

ASSESSMENT OF POLYAROMATICS EMITTED FROM MODERN POWER PLANTS

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ABSTACT

Emissions from coal combustion in fluidised bed combustion (FBC) of the Polycyclic Aromatic Hydrocarbons (PAH) listed by USEPA as priority pollutants are studied in this work. In a AFBC pilot plant, laboratory scale, a low rank combustion is carried out at close conditions (850° C, 10% excess oxygen) to the ones used at the modern power plants. The atmospheric contamination impact by the particulate matter and by the PAH, both the ones supported on the particulate matter and the ones emitted as gas, are qualy and quanty assessed by Synchronous Fluorescence Spectroscopy analysis.

Keywords: coal, FBC, airflow, organic emissions, polyaromatic hydrocarbons, PAH.