

DAFTAR PUSTAKA

- Adriano, W. S.; Filho, E. H. C.; Silva, J. A.; Giordano, R. L. C. dan Goncalves, L. R. B., 2005, Stabilization of penicillin G acylase by immobilization on glutaldehyde-activated chitosan, *Braz. J. Chem. Eng.*, 22 (4), 529-538.
- Anonim, 2006, Industri Kitin: *Dari limbah menjadi bernilai tambah*, Departemen Kelautan dan Perikanan RI, <http://www.dkp.go.id/content>, diakses pada 25 November 2007.
- Anonim, 2007, *Biokatalis mampu kurangi polutan limbah*, Harian Umum Sore Sinar Harapan Selasa, 28 Agustus 2007, diakses pada 25 November 2007.
- Avadi, M. R.; Zohuriaan-Mehr, M. J.; Younessi, P.; Amini, M.; Tehrani, M. R. dan Shafiee, A., 2003, Optimized Synthesis and Characterization of N-Triethyl Chitosan, *J. Bioact. Compat. Polym.*, 18, 469.
- Avadi, M. R.; Mahdavinia, G.; Sadeghi, A. M.; Erfan, M.; Amini, M.; Tehrani, M. R dan Shafiee, A., 2004, Synthesis and Characterization of N-Diethyl Methyl Chitosan, *Iranian Polym. J.*, 13 (5), 431-436.
- Bhumkar, D. R. dan Pokharkar, V. B., 2006, Studies on effect of pH on cross-linking of chitosan with sodium tripolyphosphate: a technical note, *AAPS PharmSciTech*, 7 (2), Article 50.
- Cervera, M. F.; Heinämäki, J.; Räsänen, M.; Maunu, S.L.; Karjalainen, M.; Acosta, O.M.; Nieto; Colarte, A. I. dan Yliruusi, J., 2004, Solid-state characterization of chitosans derived from lobster chitin, *Carbohydr. Polym.*, 58, 401-408.
- Champagne, L. M., 2002, *The synthesis of water soluble n-acyl chitosan derivatives for characterization as antibacterial agents*, Dissertation, B.S. Xavier University of Louisiana.
- Danna, G. F., 1978, Permox-A Hydrogen Peroxide-Zinc Acetate Antibacterial Finish for Cotton, *Textile Res. J.*, 48, 173.
- Dunn, E. T.; Li, Q.; Grandmaison, E. W. dan Goosen, M. F. A., 1992, Applications and Properties of Chitosan, *J. Bioact. Compat. Polym.*, 7, 370.
- Elliott, R. P.; Straka, R. P dan Garibaldi, J. A., 1964, Polyphosphate Inhibition of Growth of Pseudomonads From Poultry Meat, *Appl. Microbiol.*, 12, 6, 517-522.

- Elsner, P., Antimicrobials and the Skin: Physiological and Pathological Flora, 2006, *Biofunct. Textile. Skin*, 33, 35–41.
- Fernández, M.; Plessing, C.V. dan Cárdenas, G., 2006, Preparation and characterization of chitosan gels, *J. Chil. Chi. Soc.*, 51, 1022-1024.
- Franco, L. O.; Maia, R. C.; Porto, A. L.; Messias, A. S.; Fukushima, K. dan Campos-Takaki, G. M., 2004, Heavy metal biosorption by chitin and chitosan isolated from *cunninghamella elegans* (IFM 46109), *Brazilian J. Microbiol.*, 35, 243-247.
- Gagné N., 1993, *Production of chitin and chitosan from crustacean waste and their use as a food processing aid*, Thesis, Department of Food Science and Agricultural Chemistry McGill University, Montreal.
- Gildberg, A. dan Stenberg, E., 2001, A new process for advanced utilisation of shrimp waste, *Process Biochem.*, 36, 809–812.
- Goncalves, V. L.; Laranjeira, M. C. M.; Favere, V. T dan Pedrosa, R. C., 2005, Effect of crosslinking agents on chitosan microspheres in controlled release of diclofenac sodium, *Polimeros: Ciênc. Tecnol.*, 15, 6-12.
- Goycoolea, F.M.; El, G. N. E.; Remuñán-López, C.; Coggiola, A.; Lollo, G.; Domard, A. dan Alonso, M.J., 2003, *Effect of molecular weight and degree of acetylation on the physicochemical characteristics of chitosan nanoparticles*.
- Gylienė, O.; Razmutė, I.; Tarozaitė R. dan Nivinskienė, O.; 2003, Chemical composition and sorption properties of chitosan produced from fly larva shells, *Chemija*, 14, 3, 121-127.
- Höfer, D., 2006, Antimicrobial Textiles – Evaluation of Their Effectiveness and Safety, *Biofunct. Textile. Skin*, vol 33, pp 42–50.
- Jaworska, M.; Sakurai, K.; Gaudon, P. dan Guibal, E., 2003, Influence of chitosan characteristics on polymer properties. I: Crystallographic properties, *Polym. Int.*, 52:198–205.
- Jayakumar, R.; Reis, R. L. dan Mano J. F., 2006, Phosphorous Containing Chitosan Beads for Controlled Oral Drug Delivery, *J. Bioact. Compat. Polym.*, 21, 327.
- Jen, C. M. C. dan Leora, A. S., 1986, Factors affecting sensitivity of staphylococcus aureus 196E, to polyphosphates, *Appl. Environ. Microbiol.*, Vol. 52, No. 4, 842-846.

