



Școala Doctorală de Chimie

TEMATICA PENTRU CONCURSUL DE ADMITERE LA DOCTORAT sesiunea septembrie 2022

Prof. univ. dr. Elena BÎCU

1. Noi compuși azaheterociclici penta- și hexa-atomici. Sinteze și aplicații (ro)

New penta- and hexa-atomic azaheterocyclic compounds. Syntheses and applications (en)

Bibliografie/References

1. Moise, I.M., Bicu, E., Farce, A., Dubois, J., Ghinet, A., Indolizine-phenothiazine hybrids as the first dual inhibitors of tubulin polymerization and farnesyl transferase with synergistic antitumor activity, *Bioorganic Chemistry*, 103, 104184, **2020**;
2. Makhaeva, G.F., Lushchekina, N.P., Boltneva, S.V., Novel potent bifunctional carboxylesterase inhibitors based on a polyfluoroalkyl-2-imino-1,3-dione scaffold, *European Journal of Medicinal Chemistry*, 218, 113385, **2021**;
3. Metwally, N.H., Radwan, I.T., El-Serwy, W.S., Mohamed, M.A., Design, synthesis, DNA assessment and molecular docking study of novel 2(pyridin-2-ylimino) thiazolidin-4-one derivatives as potent antifungal agents, *Bioorganic Chemistry*, 84, 456–467, **2019**;
4. Metwally, N.H., Mohamed, M.S., AliRagb, E., Design, synthesis, anticancer evaluation, molecular docking and cell cycle analysis of 3-methyl-4,7-dihydropyrazolo [1,5-a]pyrimidine derivatives as potent histonelysine demethylases (KDM) inhibitors and apoptosis inducers, *Bioorganic Chemistry*, 88, 102929, **2019**;
5. Morak-Mlodawska, B., Pluta, K., Latocha, M., Jelen, M., Kusmierz, D., Synthesis, Anticancer Activity, and Apoptosis Induction of Novel 3,6-Diazaphenothiazines, *Molecules*, 24, 267, 2019;
6. Zhuang, C., Zhang, W., Sheng, C., Zhang, W., Xing, C., Miao, Z., Chalcone: A Privileged Structure in Medicinal Chemistry, *Chem. Rev.*, 117, 7762–7810, **2017**.

2. Noi derivați 1,2,3-triazolici. Sinteze și aplicații (ro)

New 1,2,3-triazole derivatives. Syntheses and applications (en)

Bibliografie/References

1. Lal, S., Diez-Gonzalez, S., [CuBr(PPh₃)₃] for Azide-Alkyne Cycloaddition Reactions under strict click conditions, *The Journal of the Organic Chemistry*, 76, 2367-2373, **2011**, DOI:10.1021/jo200085j
2. Lalitha, K., Muthusamy, K., Siva Prasad, Y., Vemula, P.K., Nagarajan, S., Recent developments in β-C-glycosides: Synthesis and applications, *Carbohydrate Research*, 402, 158-171, **2015**, DOI:10.1016/j.carres.2014.10.008
3. He, X.P., Zeng, Y.L., Zang, Y., Li, J., Field, R.A., Chen, G.R., Carbohydrate CuAAC click chemistry for therapy and diagnosis, *Carbohydrate Research*, 429, 1-22, **2016**, DOI: 10.1016/j.carres.2016.03.022
4. Bozorova, K., Zhaoa, J., Aisaa, H.A., 1,2,3-Triazole-containing hybrids as leads in medicinal chemistry: A recent overview, *Bioorganic & Medicinal Chemistry*, 27 (16), 3511-3531, **2019**, DOI: doi.org/10.1016/j.bmc.2019.07.005



5. Sutcharitruk, W., Sirion, U., Saeeng, R., One-pot synthesis of substituted-amino triazole-glycosides, *Carbohydrate Research*, 484, 107780, **2019**, DOI: 10.1016/j.carres.2019.107780
6. Nemallapudi, B.R., Guda, D.R., Ummadi, N., Avula, B., Zyryanov, G.V., Reddy, C.S., Gundala, S.M., New Methods for Synthesis of 1,2,3-Triazoles: A Review, *Polycyclic Aromatic Compounds*, **2021**, DOI: 10.1080/10406638.2020.1866038.

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