



## DAFTAR PUSTAKA

- Avachat, A.M., and Nandare, D.S., 2014, Effect of Alcohol on Drug Release Kinetics from HPMC-Based Matrix Tablets Using Model Drugs, *Dissolut. Technol.*, 11-17.
- Bansal, V., Sharma, P.K., Sharma, N., Pal, O, P., and Malviya, R., 2011, Application of Chitosan and Chitosan Derivatives in Drug Delivery, *Adv. Biol. R.*, 5., 28-37.
- Bernkop-Schnurch, A., Kast, C.E., Guggi, D., 2003, Permeation Enhancing Polymers in Oral Delivery of Hydrophilic Macromolecules: Thiomer/GSH System, *J. Control. Rel.*, 93, 95-103.
- Bhise, K, S., Dhumal, R, S., Chauhan, B., Paradkar, A., and Kadam, S.S., 2007, Effect of Oppositely Charged Polymer and Dissolution Medium in Swelling, Erosion, and Drug Release from Chitosan Matrices, *AAPS. PharmSciTech.*, 8(2), 44.
- Bhise, K, S., Dhumal, R.S., Chauhan, B., Paradkar, A., and Kadam, S.S., 2007, Effect of Drying Methods on Swelling, Erosion and Drug Release from Chitosan-Naproxen Sodium Complexes, *AAPS.PharmSciTech*, Vol 9, No. 1.
- Briones, A, V., and Sato, T., 2010, Encapsulation of Glucose Oxidase (GOD) in Polyelectrolyte Complexes of Chitosan-Carrageenan, *React. Func. Polym.*, 70, 19-27.
- Distantina, S., Rochmadi., Fahrurrozi, M., and Wiratni, 2012, Hydrogel Based on Glutaraldehyde-Crosslinked Kappa Carrageenan: Effect of Glutaraldehyde Concentration, *Proceeding 19<sup>th</sup> Regional Symposium on Chemical Engineering*, ISBN: 978-602-9494-30-3.
- Dutta, A.K., and Ikki, E., 2013, Novel Drug Delivery System to Improve Bioavailability of Curcumin, *J. Bioequiv.Avalab*, 6(1).
- Ensign, L.M., Cone, R., Hanes, J., 2012, Oral Drug Delivery with Polymeric Nanoparticles: The Gastrointestinal Mucus Barriers, *Adv. Drug Deliv. Rev.*, 64, 557–570.
- Giri, T.K., Thakur, A., Alexander, A., Ajazuddin., Badwaik, H., and Tripathi, D, K, 2012, Review: Modified Chitosan Hydrogels as Drug Delivery and Tissue Engineering Systems: Present Status and Application, *Acta.Pharmaceutica.sinica B*, 2(5), 439-449.



- Goot, V. H., 1997, The Chemistry and Qualitative Structure-Activity Relationships of Curcumin. In Pramono, S., editor, Recent Development in Curcumin Pharmacocchemistry; *Proceedings of The International Symposium on Curcumin Pharmacocchemistry (ISCP)*, Yogyakarta, Indonesia.
- Hadi, J.N., Hassan, N.M., and Ahmad, K, 2011, Natural Surfactants for Pharmaceutical Emulsions, Department of Pharmaceutical Chemistry, International Islamic University Malaysia, Malaysia, 10.
- Hasanah, F, 2014, Pembuatan Film Kitosan-Pektin dengan Penambahan Emulsifier Asam Stearat sebagai Matriks Pelepasan Kurkumin, *Skripsi*, Jurusan Kimia Fakultas MIPA, Universitas Gadjah Mada Yogyakarta.
- Heryanto, R., Hasan, M., Abdullah, E.C., and Kumoro, A, C., 2007, Solubility of Stearic Acid in Various Organic Solvents and Its Prediction Using Non-Ideal Solution Models, *ScienceAsia*., 33, 469-472.
- Higuchi, T., 1963, Mechanism of Sustained Action Medication, Theoretical Analysis of Rate of Release of Solid Drugs Dispersed in Solid Matrices, *J. Pharm. Sci.*, 52, 1145-1149.
- Hu, F.Q., Ren, G.F., Yuan, H., Du, Y. Z., and Zeng, S., 2006, A Novel Chitosan Oligocassharide-Stearic Acid Micelles for Gene Delivery: Properties and In Vitro Transfection Studies, *Int. J. Pharm*, 315, 156-158.
- Kolev, T.M., Velcheva, E.A., Stamboliyska, B.A., Spiteller, M., 2005, DFT and Experimental Studies of The Structure and Vibrational Spectra of Curcuma, *Int. J. Quant. Chem.*, 102, 1069-1079.
- Korsmeyer, R.W., Gurny, R., Doelker, E., Buri, P., and Peppas, N.A., 1983, Mechanism of Solute Release from Porous Hydrophilic Polymer, *Int. J. Pharm*, 15, 25-35.
- Lin, C.C., Lin, H.Y., Chen, H.C., Yu, M.W., and Lee, M.H., 2009, Stability and Characterisation of Phospholipid-Based Curcumin-Encapsulated Microemulsions, *Food.Chem.*, 116, 923-938.
- Lin, Y.L., Liu, Y.K., Tsai, N.M., Hsieh, J.H., Chen, C.H.C., Lin, C.M., Liao, K.W., 2012, A Lipo-PEG-PEI Complex for Encapsulation Curcumin That Enhances Its Antitumor Effects on Curcumin-Sensitive and Curcumin-Resistance Cells, *Nanomed-Nanotechnol*, 8, 318-327.
- Liu, Q., Rauth, A.M., Wu, X.Y., 2007, Immobilization and Bioactivity of Glucose Oxidase in Hydrogel Microspheres Formulated by an Emulsification-Internalg elation-Adsorption- Polyelectrolyte Coating Method, *Int. J. Pharm.*, 339, 148–156.



