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## **ENERGETIC POTENTIAL ASSESSMENT OF POULTRY WASTE PROCESSING INDUSTRY**

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### **Abstract**

The paper presents the experimental results carried out on chicken farms residues for complete characterization with respect to thermal processing and energy recovery. The physical-chemical properties of poultry derived waste were experimentally determined from the chicken meat processing line as it is obtained. The research focused on combustibility properties quantification for the appropriate waste to energy chain identification. The experiments focused on elemental composition, primary analysis and specific energy content determination. Due to waste properties unfitted for classic combustion (high water content) alternative integrated pyrolysis processing was investigated for energy potential enhancement. Based on product characteristics and pyrolysis by-products properties waste to energy conversion chains are proposed with respect to global process efficiency.

*Key words:* energy recovery, poultry waste characterisation, pre-treatment, pyrolysis

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