## **Poster Presentation**

MS35.P01

Hydrogen bonding in melamine compounds of amino acids

N. Ghouari<sup>1</sup>, <u>N. Benali-Cherif</u><sup>1</sup>
<sup>1</sup>University Abbes Laghrour-Khenchela, Science de la Matiere, Khenchela, Algeria

The theme of this work is part of the study of intermolecular interactions that hold the crystal structures of hybrid compounds based sulphuric acid, nitric acid, Melamine, Diethylamine, L-(+) - glutamic acid, DL-2-amino butyric acid. The aim of this work is to enlarge our laboratory researches [1-3] and methods in synthesis of new hybrid compounds consisting in organic cation(s) and mineral anion(s). We have obtained single crystals of a few samples after several trials and we plan to synthesize and characterize these crystals by X-ray diffraction, FTIR and Raman. The crystals structures allow us to study the 3D network hydrogen bonding, electron density and collect several other informations useful in FTIR and Raman studies of these hybrid compounds.

[1] N. Benali-Cherif, F. Allouche, A. Direm, et al., (2007), Acta Cryst, E 63, o2643—o2645., [2] A. Messai, R. Benali-Cherif, E. Jeanneau., et al., (2012), Acta Cryst, E68, o1307—o1308., [3] R. Takouachet, R. Benali-Cherif, and N. Benali-Cherif, (2014), Acta Cryst, E70, o186—o187.

Keywords: melamine, X ray structures, single crystals