Nanaki, S., Karavas, E., Kalantzi, L., Bikaris, D., 2010, Miscibility Study of Carrageenan Blends and Evaluation of Their Effectiveness as Sustained Release Carriers, *Carbohydr. Polym.*, 79, 1157-1167.

Malesu, V.K., Sahoo, D., and Nayak, P.L., 2011, Chitosan-Sodium Alginate Nanocomposite Blended With Cloisite 30B As A Novel Drug Delivery System for Anticancer Drug Curcumin, *IJABT.*, 2(3).

Parize, A.L., Stulzer, H.K., Laranjeira, M.C.M., and Souza, I.M.C.B.T.C.R., 2012, Evaluation of Chitosan Microparticles Containing Curcumin and Crosslinked with Sodium Tripolyphosphate Produced by Spray Drying, *Quim. Nova.*, 35(6), 1127-1132.

Park, S.Y., Lee, B.I., Jung, S.T., and Park, H.J., 2001, Biopolymer Composite Films Based on [Kappa]-Carrageenan and Chitosan, *Mater. Res. Bull.*, 36(3-4), 511-519.

Petchsomrit, A., Sermkaew, N., Wiwattanapatapee, R, 2013, Effect of Alginate and Surfactant on Physical Properties of Oil Entrapped Alginate Bead Formulation of Curcumin, *Int. J Med. Health. Pharm. Biomed Eng.*, Vol.7, No.12.

Pichot, R., Spyropoulos, F., Norton, I.T., 2010, O/W Emulsions Stabilised by Both Low Molecular Weight Surfactants and Colloidal Particles: The Effect of Surfactant Type and Concentration, *J. Colloid. Interf. Sci.*, 352, 128-135.

Ritger, P.L., Peppas, N.A., 1987, A Simple Equation for Description of Solute Release II. Fickian and Anomalous Release from Swellable Devices, *J. Control. Rel.*, 5, 37-42.

Roberts, M., Cespi, M., Ford, J.L., Dyas, A.M., Downing, J., Martini, L.G., Crowley, P, J., 2007, Influence of Ethanol on Aspirin Release from Hypromellose Matrices, *Int. J. Pharm.*, 332: 31-37.

Sankalia, M.G., Mashru, R.C., Sankalia, J.M., Sutariya V.B., 2006, Stability Improvement of Alpha-Amylase Entrapped in Kappa-Carrageenan Beads: Physicochemical Characterization and Optimization using Composite Index, *Int. J. Pharm.*, 312, 1-14.

Schipper, N.G., Varum, K.M, and Artursson, P., 1996, Chitosan as Absorption Enhancer for Poorly Absorbable Drugs. I: Influence of Molecular Weight and Degree of Acetylation on Drug Transport Across Human Intestinal Epithelial (CaCO-2) Cells, *Pharm. Res.*, 13, 1686-1692.

Ningrum, A.S, 2014, Pembuatan dan Studi Pelepasan *In Vitro* Kurkumin dari Beads Kalsium- Pektin-Kitosan dengan Penambahan Emulsifier Asam



Stearat, *Skripsi*, Jurusan Kimia Fakultas MIPA, Universitas Gadjah Mada Yogyakarta.

Tonnesen, H.H., and Karlsen, J., 1985, Studies on Curcumin and Curcuminoids, VI: Kinetics of Curcumin Degradation in Aquaeous Solution, Original Paper, Z, Lebennzm, *Unters Fosch*, 402-404.

Yadav, G., Bansal, M., Thakur, N., Sargam, and Khare, P., 2013, Multilayer Tablets and Their Drug Release Kinetic Models for Oral Controlled Drug Delivery System, *Middle-East.J.Sci.Res.*, 16 (6), 782-795.

Yallapu, M.M., Jaggi, M., and Chauhan, S.C., 2012, Curcumin Nanoformulations: A Future Nanomedicine for Cancer, *Drug.Discov.Today.*, Vol. 17, No.1/2.

Wang, X., Jiang, Y., Wang, Y., Huang., M., Hoa, C., Huang, X., 2008, Enhancing Anti-Inflamation Activity of Curcumin Through O/W Nanoemulsions, *Food.Chem.*, 108, 419-424.