanu, C.I., Radu, I., Mangalagiu I.I., Danac, R., Efficient Synthesis of Unsymmetrical 7,7'-Biindolizines, *Molbank*, **2025**(4), M2074, **2025**, <https://doi.org/10.3390/M2074>, Zona albă: Q4
- 6) Frîncu, C., Ghinet, A., Belei, D., Chankvetadze, B., Shova, S., Lipka, E., Dascalu, A.E., Optimizing Enantiomeric Resolution of Chiral Triazoles in Supercritical Fluid Chromatography, *Chirality*, 37 (2), e70016, **2025**, [10.1002/chir.70016](https://doi.org/10.1002/chir.70016) Zona galbenă: Q2
- 7) Frîncu, C., Ghinet, A., Shova, S., Ciobanu, C.I., Nica, A.S., Petre, B. A., Bîcu, E., Belei, D., Regioselective C-Alkylation in a Series of Functionalized 1,2,3-Triazoles: An Unexpected Preference Over O-Alkylation, *Journal of Molecular Structure*, under review, Zona galbenă: Q2
- 8) Iancu, C., Nita, C., Soroaga L.V., Negru, A.G., Olariu, R.I., Arsene, C., First chemical insights into airborne microbial communities isolated from ambient particulate matter in the Iasi urban area, north-eastern Romania, *Journal of Liquid Chromatography and Related Technologies*, 1-16, **2025**, <https://doi.org/10.1080/10826076.2025.2554062>, Zona albă: Q4
- 9) Mairean C.-P., Roman C., Arsene C., Bejan I.-G., Olariu R.-I., Gas-phase ozone reaction kinetics of a series of cis-3- hexenyl esters under simulated atmospheric conditions, *Journal of Physical Chemistry A*, 129, 16, 3696–3708, **2025**, <https://doi.org/10.1021/acs.jpca.5c01004>, Zona gri: Q3
- 10) Mihalcea, E., Drochioiu, G. Improved protein assay based on the biuret reaction: interference of proteinogenic amino acids. *Revue Roumaine de Chimie*, **2025**, <https://revroum.lew.ro/2025/07/no-7-8-2025/> Zona albă: Q4
- 11) Nistor, M., Nicolescu, A., Amarandi, R. -M., Pui, A., Stiufiuc, R.-I., Dragoi, B., Multi spectroscopic investigation of maisine-based microemulsions as convenient carriers for co-delivery of anticancer and anti-inflammatory drugs, *Scientific Reports*, 15, 5175, **2025**, <https://doi.org/10.1038/s41598-025-89540-w>, Zona roșie: Q1

Rezultatele activității științifice ale studenților doctoranzi din SD CHEM



- 12) Nistor, M., Balan, V., Pui, A., Zara-Danceanu, C.M., Postu, P.A., Grigoras, M., Gherca, D., Toma, V., Uritu, C.M., Fratila, R.M., Stiuftuc, R.-I., Dragoi, B., Precise-Engineering of Monodisperse Magnetite Nanoparticles with Low level of Cobalt Doping for Enhanced MRI Contrast Performance, Materials & Design, under review, **Zona roșie: Q1**
- 13) Radu, I., Borhan, A.I., Gherca, D., Dirtu, A.C., Dirtu, D., Popescu, D., Husanu, M.A., Pui, A., Cobalt oxyhydroxide co-catalyst loaded onto Al:SrTiO₃ surface to boost photocatalytic performance, Materials Chemistry and Physics, 332, 130274, 2025. DOI: 10.1016/j.matchemphys.2024.130274. **Zona galbenă: Q2**

Articole științifice publicate in extenso în volumele conferințelor

- 1) Al-Matarneh C. M., Simionescu N., Al-Matarneh A., Mangalagiu I. I., Old compounds, new purpose: iodine-substituted pyrrol-2-ones for targeted antitumor therapy, Proceedings of International Conference “Progress in Organic and Macromolecular Compounds” ISSN: 2810-2126 pag 91-93, 2025.

Manifestări științifice naționale (postere și prezentări orale)

