

Sakharova, L. V.; Shiryaeva, E. V.; Zhukov, M. Yu.

Approximation of weak solution for the problem of a pH-gradient creation in isoelectrofocusing. (English) [Zbl 1371.92149](#)

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Summary: The mathematical model describing the stationary natural pH-gradient arising under the action of an electric field in an aqueous solution of ampholytes is constructed and investigated. The model is a part of a more general model of the isoelectrofocusing process. Investigation is based on the approximation of a weak solution by the piecewise continuous non-smooth functions. The method can be used for solving classes of problems for ordinary differential equations with a small parameter at the highest derivatives and the turning points.

MSC:

[92E99](#) Chemistry

Keywords:

[pH-gradient](#); [isoelectrofocusing](#); [ampholytes](#)

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