

Synthesis and properties of a new organic-inorganic salt based on Preyssler type Polyoxometalates and amino acids:



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This new organic-inorganic salt, hereafter **I**, has been synthesized and characterized by means of elemental analyses, IR spectrum, PNMN, and single-crystal X-ray diffraction. The crystal structure consists of  $[Na(H_2O)P_5W_{30}O_{110}]^{14-}$  units linked together with glycine and alanin amino acid cations and hydrogen bonded water molecules. According to the crystal structure analysis, this material contains infinite planes of inorganic moiety. The arrangement of these mentioned planes to each other make the specific space for the entering of organic molecules. Since amino acids are one of the main building blocks of proteins and it has been shown that the POMs possess antiviral and anticancer properties, the investigation of their behavior in the crystal structure such as weak/strong hydrogen bonding interactions can leads to elucidating information about the nature of this category of materials.

**Reference**

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