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Development of an electrophysical installation for electroporation and assessment of the viability of biomembranes

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Existing invasive methods of drug delivery to the middle ear have a number of disadvantages: low concentration of the administered drug and the risk of hearing impairment. All of the above emphasizes the relevance of developing effective methods for targeted drug delivery while maintaining biological barriers. In this work, an electrophysical setup for electroporation was developed and the viability of round window membrane models was assessed.

Keywords: non-invasive drug administration, biological membranes, electroporation, electrode cell, electrophysical installation, membrane viability.

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