

STUDIES ON THE NON-ISOTHERMAL DEGRADATION KINETICS OF GRAFTED ANIONIC POLYCRYLAMIDE GEL

Ayman Abo Jabal, Isa M. Tan, Zakaria Man and Saikat Maitra
Department of Chemical Engineering, Universiti Teknologi PETRONAS, Malaysia
Email: ayman2002gabal308@yahoo.com

ABSTRACT

A new method is proposed to evaluate the kinetic parameters of degradation process from thermogravimetric traces; the method consists of two steps. α , T and da/dT values are first employed to estimate kinetic parameters by linear least squares fitting, using the different types of mechanism for gel-solid phase reactions suggested by Sestak.

KEY WORDS: Grafted anionic, Polyacrylamide gel, Kinetic function, Decomposition kinetics, Thermogravimetry.