

Poster Presentations

[MS24-P38] Experimental and theoretical studies on a novel of a [3,2- α]pyrimidine derivate

Betül Acar^a, Nezihe Çalışkan^b, Alaaddin Cukurovali^c

^a*Department of Physics, Faculty of Arts and Science, Ondokuz Mayıs University, 55139 Kurupelit, Samsun, Turkey*

^b*Department of Physics, Faculty of Science, Gazi University, 06500 Teknikokullar, Ankara, Turkey*

^c*Department of Chemistry, Faculty of Science, Fırat University, 23119 Elazığ, Turkey*

*Received *Corresponding author Betül Acar Department of Physics; Faculty of Arts and Sciences, Ondokuz Mayıs University TR-55139, Kurupelit, Samsun / Turkey*

E-mail : betulylmaz84@hotmail.com

The title molecule, (C₃₀H₃₄N₂O₂S1), was synthesized and characterized by single-crystal X-ray diffraction. The compound crystallizes in the triclinic space group *P*21/*c*. In addition, the molecular geometry, vibrational frequencies and frontier molecular orbitals analysis of the title compound in the ground state have been calculated by using the HF/6-31G(d) and B3LYP/6-31G(d) methods. Molecular electrostatic potential of the compound was also performed by the theoretical method.

Keywords: X-ray, ab-initio calculations.