

Synthesis and structure of coordination polymer based on biphenylene-4,4'-diphosphonous acid

© Anna V. Kraiushkina, Ruslan P. Shekurov, Artem I. Tufatullin, Kiril E. Metlushka, Kristina A. Nikitina, Diana F. Saifina, Olga N. Kataeva,*⁺ Vladimir A. Alfonsov, Vasily A. Milukov, and Oleg G. Sinyashin

A.E. Arbuzov Institute of Organic and Physical Chemistry of the Kazan Scientific Center of RAS. Arbuzov St., 8. Kazan, 420088. Russia. Phone: +7 (843) 273-93-44.

*Supervising author; ⁺Corresponding author

Keywords: *phosphonous acid, coordination polymers, nickel ions, synthesis, structure.*

Abstract

Coordination polymer based on biphenylene-4,4'-diphosphonous acid was synthesized and structurally characterized. According to X-ray single crystal diffraction the building block of coordination polymer consists of cationic part, represented by nickel ions, solvated water molecules, and associated molecules of 4,4'-bipyridyl, and anionic part, containing the biphenylene-4,4'-diphosphonous acid ion.