



**“Gheorghe Asachi” Technical University of Iasi, Romania**



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## EXPERIMENTAL STUDIES ON THE CORROSION OCCURRENCE DURING BIOMASS COMBUSTION PROCESS

**Ionel Pișă<sup>1\*</sup>, Gheorghe Lăzăroiu<sup>1</sup>, Corina Rădulescu<sup>2</sup>, Lucian Mihăescu<sup>1</sup>**

<sup>1</sup>Politehnica University Bucharest, 313 Splaiul Independenței, 6 District, Bucharest, Romania

<sup>2</sup>Institute of Conception, Research and Design for Thermal Energy Equipments- OVM,  
266-268 Calea Rahovei, 5 District, Bucharest, Romania

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### Abstract

Under environmental legislation, biomass is seen as a zero emitter of carbon dioxide emissions releasing only recently fixed carbon following combustion. Simultaneous combustion of biomass with coal is such an alternative energy with economic potential. Among the many stages that occur during combustion of biomass, combustion of coke (the final solid phase) is most relevant to the issue of alkali metals. The paper analyses the potential corrosion and the formation of adherent deposits in the coal-straws co-combustion process at the pilot installations. The straw (in the form of cylindrical briquettes) burning experiments carried out on 2 MW thermal pilot plant. The results of chemical analysis of ash were presented, compared with those obtained from the singular burning of straws in the burning experimental thermal plant of 55 kW.

*Key words:* biomass, combustion, corrosion, pilot installation

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\* Author to whom all correspondence should be addressed: E-mail: [ipisa@caz.mecen.pub.ro](mailto:ipisa@caz.mecen.pub.ro)