- Ketkangplu, P.; Phromdetphaiboon, C. dan Unob, F, 2005, Preconcentration of heavy metals from aqueous solution using chitosan flake, *J. Sci. Res. Chula. Univ.*, Vol. 30, No. 1.
- Khan, T.A.; Peh, K.K. dan Ch'ng H.S, 2002, Reporting degree of deacetylation values of chitosan: the influence of analytical methods, *J. Pharm. Pharmaceut Sci.*, 5(3):205-212.
- Ko, J. A.; Park, H. J.; Hwang, S. J. dan Lee J. S., 2002, Preparation and characterization of chitosan microparticles intended for controlled drug delivery, *Int. J. Pharm.*, 249, 165-174.
- Lim, S., 2002. *Synthesis of a fiber-reactive chitosan derivative and its application to cotton fabric as an antimicrobial finish and a dyeing-improving agent*, Dissertation, Fiber and polymer science, North Carolina State University.
- Liu, N.; Chen, X.G.; Park, H J; Liu, C. G dan Liu, C. S., 2006, Effect of MW and concentration of chitosan on antibacterial activity of Escherichia coli, *Carbohydr. Polym.*, 64, 60–65.
- Mahltig, B.; Haufe, H. dan Böttcher, H., 2005, Functionalisation of textiles by inorganic sol–gel coatings, *J. Mater. Chem.*, 15, 4385–4398.
- Mi, F.L.; Shyu, S. S.; Kuan, C.Y.; Lee, S.T.; Lu, K.T dan Jang S.F., 1999, Chitosan–polyelectrolyte complexation for the preparation of gel beads and controlled release of anticancer drug. I. effect of phosphorous polyelectrolyte complex and enzymatic hydrolysis of polymer, *J. Appl. Polym. Sci.*, Vol. 74, 1868–1879.
- Mi, F.L.; Shyu, S.S.; Lee, S.T. dan Wong, T.B., 1999b. Kinetic study of chitosan-tripolyphosphate complex reaction and acid-resistive properties of the chitosan-tripolyphosphate gel beads prepared by in-liquid curing method, *J. Polym. Sci: Polym. Phys.* 37, 1551-1564.
- Moustafa, M. dan Gaballa, F., 2005, *Use of natural polysaccharides in medical textile applications*, Dissertation, Chemistry Department, University of Duisburg-Essen.
- No, H. K.; Park, N.Y; Lee, S.H. dan Meyers, S. P., 2002, Antibacterial activity of chitosans and chitosan oligomers with different molecular weights, *Int. J. Food Microbiol.*, 74, 65– 72.
- Pamekas, T., 2007, Potensi ekstrak cangkang kepiting untuk mengendalikan penyakit pasca panen Antraknosa pada buah cabai merah, *J. Akta Agro.*, 10, 72-75.

