DAFTAR PUSTAKA

Amelia, 2004, Optimasi pH Buffer Asetat dan Konsentrasi Larutan Pereduksi Natrium Tiosulfat dalam Penentuan Kadar Besi secara Spektrofotometri UV VIS, *Skripsi* Jurusan Kimia ITS, Surabaya

Auerbach, S.M., Carrad, K.A., and Dutta, P.K., 2003, *Handbook of Zeolite Science and Technology*. Marcel dekker inc., New York

Bandyopadhyay, S., Ghosh, K., and Varadachari, C., 2014, Multimicronutrient Slow-Release Fertilizer of Zinc, Iron, Manganese, and Copper, *J. Chem. Eng.*, 1-7.

Bansiwal, A.K., Rayalu, S.S., Labhasetwar, N.K., Juwarkar, A.A., and Devotta, S. 2006, Surfactant-modified zeolite as a slow release fertilizer for phosphorous. *J. Agric. Food Chem*., 54, 4773-4779.

Barker, A.V., and Pilbeam, D.J., 2007, *Handbook of Plant Nutrition*, Taylor and Francis Group Press, Boca Raton, Florida.

Breck, D.W., 1964, Crystalline Molecular Sieves, *J. Chem. Educ*., 41, 678-689.

Breck, D.W., 1974, *Zeolite Molecular Sieves : Structure, Chemistry and Use, Wiley and sons*, London.

Bruckert, S., 1970, The effect of soluble organic compounds on pedogenesis in an acid environment, *Field studies. Ann. Agron.*, 21, 421-45.

Carstensen, J.T., 1996, *Modeling and Data Treatment in the Pharmaceutical Sciences*, Technomic Publishing Co., Inc., Lancaster.

Chandra, P.K., Ghosh, K., and Varadachari, C., 2009, A New Slow-Releasing Iron Manganese Fertilizer Compound, *Ind. Eng. Chem. Res.*, 46, 2870-2876.

Chaplin, M., 2013, Water Structure and Science Alginate, www.l.lsbu.ac.uk/water/hyalg.html (Diakses pada tanggal 4 Agustus 2107).

Domingues, M., Bueno, C., Fraceto, L., Watanabe, C.H., Loyola, C., Crowley, D., and Rosa, A.H., 2014, Polymeric alginate microspheres containing biochar to immobilize phosphate ions, *Chem. Eng. Tran.*, 37, 109-114.

Follest, R.H., and Westfall, D.G., 1992, *Identifying and correcting zinc and iron deficiency in field crops*. Colorado State University Cooperative Extension. Service in Action. No. 545.

Grant, G. T., Morris, E. R., Rees, D. A., Smith, P. J. C., and Thom, D., 1973, Biological interactions between polysaccharides and divalent cations - egg-box model, *FEBS Lett.*, 32, 195–198.

George, M., and Abraham, T.E., 2006, Polyionic hydrocolloids for the intestinal delivery of protein drugs, *J. Control. Release*, 114, 1–14.

Gorin, P.A.J., and Spencer, J.F.T., 1966, Exocellular alginic acid from *Azotobacter Vinelandii, Can. J. Chem.*, 44, 993 – 998.

Govan, J.R.W., Fyfe, J.A.M., and Jarman, T.R., 1981, Isolation of Alginate-producing mutants of *Pseudomonas fluoresecens, Pseudomonas putida* and *Pseudomonas mendocina, J. Gen. Micro*, 125, 217-220.

Haug, A., 1964, Composition and properties of alginates, *Thesis,* Norwegian institut of technology, Trondheim.

Haug, A., Larsen, B., and Smidsrød, O., 1966, A study on the constitution of alginic acid by partial hydrolysis, *Acta. Chem. Scand.*, 20,183 – 190.

Haris, D. C., 2006, *Determination of Iron with 1,10-Phenanthroline, in: Quantitative Chemical Analysis, 6th ed.*, W. H. Freeman & Company, New York, 2003, 258-261

Iwai, M., Majima, H., and Awakura, Y. M.T.B., 1982, Oxidation of Fe (II) in sulfuric acid solutions with dissolved molecular oxygen, 13, 311.

Kahya, S., Oya, S., and Camurlu, E., 2011, Crosslinked sodium alginate and sodium alginate-clipnotilolite (natural zeolite) composite membranes for pervaporation separation of dimethylformamide-water mixtures: a comparative in plants, *Mol. Plant*, 23, 502-513.

