

Seminar

Institute for Plasma Research

Title : Synthesis, Characterization and Biological Evaluation of Some Nitrogen Based Heterocyclic Compounds

Speaker: Dr. Falguni G. Bhabhor
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Date : 16th December 2019 (Monday)

Time : 03.30 PM

Venue : Committee Room No.4 (New building), IPR

Abstract:

Organic chemists synthesize hundreds of new heterocyclic compounds every day. In most cases the chemist has specific reasons for synthesizing a particular compound, usually based on theoretical considerations, medicinal chemistry, biological mechanisms or a combination of all three. Heterocyclic compounds have known held center stage in the development of molecules to enhance quality of human life. Taking in view of the applicability of heterocyclic compounds, the present work was undertaken to synthesize some new heterocycles such as pyrazole, benzothiazepines, azetidinone and Thiadiazole bearing Pyrazolone nucleus. All newly synthesized compounds were characterized by IR, NMR, Mass spectrometry and elemental analysis. All newly synthesized compounds were screened for their biological activity (antimicrobial, anti tuberculosis and anti oxidant) against standard drugs. All compounds showed good to moderate activity.

Keywords: pyrazolone, characterization techniques (IR, Mass, NMR), biological activity

References:

1. Knorr L. Ann., **1887**; 238: 137
 2. Mohamed Aboul-Enein N, Aida ElAzzouny A, Mohamed AttiaI, Yousreya Maklad A, Kamilia Amin M, Mohamed Abdel-Rehim, and Mohammed El-Behairy F, Design and synthesis of novel stiripentol analogues as potential anticonvulsants, *Eur. J. Med. Chem.*, **2012**; 47(1): 360-369.
 3. G. Mariyappan, B. P Saha, LSutharson, A Halder, Synthesis and bioactivity evaluation of pyrazolone derivatives. *Indian Journal of Chemistry*, **2010**; 49B: (1671-1674).
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