



Școala Doctorală de Chimie

Nr. 151/10.02.2025/16.05.2025

**TEMATICA PENTRU CONCURSUL DE ADMITERE LA DOCTORAT
sesiunea iulie 2025****Prof. univ. dr. habil. Cecilia ARSENE****1. Metode moderne de analiză utilizate în caracterizarea unor arhitecturi organice cu fragment indolizinic pentru diverse aplicații (ro)***Modern analyses methods involved in the characterization of organic architectures with indolizine moiety for various applications (en)***Bibliografie/References**

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3. Dong H., Xu Y., Han J., Deng H., Shao M., Chen J., Zhang H., Cao W., Facile one-pot tandem synthesis of perfluoroalkylated indolizines under metal-free mild conditions, *Tetrahedron*, 73(7), 938-944, 2017. DOI: 10.1016/j.tet.2017.01.005.
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2. Abordări analitice moderne în prospectarea unor soluții ecologice pentru managementul deșeurilor medicamentoase (ro)*Modern analytical approaches in prospecting ecological solutions for pharmaceutical waste management (en)***Bibliografie/References**

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- Purschke, B., Scheibelberger, R., Axmann, S., Adler, A., Jager, H., Impact of substrate contamination with mycotoxins, heavy metals and pesticides on the growth performance and composition of black soldier fly larvae (*Hermetia illucens*) for use in the feed and food value chain, *Food Additives Contamin. Part A, Chem. Anal. Control Expos. Risk Assessment*, 34 1410-1420, 2017. DOI: 10.1080/19440049.2017.1299946
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Prof. univ. dr. Ionel MANGALAGIU

- Heterociclici cu azot de șase atomi cu schelet acetofenonic sau analogi: sinteză, structură, aplicații (ro)**
Six member ring azaheterocyclic compounds with acetophenonic skeleton: synthesis, structure, applications (en)
- Azaheterociclici de șase atomi hibridi sau chimerici: sinteză, structură, aplicații (ro)**
Six member ring hybrid or chimeric azaheterocyclic derivatives: synthesis, structure, applications (en)
- Sinteza și studiul unor azaheterocicluri funcționalizate cu potențial terapeutic (ro)**
Synthesis and study of functionalized azaheterocycles with therapeutic potential (en)

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- 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* 2023, 9, e21518.



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Prof. univ. dr. habil. Romeo-Iulian OLARIU

1. Dezvoltarea unui sistem ring-down spectroscopy pentru determinarea radicalilor NO₃ într-o cameră de simulare a reacțiilor chimice din atmosferă (ro)

Development of a ring-down spectroscopy system for the determination of NO₃ radicals in a simulation chamber of chemical reactions in the atmosphere (en.)

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2. Izolarea și caracterizarea compușilor psihoactivi din plantele utilizate în medicina tradițională (ro)

Isolation and characterization of psychoactive compounds from plants used in traditional medicine (en)

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3. Metode avansate de analiză pentru evaluarea caracteristicilor unor noi triazoli chirali cu diverse aplicații (ro)

Advanced analyses methods to evaluate the characteristics of new chiral triazoles with various applications (en)

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Prof. univ. dr. Aurel PUI

1. Oxizi metalici obtinuti prin tehnica ALD (Atomic Layer Deposition) pentru producerea de hydrogen (ro)

Metal oxides obtained by ALD (Atomic Layer Deposition) technique for hydrogen production

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Prof. univ. dr. habil. Gheorghiță ZBANCIOC

1. Sinteza de noi derivati 1,2-diazinici prin metode convenționale și neconvenționale (ro) *Synthesis of new 1,2-diazine derivatives by conventional and unconventional methods (en)*

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2. Compuși azaheterociclici cu potențial terapeutic: sinteză, proprietăți și activitate biologică (ro)

Azaheterocyclic compounds with therapeutic potential: synthesis, properties, and biological activity (en)

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