

Stereoselective synthesis, solution structure and metal complexes of (1S, 2S)-2-amino-1-hydroxyalkylphosphonic acid.

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Streszczenie

The highly stereoselective synthesis of (1S,2S)-2-amino-1-hydroxyalkylphosphonic acids was achieved by addition of dimethyl phosphite to *N*-protected aminoaldehydes. Relative configuration and solution conformations of (1S,2S)-2-amino-1-hydroxy-alkylphosphonic acids (in D₂O) and their dimethyl esters (in CDCl₃ and CD₃OD) were established by means of NMR basing on the dependence between observed values of coupling constants (³J_{HH}, ³J_{PC}, ³J_{HP}) and corresponding dihedral angles. Potentiometric and spectroscopic methods were used for the evaluation of the structure of the complexes of (1S,2S)-2-amino-1-hydroxy-alkylphosphonic acids with Zn(II) and Cu(II) ions in aqueous solutions.

Adres publiczny

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