



Școala Doctorală de Chimie

28.04.2021

**TEMATICA PENTRU CONCURSUL DE ADMITERE LA DOCTORAT
sesiunea septembrie 2021****Prof. univ. dr. habil. Cecilia ARSENE**

- 1. Hidrocarburi aromatice policiclice și derivați ai acestora în atmosfera zonei urbane Iași, nord-estul României. Atribuirea surselor și estimarea riscurilor asupra sănătății umane (ro)**

Polycyclic aromatic hydrocarbons (PAHs) and their derivatives in the atmosphere of the Iasi urban area, north-eastern Romania: Sources apportionment and health risk assessments (en)

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5. Song, W., Cao, F., Lin, Y.C., Haque, M., Wu, X., Zhang, Y., Zhang, C., Xie, F., Zhang, Y.L., Extremely high abundance of polycyclic aromatic hydrocarbons in aerosols from a typical coal-combustion rural site in China: Size distribution, source identification and cancer risk assessment, *Atmospheric Research*, 248, 105192, 2021.



Prof. univ. dr. Elena BÎCU

1. Sinteze de derivați azaheterociclici cu proprietăți biologice (ro)

Synthesis of azaheterocycle derivatives with biological properties (en)

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1. Iuliana-Monica Moisea, **Elena Bîcu**, Amaury Farce, Joelle Dubois, Alina Ghinet, “Indolizine-phenothiazine hybrids as the first dual inhibitors of tubulin polymerization and farnesyltransferase with synergistic antitumor activity”, *Bioorganic Chemistry* 103, 104184 (2020). doi.org/10.1016/j.bioorg.2020.104184
2. Alina Ghinet, Iuliana-Monica Moise, Benoît Rigo, Germain Homerin, Amaury Farce, Joëlle Dubois, **Elena Bîcu**, “Studies on phenothiazines: New microtubule-interacting compounds with phenothiazine A-ring as potent antineoplastic agents”, *Bioorganic & Medicinal Chemistry* 24, 2307–2317 (2016). doi: 10.1016/j.bmc.2016.04.001
3. Iuliana-Monica Moise, Alina Ghinet, Dalila Belei, Joëlle Dubois, Amaury Farce, **Elena Bîcu**, “New indolizine–chalcones as potent inhibitors of human farnesyltransferase: Design, synthesis and biological evaluation”, *Bioorganic & Medicinal Chemistry Letters*, 26, 3730-3734 (2016). doi.org/10.1016/j.bmcl.2016.05.074
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Prof. univ. dr. Gabi DROCHIOIU

1. **Derivați ai zeinelor din porumb: obținere, purificare, caracterizare prin spectrometrie de masă MALDI-ToF, spectroscopie de infraroșu și alte tehnici utilizate în proteomică (ro)**
Derivatives of corn zeins: producing, purifying and characterization by mass spectrometry MALDI-ToF, infrared spectroscopy and other techniques used in proteomics (en)

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2. M. Devlin, Textbook of biochemistry, John Willey and Sons, New York, Chichester, Brisbane, Toronto, Singapore, 1986.
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5. Jureschi, M., Lupaescu, A. V., Ion, L., Petre, B. A., Drochioiu, G. Stoichiometry of heavy metal binding to peptides involved in Alzheimer's disease: Mass spectrometric evidence. *Advances in Experimental Medicine and Biology*. Adv Exp Med Biol.; 1140, 401-415, 2019.
6. Postu, P. A., Ion, L., Drochioiu, G., Petre, B. A., Glocker, M. O.* Mass spectrometric characterization of the zein protein composition in maize flour extracts upon protein separation by SDS-PAGE and 2D Gel electrophoresis. *Electrophoresis*. 40(20) 2747-2758, 2019.



Prof. univ. dr. Ionel MANGALAGIU

1. Azaheterocicli de cinci și șase atomi cu activitate anticanceroasă și antimicrobiană (ro) *Five and six member ring azaheterocycles with anticancer and antimicrobial activity (en)*

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1. Antoci, V., Cucu, D., Zbancioc, Ghe., Moldoveanu, C., Mangalagiu, V., Amariuca-Mantu, D., Aricu, A., Mangalagiu, I.I., Bis-(imidazole/benzimidazole)-pyridine derivatives: synthesis, structure and antimycobacterial activity. Part XII, *Future Medicinal Chemistry*, 12, 207-222, **2020**.
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Prof. univ. dr. habil. Romeo-Iulian OLARIU

1. **Studiul formării aerosolilor organici secundari din foto-oxidarea unor hidrocarburi aromatice în prezență de NO_x și SO_2 : Simulare în camere de reacție cu aer purificat versus aer ambiental ca matrice (ro)**

Investigations on secondary organic aerosols formation from the aromatic hydrocarbons photooxidation in the presence of NO_x and SO_2 : Reaction chamber simulation with purified versus ambiental air (en)

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Prof. univ. dr. Aurel PUI

1. **Nanostructuri oxidice cu aplicații catalitice (ro)**
Oxidic nanostructures for catalytic applications (en)

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