



Școala Doctorală de Chimie

03.06.2020

**TEMATICA PENTRU CONCURSUL DE ADMITERE LA DOCTORAT
sesiunea septembrie 2020****Prof. univ. dr. habil. Cecilia ARSENE****1) Investigarea proprietăților optice și chimice ale aerosolilor troposferici din zonele urbane poluate prin tehnici analitice *in situ* / Investigation of optical and chemical properties of tropospheric aerosols in polluted urban areas using *in situ* analytical techniques****Bibliografie**

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2) Influența particulelor de bioaerosoli primari din troposfera urbană asupra proceselor atmosferice / Urban tropospheric primary bioaerosol particles influence on atmospheric processes**Bibliografie**

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Prof. univ. dr. Elena BÎCU

1) Utilizarea reacțiilor multi-componente (MCR) în sinteza de azaherocicluri polisubstituiți, ca intermediari în obținerea de noi compuși biologic activi / One-pot multicomponent synthesis (MCR) of polisubstituted azaheterocycles as intermediates in obtaining new biologically active compounds

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2. Aly, A.A., Elshaiar, Y., Youssif, B., Brown, A., Abuo-Rahma, G., Novel Pyrazoloquinolin-2-ones: Design, synthesis, docking studies, and biological evaluation as antiproliferative EGFR-TK inhibitors, *Bioorganic Chemistry*, 90, 103045, 2019; <https://doi.org/10.1016/j.bioorg.2019.103045>
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Prof. univ. dr. Gabi DROCHIOIU

1) Studiul legării ionilor metalici la peptidele implicate în boli neurodegenerative prin spectrometrie de masă MALDI-ToF, spectroscopie de infraroșu și alte tehnici utilizate în proteomică / Study of the binding of metal ions to peptides involved in neurodegenerative diseases by MALDI-ToF mass spectrometry, infrared spectroscopy and other techniques used in proteomics

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11. Ion, L., Ciobanu, C. I., Murariu, M., Gradinaru, V. R., Drochioiu, G., SDS-induced peptide conformational changes: From triglycyl-glycine to amyloid- β oligomers associated with Alzheimer's disease, *Int. J. Pept. Res. Therap.*, 22, 45-55, **2016**.
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2) Metode rapide și sensibile de determinare a proteinelor și peptidelor / Fast and sensitive methods for determining proteins and peptides

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Prof. univ. dr. Ionel MANGALAGIU

1. Azine: sinteză, structură, proprietăți / Azines: synthesis, structure, properties

Bibliografie

1. Olaru, A., Vasilache, V., Danac, R., Mangalagiu I.I., Antimycobacterial activity of nitrogen heterocycles derivatives: 7-(pyridine-4-yl)- indolizine derivatives. Part VII, *Journal of Enzyme Inhibition and Medicinal Chemistry*, 32, 1291-1298, **2017**.
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2. Compuși hibridi azaheterociclici: sinteză, structură, proprietăți / Azaheterocycles hybrid compounds: synthesis, structure, properties

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

Chimismul troposferic nocturn: cinetica și mecanismele de degradare atmosferică a unor compuși organici aromatici volatili / Night-time tropospheric chemistry: kinetics and atmospheric degradation mechanisms of selected volatile aromatic organic compounds

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Prof. univ. dr. Aurel PUI

1) Nanoparticule magnetice funcționalizate pentru aplicații diverse

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2) Noi compuși coordinativi; sinteza, caracterizarea și aplicații

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