

POLITECHNIKA ŚLĄSKA
WYDZIAŁ ORGANIZACJI I ZARZĄDZANIA
Instytut Inżynierii Produkcji

ROZPRAWA DOKTORSKA

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*Model technologiczno-logistyczny procesu energetycznego
wykorzystania odpadów*

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SUMMARY OF THE DOCTORAL DISSERTATION

The inventory of source materials and the conducted research presented in the dissertation were the basis to prepare the structure of the system of waste management in which the logistic and technological processes of energetic waste management were identified.

As a result of preparing the characteristics of research area -II Region of Waste Management of Silesia province, there was the functioning technological infrastructure identified, the amount of energetic potential was defined of municipal waste collected and the decision problem was defined as the optimisation of the variant of thermal waste treatment technology.

On the basis of the identified variables and technological-logistics criteria the mathematical model was prepared, in which the decision problem was presented in the form of the optimisation task.

Given the need of mutlidimensional approach to the decision problem for realisation of dissertation aims, the model of geographic information was integrated with the technological-logistics model. The object model was prepared with the application of UML notation.

On the basis of the prepared technological-logistics model of the energetic waste management process, the prototype of support system was built and validated.