Calculation of activation energy for unsaturated polyamide using fumaric acid and 2,6diaminopyridine by modified Higashi-Yamazaki phosphorylation method

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With a view to examine the modification of polymer characteristics by the introduction of heterocyclic units in the polymer backbone it was proposed to synthesize and characterise unsaturated polyamides involving 2,6diaminiopyridine and fumaric acid. Though the synthesis of these polyamide has been reported earlier by interfacial method, there is no systematic study seems to have been done to evaluate the kinetic parameters and biological activity. In the present paper phosphorylation technique was employed to prepare the unsaturated polyamide and the results compared with the maleic acid to show the effect of *cis-trans* isomerism in thermal studies.

Keywords: 2,6-Diaminiopyridine, fumaric acid, phosphorylation, kinetic parameters.