

## SUMMERY

The Bachelor's Thesis consist of 74 pages and 19 figures, 2 tables and 34 references, 1 appendix and the graphical part on 3 pages A1.

In the bachelor thesis was developed a direct vector control voltage of the DC link induction generator.

The object of research in this paper is a system for generating electricity, which is based on the drive motor and an induction generator. For research the feasibility review in control of induction generators, the parameters of the generator and developed a synthesis of control systems. Control algorithm implemented in the environment of Matlab / Simulink and performed dynamic analysis of induction generator by mathematical modeling with different tasks of speed and load is applied to the DC link. Research the influence of load current compensation for voltage level DC transients.

Calculation and realization of the project was provided through the use of these programs: *MATLAB R2009b*, *Mathcad 2014*, *Microsoft Office Word 2010*, *Microsoft Office Visio 2010*, *MathType 6.9*.

INDUCTION GENERATOR, FIELD-ORIENTED CONTROL, DC-LINK,  
SYSTEM GENERATION, SYNTHESIS

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N. Contr.						NTUU «KPI», FEA Department. AEMS-ED		
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