- 1) **20th International Conference of Constructive Design and Technological Optimization in Machine Building, OPROTEH 21 – 23 May 2025**, Bacău <http://oproteh.ub.ro/> Lazăr F. G., Al-Matarneh A., Al-Matarneh C. M., Advanced synthesis of sulfonyl-substituted pyrrole-fused (iso)quinoline derivatives
- 2) **OPEN DOOR TO THE FUTURE SCIENTIFIC COMMUNICATIONS SESSION OF YOUNG RESEARCHERS MacroYouth 2025**, Iași, November 19, <https://icmpp.ro/macroyouth2025/> Al-Matarneh A., Lazăr F. G., Roșca I., Nicolescu A., Al-Matarneh C. M., Mangalagiu I. I., Phenanthridinium monoquaternary salts: synthesis, structural insights, and antimicrobial activity
- 3) **IasiChem 2025** Iași, România, 30-31 Octombrie 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Lazăr F.-G., Al-Matarneh A., Al-Matarneh C., Pinteală M., Development and characterization of nitrogen-heterocyclic sulfonamides
- 4) **Progress in Organic and Macromolecular Compounds**, Iași, România, 23-26 Septembrie 2025 <https://icmpp.ro/macroiiasi2025/> Al-Matarneh C., Simionescu N., Al-Matarneh A., Mangalagiu I., Old compounds, new purpose: iodine substituted pyrrol-2-ones four targeted antitumor therapy
- 5) **Sesiunea de Comunicări Științifice a Studenților, Masteranzilor și Doctoranzilor "CHIMIA - FRONTIERĂ DESCHISĂ SPRE CUNOAȘTERE"**, ediția a XVI-a, Facultatea de Chimie, Iași, 19 Iunie 2025. <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Birgoanu, A.M., Zbancioc, G., Functionalization of quinoline for the synthesis of derivatives with biological applications
- 6) **IasiChem 2025**, Faculty of Chemistry Conference, Iași, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Birgoanu, A.M., Ciobanu, C.I., Zbancioc, G., Synthesis of pyrroloquinoline derivatives by conventional and unconventional methods.
- 7) **Sesiunea națională metodică-științifică "METODE ȘI MIJLOACE DE ÎNVĂȚĂMÂNT PENTRU CHIMIE"**, ediția a 53-a, Iași, 15 noiembrie 2025 <https://www.chem.uaic.ro/ro/manifestari/mmic2025.html> Birgoanu, A.M., Cazan, D.E., Reacții care aprind interesul: vocea elevilor
- 8) **Sesiunea de Comunicări Științifice a Studenților, Masteranzilor și Doctoranzilor "CHIMIA - FRONTIERĂ DESCHISĂ SPRE CUNOAȘTERE"**, ediția a XVI-a, Facultatea de Chimie, Iași, 19 Iunie 2025. <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Burghilea, M.O., Bicu, E., Belei, D., Synthesis of new triazole cinnamic esters.
- 9) **Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor "CHIMIA - FRONTIERĂ DESCHISĂ SPRE CUNOAȘTERE"**, ediția a XVI-a, Iași, 19 Iunie 2025 <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Filipciuc, D., Ciorțeanu, R., Ciobanu,



