



REFERENCES

- Allan, G.G., and Peyron, M. (1997). Depolymerization of chitosan by means of nitrous acid. In R.A.A. muxxarelli and M.G.Peter (Eds.). Chitin Handbook, European Chitin Society.
- Amano, K., and Ito, E. (1978). European Journal of Biochemistry, 85(1), 97-104.
- Chandy, T., and Sharma, C.P. (1992). Chitosan beads and granules for oral sustained delivery of nifedipine: in vitro studies. Biomaterials, 13(13), 949-952.
- Eric, G., Celine, M., and Michael, T. (1998). Metal-Anion Sorption by Chitosan Beads: Equilibrium and Kinetic Studies. Industrial&Engineering Chemistry Resources, 37, 1454-1463.
- Fujii, S., H. Kumagai, M. noda. (1980). Carbohydrate Research, 83, 389.
- Hirano, S., and Nagao, N. (1989). Effects of chitosan, pectin acid, lysozyme, and chitinase on the growth of several phytopathogens. Agricultural and Biological Chemistry, 53, 3065-3066.
- Hiroyuki, Y., and Masato, A. (1997). Biodegradation of Cross-Linked Chitosan Gels by a Microorganism. Macromolecules, 30, 3936-3937.
- J. Guzman, Saucedo, I., Navarro, R., Revilla, J., and Guibal, E. (2002). Vanadium Interactions with Chitosan: Influence of Polymer Protonation and Metal Speciation. Langmuir, 18, 1567-1573.
- Ken-ichiro, H. (2001). Study of Structure and Function of Polymeric Nanosphere Prepared by Macromonomer Method. Ph.D., Dissertation, Kagoshima University.
- Kurita, K., Yoshino, H., Yokota, K., Ando, M., Inoue, S., Ishii, S., and Nishimura, S.I. (1992). Preparation of tosylchitins as precursors for facile chemical modification of chitin. Macromolecules, 25, 3786-3790.
- Mark, H.F., Bikales, N.M., Overberger, C. G., Menges, G. (1985). Encyclopedia of Polymer Science and Enginnering, New York: John Wiley&Sons, 3, 430-440.
- Moo-Yeal, Lee.; Figen, V.; Yoshitsune, S.; Toshio, K.; and Ji-Won, Y. (1999). Optimum conditions for the precipitation of chitosan oligomers with DP 5-7

- in concentrate hydrochloric acid at low temperature. Process Biochemistry, 34, 493-500.
- Nishimura, S.I., Kohgo, O., and Kurita, K. (1990). Chemospecific manipulation of a rigid polysaccharide: Syntheses of novel chitosan derivatives with excellent solubility in common organic solvents by regioselective chemical modifications. Macromolecules, 24, 4745-4748.
- Qurashi, M.T., Blair, H.S., and Allen, S.J. (1992). Studies on modified chitosan membranes. I. Preparation and characterization. Journal of Applied Polymer Science, 46, 255-261.
- Sawayanagi, Y., Numbu, N., and Nagai, T. (1982). Use of chitosan for sustained-release preparations of water-soluble drug. Chemical&Phamaceutical Bulletin, 30(11), 4213-4215.
- Singh, D.K., and Ray, A.R. (1994). Graft Copolymerization of 2-Hydroxyethyl methacrylate onto chitosan films and their blood compatibility. Journal of Applied Polymer Science, 53, 1115-1121.
- Suzuki, S. (1996). Studies on biological effects of water soluble lower homologous oligosaccharides of chitin and chitosan. Fragrance Journal, 15, 61-68.
- Takeshi, S., Ming-Qing, C., and Mitsuru, A. (1998). Graft copolymers Having Hydrophobic Backbone and Hydrophilic Branches. XVIII. Poly(styrene) Nanospheres with Novel Thermosensitive Poly (N-vinylisobutyramide)s on Their Surfaces. Journal of Polymer Science, 36, 2581-2587.
- Tsukada, K.; Matsumoto, T.; Aizawa, K.; Toko3ro, A.; Naruse, R.; Suzuki, S.; and Suzuki, M. (1990). Antimetastatic and growth-inhibitory effects of N-acetylchitohexose in mice bearing Lewis lung carcinoma. Japanese Journal of Cancer Research, 81, 259-265.
- Weiner, S., and Addadi, L. (1988). Nature, 331, 546.
- Yoksan, R., Mitsuru, A., Siriratana, B., Chirachanchai, S. (2001). Hydrophobic Chain Conjugation at hydroxyl Group onto γ -ray irradiated Chitosan. Biomacromolecules, 2(3), 1038-1044.
- Zhang, S., and Gonsalves, K.E. (1995). Synthesis of CaCO₃-chitosan composite via biomimetic processing. Journal of Applied Polymer Science, 56, 687-695.

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