MAGNETICALLY OPERATED CORROSION METHOD OF HIGH GRADIENT FERROMAGNETIC MATRIX OBTAINING FOR MAGNETIC SEPARATION FOR BIOMEDICAL APPLICATIONS

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Nowadays the future of medicine and biotechnology bound up with using of nanomaterials and methods of nanotechnology. Recently special attention is attracted to scientific developments in biomedicine, such as the problem of cleaning of various working media from pathogenic microorganisms and viruses [1-3] and following removal of used up biosorbent from medium, which is purified with using of magnetic separation with high-gradient ferromagnetic matrix (HGFM).

Considering the foregoing actuality aim of the work was development and receiving of matrix of magnetic separator with branched surface structure by magnetically operated corrosion method and to determine the efficiency of work of HGFM.

HGFM, which is obtained by magnetically operated corrosion method, is characterized by high contaminant capacity and is able to provide high fineness of the cleaning of working media in biology and medicine. Purification efficiency reach to 98% during extraction of magnetically labeled sorbent *S.cerevisiae* from solution by magnetic separator with this HGFM.

References

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