

## **СВЕДЕНИЯ О ВЕДУЩЕЙ ОРГАНИЗАЦИИ**

по диссертации Бардаковой Ксении Николаевны «Влияние структуры и физико-механических свойств трехмерных биodeградируемых полимерных материалов на их биосовместимость и клеточную адгезию», представленной на соискание ученой степени кандидата химических наук по специальности 1.4.7 – Высокомолекулярные соединения

### **Полное и сокращенное наименование**

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### **Список основных публикаций работников ведущей организации по теме диссертации соискателя в рецензируемых научных изданиях за последние 5 лет:**

1. Karpova S.G., Olkhov A.A., Varyan I.A., Popov A.A., Iordanskii A.L. Effect of Drug Encapsulation and Hydrothermal Exposure on the Structure and Molecular Dynamics of the Binary System Poly(3-hydroxybutyrate)-chitosan. *Polymers*, 2023, V 15, No 10, 2260.
2. Tyubaeva P. M., Varyan I. A., Nikolskaya E. D., Mollaeva M. R., Yabbarov N. G., Sokol M. B., ... & Popov A. A.. Biocompatibility and antimicrobial activity of electrospun fibrous materials based on PHB and modified with hemin. *Nanomaterials*, 2023, 13(2), 236.
3. Gasparyan K.G.; Tyubaeva P.M.; Varyan I.A.; Vetcher A.A.; Popov A.A. Assessing the Biodegradability of PHB-Based Materials with Different Surface Areas: A Comparative Study on Soil Exposure of Films and Electrospun Materials. *Polymers*. 2023. V 15, No 9, 2042.
4. Shelenkov P.G., Pantyukhov P.V., Poletto M., Popov A.A. Influence of Vinyl Acetate Content and Melt Flow Index of Ethylene-Vinyl Acetate Copolymer on

Physico-Mechanical and Physico-Chemical Properties of Highly Filled Biocomposites. *Polymers*, 2023, V. 15, No 12, 2639.

5. Olkhov A.A.; Mastalygina E.E.; Ovchinnikov V.A.; Kurnosov A.S.; Popov A.A.; Iordanskii A.L. Biological and Oxidative Degradation of Ultrathin-Fibrous Nonwovens Based on Poly(lactic Acid)/Poly(3-Hydroxybutyrate) Blends. *International Journal of Molecular Sciences*, 2023, V. 24, No 9, P. 7979.

6. Varyan I., Tyubaeva P., Kolesnikova N., & Popov A.. Biodegradable polymer materials based on polyethylene and natural rubber: Acquiring, investigation, properties. *Polymers*, 2022, V 14, No 12, 2457.

7. Tyubaeva P., Varyan I., Krivandin A., Shatalova O., Karpova S., Lobanov A., ... & Popov A. The comparison of advanced electrospun materials based on poly(-3-hydroxybutyrate) with natural and synthetic additives. *Journal of Functional Biomaterials*, 2022, 13(1), 23.

8. Tyubaeva P., Zykova A., Podmasteriev V., Olkhov A., Popov A. & Iordanskii A.. The investigation of the structure and properties of ozone-sterilized nonwoven biopolymer materials for medical applications. *Polymers*, 2021, V 13, No 8, 1268.

9. Zykova A. K., Pantyukhov P. V., & Popov A. A.. Degradation of highly filled biocomposites based on synthetic polymers and natural polysaccharides under the action of climatic weathering and biodegradation. In *IOP Conference Series: Earth and Environmental Science*, 2021, Vol. 720, No. 1, p. 012136. IOP Publishing.

10. Tertyshnaya Y. V., Lobanov A. V., Karpova S. G., & Pantyukhov P. V. Composites based on polylactide and manganese (III) tetraphenylporphyrin. Influence of concentration on the structure and properties. *Journal of Molecular Liquids*, 2020, 302, 112176.

11. Lukanina Y.K., Popov A.A., Khvatov A.V.. Biodegradation of polymer compositions with pro-oxidants. In *IOP Conference Series: Materials Science and Engineering*, 2020, Vol. 921, No. 1, p. 012016. IOP Publishing.

12. Tertyshnaya Y.V., Popov A.A.. Hydrolytic degradation of polylactide in distilled water and seawater. *Polymer Science, Series D*, 2020, V 13, No 3, 306-310.

13. Mastalygina E., Varyan I., Kolesnikova N., Gonzalez M., Popov A., Effect of natural rubber in polyethylene composites on morphology, mechanical properties and biodegradability. *Polymers*, 2020, V. 12, No 2, 437.

14. Anpilova A.Y., Mastalygina E., Khrameeva N., Popov A.. Methods for cellulose modification in the development of polymeric composite materials. *Russian Journal of Physical Chemistry B*, 2020, V 14, No 1, 176-182.