

Manuscript ID : 00001-53984

Source ID : 00000514

International Journal of Scientific Research in Physics and Applied Sciences

Volume 7, Issue 5, October 2019, Pages 1-3, Page Count - 3



Synthesis and Characterization of Diethyl 4-Amino-1-(3-Chlorophenyl)- 1H-Pyrazole-3,5 Dicarboxylate

Garima Jain ^{(1)*} Ashutosh Mishra ⁽²⁾

⁽¹⁾ School of Physics, Devi Ahilya Vishwavidyalaya, Madhya Pradesh, India.

⁽²⁾ School of Physics, Devi Ahilya Vishwavidyalaya, Madhya Pradesh, India.

Abstract

In the present study, Diethyl 4-amino-1-(3-chlorophenyl) -1H-pyrazole-3,5 dicarboxylate (D4A1(3-cl)1HP35D) was synthesized. The structure of newly synthesized compounds of Diethyl 4-amino-1-(3-chlorophenyl) -1H-pyrazole-3,5 dicarboxylate was characterized by x-ray diffraction (XRD), Fourier transforms infrared spectroscopy (FTIR) and Transmission electron microscopy (TEM). The compound has been prepared by the chemical root method and crystal structure was determined by x-ray diffraction technique. The XRD pattern of (D4A1(3-cl)1HP35D) confirms the crystalline nature and (h k l) values are indexed. From the experimental analysis, the presence of functional groups in the synthesized compound and particle size of the compound has been estimated by FTIR and TEM spectroscopy.

Author Keywords

Pyrazole, Synthesis, XRD, FTIR, TEM spectroscopy

Acknowledgement

Thanks to Dr. Pratibha Sharma, School of Chemical Science, DAVV, Indore for providing valuable guidance during the synthesis of compound and Dr. T. Sripathy, Dr. N. P. Lalla for accessing the characterization facilities at UGC-DAECSR, Indore, India

ISSN Print:

Source Type: Journals

Publication Language: English

Abbreviated Journal Title: IJSRPAS

Publisher Name: ISROSET

Major Subject: Physical Sciences

Subject area: Physical and Theoretical Chemistry

ISSN Online: 2348-3423

Document Type: Journal Article

DOI: <https://doi.org/10.26438/ijsrpas/v7i5.13>

Access Type: Open Access

Resource Licence: CC BY-NC

Subject Area classification: Chemistry

Source: SCOPEDATABASE

Reference