

## **Abstract**

**University of Plovdiv, Bulgaria, Scientific Papers - Chemistry**  
**35** [5], 5-10 (2007) ISSN 0204-5346.

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### **Evaluation of the heating value of biomass fuel from elemental composition and infrared data**

The heating value of 35 biomass samples (wood, cereals) has been modeled from mass% data for carbon, hydrogen, and nitrogen, as well as from infrared data.

Regression models have been obtained by application of a genetic algorithm for variable selection and PLS for creation of models.

Standard deviation of prediction errors is typically 0.3 % for models from IR data, and 0.7 % for models from elemental composition data.