## STUDY OF FARADEY'S LAW OF ELECTROMAGNETIC INDUCTION IN PHYSICAL EXPERIENCE

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## ABSTRACT

According to the law of electromagnetic induction, if the magnetic flux is increasing (DF>0), a negative induction EYuK ( $\varepsilon$ ind<0) appears in the circuit, and vice versa, if the magnetic flux is decreasing (DF<0) a positive induction EYuK ( $\varepsilon$ ind>0) appears in the circuit. If the magnetic flux changes uniformly, then the value of the induction EMF formed by the wire frame is constant. That is, an alternating magnetic field excites an rotating electric field in the space around it, which in turn causes an inductive current inside the coil and an electromotive force in the coil.

**KEYWORDS:** Faraday's law, energy sources, coil, magnetic flux, electromotive force, induction current.

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