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Cryosynthesis and physico-chemical properties of hormone Δ^5-androstenediol-3β,17β nanoparticles

© **Anastasia Yu. Utehina**,[+] **Alexandra A. Moscova**, **Yuriy N. Morozov**, **Pavel N. Kolotilov**, **Boris M. Sergeev**, and **Gleb B. Sergeev***
Department of Chemistry. M.V. Lomonosov Moscow State University. Leninskie Gory St., 1. Moscow, 119991. Russia. Fax: +7 (495) 939-02-83. E-mail: gbs@kinet.chem.msu.ru

*Supervising author; [+]Corresponding author

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Abstract

Cyochemistry is a powerful method of micronization and structure changing of organic nanoparticles. In the case of drugs it's lead to improve pharmacol properties. Cryochemical method of modification based on using of a metastable state obtained by condensation of their vapors on the cooled surface. Low temperature is applied for modification of an analog natural hormone – Δ^5-androstendiol-3β,17β. A crystal monohydrate of androstendiol with particle size of 220±10 nm was obtained as a result. Using this method we are able to reduce particle size of organic crystal powder saving molecular structure.