C. Mangalagiu, I.I., Danac, R., SYNTHESIS OF NEW 1,10-PHENANTHROLINE DERIVATIVES WITH POTENTIAL APPLICATIONS

- 10) **Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor "CHIMIA - FRONTIERĂ DESCHISĂ SPRE CUNOAȘTERE"**, ediția a XVI-a, Iași, 19 Iunie 2025 <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Danila, A., Ciorteanu, R., Ciobanu, C., Mangalagiu, I.I., Danac, R., SUBSTITUTED PYRROLOINDOLIZINES WITH ANTICANCER POTENTIAL
- 11) **Recent Advances in Natural Sciences Yield the Future for the European Citizens and Society Ready For Europe, RARE 2025 - 2nd Edition**, Agigea, Constanta, 02-05 October 2025 <https://recent-air.uaic.ro/rare2025.php?menu=conferenceMenu> Ciorteanu, R., Ciobanu, C.I., Mangalagiu, I.I., Danac, R., Efficient Synthesis of Unsymmetrical 7,7'-Biindolizines
- 12) **IasiChem 2025**, Faculty of Chemistry Conference, Iasi, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Danila, A., Ciorteanu, R., Ciobanu, C., Mangalagiu, I.I., Danac, R., [2+2+1] Cycloaddition for the Synthesis of Unsymmetrical 7,7'-Biindolizines
- 13) **IasiChem 2025**, Faculty of Chemistry Conference, Iasi, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Ciorteanu, R., Ciobanu, C., Mangalagiu, I.I., Danac, R., Synthesis and anticancer screening of new functionalized indolizines, awarded with best poster presentation.
- 14) **IasiChem 2025**, Faculty of Chemistry Conference, Iasi, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Danila, A., Ciorteanu, R., Ciobanu, C.I., Mangalagiu I.I., Danac, R., [2+2+1] Cycloaddition for the synthesis of unsymmetrical 7,7'-biindolizines, Abstract in Book of Abstract 2025
- 15) **Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor "CHIMIA-FRONTIERĂ DESCHISĂ SPRE CUNOAȘTERE"**, Facultatea de Chimie, Iasi, Romania, 19 Iunie 2025, <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Frincul, C., Bicu, E., Ghinet, A., Belei, D., Study of the C-alkylation reaction of benzotriazole derivatives, Abstract in Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor, pp. 20, 2025.
- 16) **RARE 2025, Prof. Dr. Ioan Borcea" Marine Biological Station**, Agigea, Romania, 02-05 October 2025 <https://recent-air.uaic.ro/rare2025.php?menu=conferenceMenu> Iancu, C., Nita, C., Negru, A.G., Olariu, R.I., Arsene, C., Molecular fingerprints of airborne bioaerosols revealed by MALDI-MS, Abstract in Book of Abstract 2025.
- 17) **The 16th Scientific Session of Undergraduate, Master and PhD Students 2025**, Faculty of Chemistry Conference, Iasi, Romania, 19 June 2025 <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Iancu, C., Soroaga, V.L., Negru, A.G., Olariu, R.I., Arsene, C., Elemental composition of bacteria, fungi, and yeasts isolates from airborne bioaerosol particles, Abstract in Book of Abstract 2025.
- 18) **IasiChem 2025**, Faculty of Chemistry Conference, Iasi, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Iriciuc, A. D., Arsene C., Modern analytical approaches in prospecting ecological solutions for pharmaceutical waste management, Abstract in Book of Abstract 2025.
- 19) **Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor "CHIMIA - FRONTIERĂ DESCHISĂ SPRE CUNOAȘTERE"**, ediția a XVI-a, Iași, 19 Iunie 2025, <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Marandis C.-G., Amariuca-Mantu D., Antoci V., Diaconu D., Ciobanu C.-I., Mangalagiu I.I., Mihai M., Novel compounds with indolizinic skeleton: synthesis and characterization, Abstract in Book of Abstracts (PP11, pp. 48).
- 20) **IasiCHEM 2025 CONFERENCE 6th Edition**, Iasi, Romania, October 30 – 31 2025, <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Marandis C.-G., Amariuca-Mantu D., Antoci V., Ciobanu C.-I., Mangalagiu I.I., Mihai M., Synthesis of new hybrid-chimeric compounds



via Cu(I)-catalyzed Huisgen azide-alkyne 1,3-dipolar cycloaddition, Abstract in Book of Abstracts (PI-15, pp. 29).

- 21) **MacroYouth - OPEN DOOR TO THE FUTURE SCIENTIFIC COMMUNICATIONS OF YOUNG RESEARCHERS 6th Edition**, Iasi, Romania, November 19, 2025, <https://icmpp.ro/macroyouth2025/index.php> Marandis C.-G., Amariuca-Mantu D., Antoci V., Ciobanu C.-I., Mangalagiu I.I., Mihai M., SYNTHESIS OF 1,2,3-TRIAZOLE-1,4-DISUBSTITUTED DERIVATIVES via Cu(I)-CATALYZED HUISGEN AZIDE-ALKYNE CYCLOADDITION, Abstract in Book of Abstracts (OC-16, pp. 56).
- 22) **IasiCHEM 2025 Conference, 7th Edition**, Iasi, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Nistor, M., Balan, V., Pui, A., Fratila, M.R., Stiufiuc, R.-I., Dragoi, B., Zn10%:Fe₃O₄ Nanoparticles as Dual-Function Systems for Controlled Doxorubicin Release and Magnetic Hyperthermia.
- 23) **Sesiunea de comunicări științifice a studenților, masteranzilor și doctoranzilor**, Faculty of Chemistry Conference, Iasi, Romania, 19 June 2025, <https://www.chem.uaic.ro/ro/manifestari/scssmd2025.html> Savu, M., Antoci, V., Amăriucai-Mantu, D., Dănac, R., Diaconu, D., Ciobanu, C., I. Mangalagiu, I., NEW HYBRID COMPOUNDS WITH PHTHALAZINE SCAFFOLD OBTAINED THROUGH CLICK CHEMISTRY, Abstract in SCS - SMD 2025.
- 24) **IasiChem 2025**, Faculty of Chemistry Conference, Iasi, Romania, 30-31 October 2025 <https://www.chem.uaic.ro/ro/manifestari/zu-2025.html> Savu, M., Antoci, V., Amăriucai-Mantu, D., Dănac, R., Diaconu, D., Ciobanu, C., Shova, S., I. Mangalagiu, I., DESIGN, SYNTHESIS AND CHARACTERIZATION OF NOVEL HYBRID COMPOUNDS BASED ON PHTHALAZINO-ACETOPHENONE SCAFFOLDS, Abstract in IasiChem 2025.
- 25) **MacroYouth 2025, ICMPP** - Petru Poni Institute of Macromolecular Chemistry of Romanian Academy, Iasi, Romania, 19 November 2025 <https://icmpp.ro/macroyouth2025/index.php> Savu, M., Antoci, V., Amăriucai-Mantu, D., Dănac, R., Diaconu, D., Ciobanu, C., I. Mangalagiu, I., DESIGN, NOVEL PHTHALAZINO-ACETOPHENONE HYBRIDS: DESIGN, SYNTHESIS, AND STRUCTURAL CHARACTERIZATION, Abstract in MacroYouth 2025.

