



**Synthesis and Crystal structure of 4-(3-chlorophenyl)-N3,  
N5-bis (2,6-fluorophenyl)-2,6-dimethyl-pyridine-3,5-dicarboxamide  
using Hirshfeld Surface Analysis**

S. Neetha<sup>1\*</sup>, Arun Mishra<sup>2</sup>, M. A. Sridhar<sup>3</sup>, J. Shashidhara Prasad<sup>3</sup> and Anamik Shah<sup>2</sup>

1. Department of Physics, The National Institute of Engineering, Mysuru, **INDIA**
2. Department of Studies in Chemistry, Saurashtra University, Rajkot, **INDIA**
3. Department of Studies in Physics, University of Mysore, Mysuru, **INDIA**

Email: [neethagowda@gmail.com](mailto:neethagowda@gmail.com)

Accepted on 17<sup>th</sup> September 2016

---

**ABSTRACT**

The title compound,  $C_{27}H_{20}ClF_2N_3O_2$ , crystallizes in the monoclinic crystal system and space group  $P2_1/a$  with cell parameters  $a = 10.0610(11) \text{ \AA}$ ,  $b = 11.012(2) \text{ \AA}$ ,  $c = 22.402(5) \text{ \AA}$ ,  $\beta = 102.731^\circ$ ,  $V = 2420.0(8) \text{ \AA}^3$  for  $Z = 4$ . The structure exhibits inter-molecular hydrogen bonds of the type  $N-H...O$ .

**Keywords:** Pyridine, crystal structure, hydrogen bond, Hirshfeld surface analysis.

---