

REFERENCE

1. Bikales, N.M., ed. Water-soluble polymers : Polymer science and technology. Vol.2 Newyork-London : Plenum Press, 1973.
2. McCormick, C.L., and Bock, J. Water-soluble polymers. Encyclopedia of Polymer Science and Engineering 17 (1989) : 730-784.
3. Zhang, L.S., Wang, Y.Q., and Farrar, D. Polymerisation process and products. Eur. Pat. no. 0,365,242 A2 (February 28, 1990).
4. Morawetz, H. Macromolecules in solution. 2nd ed. New york : John Wiley & Sons, Inc., 1975.
5. Molyneaux, P. Water-soluble synthetic polymers : Properties and behaviour. Vol 2. Boca Raton, Fla. : CRC Press, Inc., 1984.
6. Watchalayan, K., et al. Water-absorbable copolymers (1) : A study of new method for synthesizing copolymers in laboratory scale. Undergraduate Special Project, KMITL, 1992.
7. Tripattanasuwan, S., Chittasonti, B. and Euapermkiati, A. Synthesis of water absorbable graft copolymers using foamed polymerization for using in agriculture. Undergraduate Special Project, KMITL, 1993.
8. Charoensirisomboon, P., Rukachantarakul, K. and Euapermkiati, A. Synthesis and characterization of graft copolymer as flocculating agent. Undergraduate Special Project, KMITL, 1993.

9. Kaihirun, M., Sena-ampornchai, S. and Euapermkiati, A. Synthesis analysis and characterization of chelating biopolymer. Undergraduate Special Project, KMITL, 1994.
10. Odian, G. Principle of polymerization. 3 rd ed. New York : John Wiley & Sons, Inc., 1991.
11. Malavasic, T., et al. Study of the isothermal bulk polymerization of methyl methacrylate by differential scanning calorimetry. Die Makromolekulare Chemie 175 (1974) : 873-880.
12. Yarn, Y.S., and Lee, L.J. Composition of thermal and Infrared spectroscopic analysis in the formation of polyurethane, unsaturated polyester, and their blends. J. Appl. Polym. Sci. 36 (1988) : 1325-1342.
13. Peiguand, Z., and Frisch, H.L. Isothermal reaction kinetics and phase behavior analysis in the formation of PCU/PMMA interpenetrating polymer networks. Macromolecules 27 (March 1994) : 1788-1794.
14. Hernandez-Sanchez , F. , and Vera- Grazino , R. Determination of the kinetic parameters for the polymerization of polyurethane using an improved method of differential scanning calorimetry. J. Appl. Polym. Sci. 46(1992) : 571-580.
15. Peyser , P. , and Bascom, W.D. Kinetic of epoxy resin polymerization using differential scanning calorimetry. J. Appl. Polym. Sci. 21 (1977) : 2359-2373.
16. Achilias , D. and Kiparissiades , C. Modeling of diffusion-controlled

- free-radical polymerization reactions. J. Appl. Polym. Sci. 35 (1988) : 1303-1323.
17. Kay , T.A., and Rodriguez , F. Polymerization of acrylamide using the hydrogen peroxide-hydroxylamine couple. J. Appl.Polym.Sci. 35 (1983) : 633-646.
18. Balakrishnan, T. and Subbu, S. Kinetic studies on the radical polymerization of acrylamide initiated be Mn³⁺- ethoxyacetic acid redox system. J. Polym. Sci. Part A Polym. Chem. 24(1986): 2271 - 2278.
19. Mishra , M. K. and Bhadani , S.N. Kinetics of polymerization of acrylamide with nitrogen dioxide. J. Appl. Polym. Sci. 30(1985) : 3113-3117.
20. Behari, K., Raja , G.D. , and Agarwal , A. (Km). Kinetics of perphosphate - initiated polymerization of acrylamide with different activators. Polymer 30 (April 1989): 726-731.
21. Bajpai , U.D.N. , Bajpai , A.K., and Bajpai , J. Peroxy diphosphate/ bisulfite - initiated polymerization of acrylamide and its retardation kinetics. J. Appl. Polym. Sci. 42 (1991) : 2005-2012.
22. Rapp , T.L. , et al. Acrylamide polymerization kinetics in gel electrophoresis capillaries: A Raman microprobe study. Anal chem. 64(1992) : 2434-2437.
23. Candau ,F., and Leong, Y.S. Kinetic study of the polymerization of

- acrylamide in inverse microemulsion. J. Polym. Sci. Polym. Chem. Ed. 23 (1985) : 193-214.
24. Ghosh, S.K., and Mandal , B.M. Studies on the kinetics of inverse emulsion polymerization of acrylamide using α -ketoglutaric acid as photoinitiator. Polymer. 34(1993) : 4287-4290.
25. Hunkeler , D. Mechanism and kinetics of the persulfate - initiated polymerization of acrylamide. Macromolecules 24(1991) : 2160-2171.
26. Bajpai , U.D.N. , Jain , A., and Rai , S. Grafting of polyacrylamide onto guar gum using $K_2S_2O_8$ ascorbic acid redox system. J. Appl. Polym. Sci. 39 (1990) : 2187-2204.
27. Jarowenko , W. Starch. Encyclopedia of Polymer Science and Technology 12(1970) : 787-862.
28. Kothoff , I.M. , and Miller , I.K. The chemistry of persulfate I : The kinetics and mechanism of the decomposition of the persulfate ion in aqueous medium. J. Am. Chem. Soc. 73(1951) : 3055-3059.
29. Cavelle , E.A.S. Kinetics of polymerization of acrylamide initiated by 4,4' -azo bis (4- cyanopentanoic acid). Makromol. Chem. 54 (1962) : 70-77.
30. Suen, T.S. ,and Rossler, D.F. Residual unsaturation in polyacrylamide . J. Appl. Polym. Sci. 3 (1960) : 126
31. Venkataraao, K. , and Santappa , M. Molecular weight distribution in polyacrylamide prepared by a photo-chemical method. J. Polym.

Sci Part A 18 (1970) :

32. Riggs , J.P. , and Rodriguez , F. Persulfate-initiated polymerization of acrylamide. J. Polym. Sci Polym. Chem. Ed. 5(1967) : 3151-3165.
33. Thomus , W.M., and Wang, D.W. Acrylamide polymer Encyclopedia of Polymer Science and Engineering 1(1985) : 169-208.
34. Riggs , J.P. , and Rodriguez , F. Polymerization of acrylamide initiated by the persulfate-thiosulfate redox couple. J. Polym.Sci Sci. Polym. Chem. Ed. 5(1967) : 3167-3181.
35. Hunkeler, D. , and Hamielec, A.E. Water soluble polymers. Washington, D.C. : American Chemical Society, 1991.
36. Hummel, D.O. , and Scholl, F. Atlas of polymer and plastics analysis. Vol. 2. Part A/I. 2nd ed. Germany : Verlag Chemie International, 1984.

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