

# KINETICS OF THERMAL DEGRADATION APPLIED TO BIOPLASTICS WITH NATURAL FIBERS BY NON-ISOTHERMAL PROCESSES

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Ligno-cellulosic fibers were given surface treatment for the improvement of its competency towards polymer matrix. Thermal decomposition of bioplastics with lingo-cellulosic fibers were analysed/investigated by TGA/DTG data obtained under nitrogen atmosphere by varying heating rates. Activation energies were calculated by applying non-isothermal methods on TGA data of bio-composites blended with different proportion of cellulosic fibers. Activation energy was found to be maximum when treated with alkali. Different composite samples were also studied for its optical properties through X-ray diffraction and its morphology using scanning electron microscope and compared with available literature.

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