Școala Doctorală de Chimie (SD Chem)
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Dezvoltarea unor noi hibrizi heterociclici cu proprietăți biologice și aplicații în chimia medicinală

Design and Development of Novel Bioactive Heterocyclic Hybrids for Medicinal Chemistry Applications

Descrierea succintă a temei de cercetare (ro)

Această cercetare își propune dezvoltarea unor strategii sintetice eficiente pentru obținerea unor noi structuri azaheterociclice și investigarea proprietăților lor fizico-chimice, fotofizice și biologice. Accentul va fi pus pe relația structură–proprietate, pentru a înțelege modul în care designul molecular influențează comportamentul fluorescent și activitatea biologică. Rezultatele sunt așteptate să contribuie la dezvoltarea unor molecule funcționale cu potențiale aplicații în bioimagistică, senzori sau chimie medicinală.

Short description of the research subject (en)

This research aims to develop efficient synthetic strategies for the preparation of novel azaheterocyclic structures and to investigate their physicochemical, photophysical, and biological properties. Emphasis will be placed on structure–property relationships to understand how molecular design influences fluorescence behavior and biological activity. The results are expected to contribute to the development of functional molecules with potential applications in bioimaging, sensing, or medicinal chemistry.

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