- Pasaribu, N., 2004, *Berbagai ragam pemanfaatan polimer*, Jurusan Kimia Fakultas Matematika Dan Ilmu Pengetahuan Universitas Sumatera Utara.
- Purnawan, C., 2008, *unpublished data*.
- Prashanth, K. V. H dan Tharanathan, R.N., 2007, Chitin/chitosan: modifications and their unlimited application potential dan overview, *Trends Food Sci. Technol.*, 18, 117-131.
- Pratiwi, T. S., 2005, *Buku ajar: Mikrobiologi farmasi*, Fakultas Farmasi UGM, Yogyakarta.
- Rege, P. R. dan Lawrence H. B., 1999, Chitosan processing: influence of process parameters during acidic and alkaline hydrolysis and effect of the processing sequence on the resultant chitosan's properties, *Carbohydr. Res.*, 321, 235–245.
- Schlievert, P. M., 2007, Chitosan malate inhibits growth and exotoxin production of toxic shock syndrome-inducing staphylococcus aureus strains and group a streptococci, *Antimicrob. Agents Chemother.*, Vol. 51, No. 9, 3056–3062.
- Shepherd, R.; Reader, S. dan Falshaw, A., 1997, Chitosan functional properties, *Glycoconjugate J.*, 14, 535-542.
- Slamet, D., S.; Mahmud M. K.; Muhilal; Fardiaz, D. dan Simarmata, 1990, *Pedoman analisis zat gizi*, Departemen Kesehatan RI, Jakarta.
- SNI 0086-92-A, Pupuk tripel superfosfat, Dewan Standarisasi Nasional.
- Suhardi, 1992, *Buku monograf khitin dan khitosan*, PAU UGM, Yogyakarta.
- Sun, S.; Wang, L. dan Wang, A., 2006, Adsorption properties of crosslinked carboxymethyl-chitosan resin with Pb(II) as template ions, *J. Hazard. Mater. B*, 36, 930–937.
- Teal, S.; Ervin, R. T. dan Mehta R.D., 1998, *Economic analysis of cotton textile finishing processes: Part 2 – aftertreatments*, Paper, Texas Tech University Lubbock, Texas.
- Thatte, M. R., 2004, *Synthesis and antibacterial assessment of water-soluble hydrophobic chitosan derivatives bearing quaternary ammonium functionality*, Dissertation, Louisiana State University, LA.

- Tolaimatea, A.; Desbrieresb, J.; Rhazia, M., dan Alaguic, A., 2003, Contribution to the preparation of chitins and chitosans with controlled physico-chemical properties, *Polym. J.*, 44, 7939–7952.
- Vareltzis, K.; Soultos, N.; Koidis, P., Ambrosiadis, J. dan Genigeorgis C., 1997, Antimicrobial effects of sodium tripolyphosphate against bacteria attached to the surface of chicken carcasses, *Lebensm.-Wiss. u.-Technol.*, 30, 665–669.
- Wang, D., 1999, *Characterization of thermoreversible pH-sensitive physical gels of chitosan*, Université De Montréal, Canada.
- Widodo, A.; Mardiah, dan Prasetyo A., 2005, *Potensi kitosan dari sisa udang sebagai koagulan logam berat limbah cair industri tekstil*, Institut Teknologi Sepuluh Nopember, Surabaya.
- Wollina, U.; Abdel-Naser, M.B. dan Verma S, 2006, Skin Physiology and Textiles –Consideration of Basic Interactions, *Biofunct. Textile. Skin*, vol 33, pp 1–16.
- Yanming, D.; Congyi, X.; Jianwei, W.; Mian, W.; Yusong, W.; Yonghong, R., 2001, Determination of degree of substitution for N-acylated chitosan using IR spectra, *Sci. China, Ser. B*, Vol. 44 No. 2.
- Yilmaz, E.; Adali, T.; Yilmaz, O. dan Bengisu M., 2007, Grafting of poly(triethylene glycol dimethacrylate) onto chitosan by ceric ion initiation, *React. Funct. Polym.*, 67, 0–18.
- Zhang, Z., Chen, L., Ji, J., Huang, Y. dan Chen, D., 2003, Antibacterial Properties of Cotton Fabrics Treated with Chitosan, *Textille Res. J.*, Vol 73(12) : 1103-1106.
- Zheng, L. dan Zhu, J., 2003, Study on antimicrobial activity of chitosan with different molecular weights, *Carbohydr. Polym.*, 54, 527–530.
- Zhou, D.; Zhang, L.; Zhou, J.; Guo, S., 2004, Cellulose/chitin beads for adsorption of heavy metals in aqueous solution, *Water Res.*, 38, 2643–2650.