PR-20

SYNTHESIS AND CHARACTERIZATION OF 1,2,3-TRIAZOLE-INTEGRATED QUINAZOLINONE DERIVATIVES

Aluru Rammohan^{1*} and Grigory V. Zyryanov^{1,2}¹Center for Chemical and Pharmaceutical Institute,
Ural Federal University, Yekaterinburg 620002, Russia²Department of Organic & Biomolecular Chemistry, Chemical Engineering Institute, Ural
Federal University, Yekaterinburg 620002, Russia

*E-mail: rammohan4ever@gmail.com

Abstract. Design and development of a new class of heterocyclic compounds is always fascinated route in the drug discovery owing to wide range of pharmaceutical applications. Especially, quinazolinones are the important class of heterocyclic compounds having broad spectrum of biological activities including antimicrobial, anti-HIV, antimalarial, anti-tuberculosis and anticancer¹⁻³. The present work intended to synthesize new series of 1,2,3-triazole-integrated quinazolinone derivatives by *via* click chemistry. The synthesis method is very humble and novel which results products in high yields. The formation of all the products was confirmed by means of MS- and NMR spectral studies.

Scheme: Synthesis of 1,2,3-triazole-integrated quinazolinone derivatives.

References

1. Quinazoline and quinazolinone as important medicinal scaffolds: a comparative patent review (2011–2016)/ Hameed, A., Al-Rashida, M., Uroos, M., Ali, S.A., Arshia, Ishtiaq, M. and Khan, K.M.// Expert opinion on therapeutic patents, 2018. Vol. 28(4), pp.281–297.
2. Design, synthesis, antimicrobial activity and anti-HIV activity evaluation of novel hybrid quinazoline–triazine derivatives/ Modh, R.P., De Clercq, E., Pannecouque, C. and Chikhaliya, K.H.// Journal of enzyme inhibition and medicinal chemistry, 2014, Vol. 29(1), pp.100-108.
3. Chemical characteristics, synthetic methods, and biological potential of quinazoline and quinazolinone derivatives/Asif, M.//International journal of medicinal chemistry, 2014, Vol. 2014, pp.1-24.