

**PERSPECTIVES OF APPLICATION OF LOW-TEMPERATURE PLASMA
IN THE FIELD OF BIOLOGICAL AND ENVIRONMENTAL SAFETY**

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The research whose objective was to inactivate different species of microorganisms with low-temperature plasma at atmosphere pressure demonstrated the great potential of this method. Gr- bacteria of *Serratia marcescens* and *Escherichia coli* appeared more sensitive to cold plasma than Gr+ bacteria of *Bacillus subtilis*. Spores of *B. subtilis* appeared highly resistant to plasma. The method is recommended for sterilization of liquids and surfaces. Moreover, while sterilizing surfaces it is possible to destroy such objects as biofilms that are highly resistant to chemical biocides.