Khairou, K.S, and Hassan, R.M., 2002, Temperature-dependence of the electrical conductivity for cross-linked Mono- and divalent metal-alginate complexes. *High Perf. Poly.* 14, 93-102.

Korsmeyer, R.W., Gurny, R., Doelker, E., Buri, P., and Peppas, N.A., 1983, Mechanisms of solute release from porous hydrophilic polymers. *Int. J. Pharm.* 15, 25–35.

Kroll., E., Winnik, F.M., and Ziolo, R. F., 1996, In situ preparation of nanocrystalline γ-Fe_2O_3 In Iron (II) cross-linked alginate gels. *Chem. mater.*, 1594-1596.

Lagergren, S., 1898, About the theory of so-called adsorption of soluble substances, *Kungliga Svenska Vetenskapsakademiens, Han-dlingar,* 24, 1-39.

Lee, C. K., Low, K. S. and Kek, K. L., 1995, Removal of chromium from aqueous solution, *Bio. Tech*, 54, 183-189.

Lee, K. Y., and Yuk, S. H., 2007, Polymeric protein delivery systems, *Prog. Polym. Sci.*, 32, 669–697.

Lee, K. Y., Kong, H. J., Larson, R. G., and Mooney, D. J., 2003, Hydrogel formation via cell cross-linking, *Adv Mater.*, 15, 1828–1832.

Legras, B., Polaert I., Estel L. and Thomas M., 2011, Mechanisms Responsible for Dielectric Properties of Various Faujasites and Linde Type A Zeolites in the Microwave Frequency Range, *J. Phys. Chem. C.*, 115, 3090-3098.

Li, Z., 2003, Use of surfactant-modified zeolite as fertilizer carriers to control nitrate release, *Micro. Meso. Mater.*, 61, 181-188.

Lindsay, W.L., and Norvell, W.A., 1978, Development of DTPA soil test for zinc, iron, manganese and copper, *Soil Sci. Society of America J.*, 42, 421–428.

Lokhandwala, H., 2013, Kinetic modeling and dissolution profiles comparison: An overview, *Int.J.Pharm Bio Sci*, 4, 728-737.

Ma, H.L., Qi, X.T., Maitani,Y., and Nagai, T., 2007, Preparation and characterization of superparamagnetic iron oxide nanoparticles stabilized by alginate, *Int. J. Pharmaceutics*, 333, 177–186.

Malakouti, M.J., 2008, The Effect of Micronutrients in Ensuring Efficient Use of Macronutrients, *Turk. J. Agr. For.*, 32, 215-220.

Mishra, S. P., Singh,V. K. and Tiwari, D., 1996, Radiotracer technique in adsorption study: Part XIV. Efficient removal of mercury from aqueous solutions by hydrous zirconium oxide, *Applied Radiation and Isotopes*, 47, 15-21.

Morris, E.R., Rees, D.A., Thom, D., and Boyd, J., 1978, Chiroptical and stoichiometric evidence of a specific, primary dimerisation process in alginate gelation, *Carbohydr. Res.*, 66, 145-154.

Morrissey, J., and Guerinot, M. L., 2009, Iron uptake and transport in plants: The good, the bad, and the ionome, *Chem Rev.*, 109(10), 4553–4567.

Narashimhan, B., Mallapragada, S.K., and Peppas, N.A., 1999, *Release kinetics data interpretation in: Encyclopedia of controlled drug delivery*, Mathiowitz E. Ed., John Wiley and Sons, Inc, New York.

Nussinovitch, A., 1997, Alginates in C. Hall (Ed.), *Hydrocolloid applications: Gum technology in the food and other industries*. London: Blackie Academic and Professional, 39, 19.

Orumwense, F. F. O., 1996, Removal of lead from water by adsorption on a kaolinitic clay, *J. Chem. Tech. Biotech*, 65, 363-369.

Othmer, K., 1978, *Encyclopedia of Chemical Technology*, thirth edition, volume 13, John Willey & Sons Inc, New York.

Othmer, K., 1998, *Encyclopedia of Chemical Technology*, *Controlled Release Technology*, vol. 7, fourth ed., John Wiley and Sons, Inc. , New York

Painter, T. J., 1983, *Algal polysaccharides. In Aspinall GO (ed) The polysaccharides*., Acad. Press., New York.

Pignolet, L.H., Waldman, A.S., Govindarajoo, G., Nowick, J.S., and Labuza, T., 1998, The Alginate Demonstration: Polymers, Food Science and Ion Exchange, *J. Chem. Edu*., 75(11), 1430-1431.

Prajapti, S., 2014, *Cation Exchange for Ammonia Removal From Wastewater*, *Thesis*, Tampere University of Technology, Finland.

