

## SYNTHESIS AND STRUCTURAL CHARACTERISTICS OF BIS(CITRATE)GERMANATES(IV) (Hbipy)<sub>2</sub>[Ge(HCit)<sub>2</sub>]·2H<sub>2</sub>O AND [CuCl(bipy)<sub>2</sub>]<sub>2</sub>[Ge(HCit)<sub>2</sub>]·8H<sub>2</sub>O

Inna Seifullina<sup>a</sup>, Elena Martsinko<sup>a\*</sup>, Elena Chebanenko<sup>a</sup>, Olha Pirozhok<sup>a</sup>,  
Viktoriya Dyakonenko<sup>b</sup>, Svitlana Shishkina<sup>b,c</sup>

<sup>a</sup>I.I. Mechnikov Odessa National University, Odessa 65082, Ukraine

<sup>b</sup>SSI "Institute for Single Crystals", National Academy of Sciences of Ukraine, 60, Nauki Ave., Kharkiv 61001, Ukraine

<sup>c</sup>V.N. Karazin Kharkiv National University, 4 Svobody sq., Kharkiv 61077, Ukraine

\*e-mail: [lborn@ukr.net](mailto:lborn@ukr.net)

**Abstract.** The crystalline compounds (Hbipy)<sub>2</sub>[Ge(HCit)<sub>2</sub>]·2H<sub>2</sub>O (**1**) and [CuCl(bipy)<sub>2</sub>]<sub>2</sub>[Ge(HCit)<sub>2</sub>]·8H<sub>2</sub>O (**2**) (where H<sub>4</sub>Cit is citric acid, bipy is 2,2'-bipyridine) were obtained for the first time and their structures were determined by the single-crystal X-ray diffraction method. Compounds were characterized by IR spectroscopy, thermogravimetric (TGA) and elemental analyses. Both compounds are formed with complex bis(citrate)germanate anion and protonated 2,2'-bipyridine or [Cu(bipy)<sub>2</sub>Cl]<sup>+</sup> as cations in compounds **1** and **2**, respectively.

**Keywords:** germanium(IV) compound, citric acid, 2,2'-bipyridine, copper(II) complex, structure.

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