Editorial
Volume 11:8 , 2021

Medicinal Chemistry

ISSN: 2161-0444 **Open Access**

Innovations in the Field of Medicinal Chemistry

Kejia Jessy*

Department of Pharmacy, Jawaharlal Nehru Technological University, Ranga Reddy, Telangana, India

Medicinal Chemistry and drug science are disciplines at the convergence of science, particularly manufactured natural science, and pharmacology and different other organic claims to fame, where they are associated with plan, chemical synthesis and improvement for market of drug specialists, or bio-dynamic particles (drugs).

The previous volume 9, issue 2 various aspects were discussed by the authors from different parts of the world. In the Research article entitled "Structural Elucidation of Cobalt (II) Complexes of 2-Imino-3-(2-hydroxyphenyl)-1-oxozolodin-4-one and Study of its Antimicrobial Relevance" Dr. Desalegn Demise Sage explained regarding the Complex of Co(II) with heterocyclic ligand [2-imino-3-(2-hydroxyphenyl)-1-oxazolodin-4-one] has been synthesized and characterized with the help of elemental analysis, magnetic, 1 H-NMR, 13C-NMR, IR and electronic spectral data. IR spectra exhibit the coordination of the ligands to the metal ion through deprotonated phenolic oxygen and heterocyclic nitrogen. All these studies reveal square planar geometry of Co (II) complexes [1].

The word 'cobalt' is derived from the German 'Kobalt', from kobold, meaning 'goblin', a word used by miners for the ore of cobalt. Cobalt occurs naturally as only one stable isotope, 59Co. 60Co is a commercially important radioisotope, used as a radioactive tracer and in the production of gamma rays.

In another Research article entitled "Synthesis and Antibacterial Activity of Novel Benzimidazole Linked 1,3,4-Oxadiazole Derivatives" Dr. Bala Guraiah Mothukuri briefly explained about heterocyclic compounds have immense significance in medical chemistry due to their broad spectrum of biological activities in treating of numerous diseases. Among them, benzimidazole derivatives exhibited huge importance in medicinal chemistry because of their broad variety of biological and pharmacological applications. The N-ribosyl demethylbenzimidazole is a prominent benzimidazole compound in nature, it exists in vitamin B12 through the connection of cobalt at axial position. Benzimidazole is a bicyclic organic compound consists the fusion of benzene and often called as 1, 3-benzodiazole. They are efficient heterocycles in treating various diseases due to having of active sites [2]. At present, they have become an important target to current medicinal chemists and biologists in finding of proficient molecules possessing diverse biological activities.

In another previous volume 9, issue 1 Dr. Mumtaz Hussain described about the Antimicrobial Resistance (AMR) in Research article entitled "Synthesis and Biological Evaluation of Novel 1, 4-Disubstituted 1, 2, 3-Triazoles and Bis 1, 2, 3-Triazoles as Anti-Bacterial Agents". In this article author described that A library of novel 1, 4-disbustituted 1, 2, 3-triazoles 3a-3k was prepared by using Click-chemistry concept. In this 1,3-dipolar cycloaddition, the 3-methoxy-4-(prop-2-yn-1-yloxy) benzaldehyde was used as alkyne partner which was synthesized from vanillin and propargyl bromide and was reacted with differently substituted arylpropoxy azides to furnish series of mono and bis 1,4-disubstituted-1,2,3-triazoles. All the synthesized compounds were characterized spectroscopically and were evaluated for their antimicrobial activity. Preliminary results of antibacterial screening revealed that various synthesized compounds have the highest inhibitory effects then the control ciprofloxacin against the growth of a wide range of both gram positive and gram negative bacterial strains. Compounds 3g and 3b were found to be the most active against various strains of gram-positive and gramnegative bacteria [3].

I would also like to express my gratitude to all the authors, reviewers, the publisher, language editor, honorary editors, the scientific advisory and the editorial board of "MCCR," the office bearers for their support in bringing out the new volume of MCCR for the calendar year 2021 and look forward to their support further to release more issues for "Medicinal Chemistry" in schedule time.

References

1. Desalegn, Demise Sage, Ermias Tamiru and Upadhyay RK. "Structural Elucidation of Cobalt (II) Complexes of 2-Imino-3-(2- hydroxyphenyl)-1-oxozolodin-4-one and Study of its Antimicrobial Relevance." *Med Chem* 9 (2019):1-7.
2. Bala, Guraiah Mothukuri, Triloknadh Settypalli, Nagaraju Begari and Vijaya Kumari Dalavai, et al. "Synthesis and Antibacterial Activity of Novel Benzimidazole Linked 1, 3, 4-Oxadiazole Derivatives." *Med Chem* 9(2019):1-6.
3. Mumtaz, Hussain, Zahid Hussain, Aamer Saeed and Pervaiz Ali Channar, et al. "Synthesis and Biological Evaluation of Novel 1, 4-Disubstituted 1, 2, 3-Triazoles and Bis 1, 2, 3-Triazoles as Anti-Bacterial Agents." *Med Chem* 9 (2019):1-6.

How to cite this article: Jessy, Kejia. "Innovations in the Field of Medicinal Chemistry." *Med Chem* 11 (2021): e594.

***Address for Correspondence:** Kejia J, Department of Pharmacy, Jawaharlal Nehru Technological University, Ranga Reddy, Telangana, India; E-mail: kejiajessy772@gmail.com*

Received : July 05, 2021; **Accepted :** July 19, 2021 ; **Published :** July 26, 2021