Puschenreiter, M. and Horak, O., 2003, Slow-Release Zeolite-Bound Zinc and Copper Fertilizers Affect Cadmium Concentration in Wheat and Spinach, Commun, *Soil Sci. Plan.*, 34, 31-40.

Ranney, M. W., 1987, *Fertilizer Additives and Soil Conditioners*, Noyes Development Corporation, New Jersey.

Ray, S.K., Varadachari, C., and Ghosh, K., 1993, Novel slow-releasing micronutrient fertilizers. I. Zinc compounds, *Ind. Eng. Chem. Res*., 32, 1218–1227.

Raimon., 1993, Perbandingan Metoda Destruksi Basah dan Kering Secara Spektrofotometri Serapan Atom. *Lokakarya Nasional.Jaringan Kerjasama Kimia Analitik Indonesia.* Yogyakarta.

Rehm, B.H.A., 2009, *Alginates: Biology and application*, Springer Dordrecht Heidelberg, New York.

Rinaudo, M., 2008, Main properties and current applications of some polysaccharides as biomaterials. *Polym. Int.*, 57, 397–430.

Roy, D., Cambre, J. N., and Sumerlin, B. S., 2010, Future perspectives and recent advances in stimuli responsive materials, *Progr. Polym. Sci*., 35, 278–301.

Sang, L., Xiaoliang, W., Zhenhua, C., Jiao, L., Zhongwei, G., and Xudong, L., 2011, Assembly of collagen fibrillar networks in the presence of alginate, *Carbohydrate Polymers*, 82, 1264-1270

Schulte, E.E., 2004, *Soil and applied iron. Understanding Plant Nutrients*, A3554

Sheta, A.S., Falatah, A.M., Al-Sewailem, M.S., Khaled, E.M. and Sallam, A.S.H., 2003, Sorption Characteristics of Zinc and Iron by Natural Zeolite and Bentonite, *Micro. Meso. Mat*., 61, 127-136.

Shaviv, A., 2001, Advances in controlled-release fertilizers, *Adv. Agro*., 71, 1–41.

Singhvi, G. and Singh, M., 2011, Review: In-Vitro Drug Release Characterization Models, *Int. J. Pharm*. Res., 2, 77-84.

Singh, P., Singh, S.K., Bajpaia, J., Bajpaia, A.K., and Shrivastavac, R.B., 2014, Iron crosslinked alginate as novel nanosorbents for removal of arsenic ions and bacteriological contamination from water, *J. Mat. Res. Tech.*, 3(3), 195-202.

Skoog, Douglas, A., 2004., *Fundamentals of Analytical Chemistry, eight edition*, Brooks/Coole, a division of Thomson Learning,Inc, United States of America.

Su, H., Kim, H.S., Seo, S.M., Ko, S.O., Suh, J.M., Kim, G.H., and Lim, W.T., 2012, Location of Na^+ Ions In Fully Dehydrated Na^+ -Saturated Zeolite Y (FAU, Si/Al = 1.56). *Bull. Korean Chem. Soc*, 33, 2785-2788.

Sukma, N., S. 2014, Karakterisasi dan Kajian Pelepasan Besi(III) dari komposit Alginat/Zeolit/Fe, Thesis, Universitas Gadjah Mada.

Trenkel, M. E., 2010, *Slow- and Controlled-Release and Stabilized Fertilizers: An Option for Enhancing Nutrient Use Efficiency in Agriculture*. International Fertilizer Industry Association (IFA), Paris.

Trivedi, H. C., Patel, V. M. and Patel, R. D., 1973, Adsorption of cellulose triacetate on calcium silicate, *Euro. Poly. J*, 9, 525-531.

Varghese, S., and Elisseeff, J. H., 2006, Hydrogels for musculoskeletal tissue engineering, *Adv. Polym. Sci*., 203, 95–144.

Wahyuni, E. T., and Aprilita, N. H., 2000, *Penanganan Fenol dalam Limbah dengan Menggunakan zeolit alam sebagai adsorben*. Universitas Gajah Mada.

Xin, Y, Bligh, Mark. B., Kinsela, A., and Waite, T., 2015, Effect of iron on membrane fouling by alginate in the absence and presence of calcium, *J. Memb. Sci.*, 497, 289-299.

Zhao, X. H., Huebsch, N., Mooney, D. J., and Suo, Z. G., 2010, Stress-relaxation behavior in gels with ionic and covalent crosslinks, *J. Appl. Phys.*, 107, 1–5.