Manifestări științifice internaționale

- 1) **MEDICINA, ȘTIINȚELE MOLECULARE ȘI DE MEDIU 2025 MedMolMed 2025**, Chișinău, Republica Moldova, 10-15 November 2025 <https://icmpp.ro/medmolmed2025/index.php> Simionescu N., Petrovici A. R., Al-Matarneh A., Marinas I. C., Al-Matarneh C. M., Targeting Chronic Wound Pathogens with Sulfonamide-Enhanced Nitrogen Scaffolds
- 2) **MEDICINA, ȘTIINȚELE MOLECULARE ȘI DE MEDIU 2025 MedMolMed 2025**, Chișinău, Republica Moldova, 10-15 November 2025 <https://icmpp.ro/medmolmed2025/index.php> Simionescu N., Al-Matarneh A., Popușoi A., Nicolescu A., Kulcički V., Al-Matarneh C. M., Design, synthesis, and characterization of novel pyrrole-terpenic hybrids
- 3) **International Congress MEDICINE, MOLECULAR AND ENVIRONMENTAL SCIENCES 2025** “From chemistry to medicine – 35 years of Moldo-Romanian scientific collaboration, Chișinău, Republic of Moldova, 15 November 2025 <https://icmpp.ro/medmolmed2025/index.php> Birgoanu, A.M., Țicaleac, C., Ciobanu C., Mangalagiu, I., Moldoveanu, C., Zbancioc, G., Quinoline functionalization for the obtaining of biologically useful compounds
- 4) **INTERNATIONAL SARAJEVO SCIENTIFIC RESEARCH AND INNOVATION CONGRESS, BOSNIA-HERZEGOVINA**, 18-19 October 2025 <https://career.upatras.gr/3rd-international-sarajevo-congress-scientific-research-and-innovationhttp://www.photocatalysis-workshop.com/> Ciorțeanu, R., Ciobanu, C.I., Mangalagiu, I.I., Danac, R., Synthesis and anticancer potential of new functionalized indolizines and imidazopyridines



- 5) OPEN DOOR TO THE FUTURE SCIENTIFIC COMMUNICATIONS OF YOUNG RESEARCHERS 6th EDITION Iași, Romania, 19 November 2025 <https://icmpp.ro/macroyouth2025/> Ciorteanu, R., Ciobanu, C., Mangalagiu, I.I., Danac, R., FUNCTIONALIZED INDOLIZINES AS POTENTIAL ANTICANCER AGENTS
- 6) International Workshop on Polymer Structures for Medical Applications – PolymerTalent 2025, organized within the framework of the NAWA “Welcome to Poland” project, supported by the Polish National Agency for Academic Exchange (Project No. BNP/WTP/2023/1/00015), November 26, 2025, <https://cmpw-pan.pl/2025/10/20/workshop/> - Peer-reviewed abstract Marandis C.-G., Petrila L.-M., Lotos E.-D., Mangalagiu I., Pispas S., Mihai M., Study of the binding between human serum albumin and chitosan derivatives, Abstract in Book of Abstracts (P5, pp. 31)
- 7) 17th International Conference on Nanomaterials - Research & Application, NANOCON 2025, Brno, Czech Republic, 15-17 October 2025 <https://www.nanocon.eu/en/> Nistor, M., Balan, V., Pui, A., Fratila, M.R., Stiufiuc, R.-I., Dragoi, B., Zinc-Doped Magnetite Nanoparticles for Magnetic Hyperthermia: In Vitro Evaluation in MDA-MB-231 Breast Cancer Cells;
- 8) 17th International Conference on Nanomaterials - Research & Application, NANOCON 2025, Brno, Czech Republic, 15-17 October 2025 <https://www.nanocon.eu/en/> Zara-Danceanu, C.-M., Nistor, M., Pui, A., Balan, V., Stiufiuc, R.-I., Dragoi, B., Synthesis, Characterization, and Cytotoxic Evaluation of Zn-doped Fe₃O₄ Nanoparticles loaded with DOX for Drug Delivery Applications.

Brevete

- 1) **Metodă de sinteză a nanoparticulelor magnetice dopate cu elemente tranziționale pentru aplicații medicale**, Mirela Nistor, Brîndușa Drăgoi, Rareș-Ionuț Știufiuc.