

## DAFTAR PUSTAKA

- Abidin, Trimurni, 2007, Inovasi Perawatan Konservasi Gigi Melalui Teknologi Tissue Engineering, *Pidato Pengukuhan Jabatan Guru Besar Tetap Bidang Ilmu Konservasi Gigi Fakultas Kedokteran Gigi Universitas Sumatera Utara*, Medan, 4-13
- Amiruldin, M., 2007. Pembuatan dan Analisis Karakteristik Gelatin dari Kulit Ikan Tuna (*Thunnus albacares*). Fakultas Teknologi Pertanian. Institut Pertanian Bogor.
- Angeline, R., Lannie H., 2011. Optimization of Formula Sustained Release Captopril Using Combination Polymer System HPMC K4M and Guar Gum. *Jurnal Kesehatan Sain Med*. Fakultas Farmasi Universitas Katolik Widya Mandala. Surabaya.
- Annabi N, M.S., Jason W. Nichol., Xia Zhong, M.S., Chengdong Ji., Sandeep Koshy., Ali Khademhosseini., Fariba Dehghani., 2010, *Controlling the Porosity and Microarchitecture of Hydrogels for Tissue Engineering.*, 18,4,
- Arvanitoyannis I.E, Psomiadou A, Nakayama S, Aiba dan N. Yamamoto. 1997. Edible film made from gelatin, soluble starch and polyols, Part 3. *Int. J. Food Chem.* 60(4), p593-604.
- Bestebroer, S.I., Kho, S.L., Leeuwenburg, S., 2007, Development of a gelatin-apatite nanocomposite for bone-substituting purposes. Research Report "block 390", Dental Department, Radboud University Nijmegen Medical Center, *Departement of Periodontology and Biomaterials*: 3-17.
- Chandel., Rajumari., K. Ankita, 2013, *Polymer A Boon To Controlled Drug Delivery System*, vol.4, p 5
- Chang, C.H., Liu, H.C., Lin, C.C., Chou, C.H., Lin, F.H., 2003, Gelatin chondroitin-hyaluronan tri-copolymer scaffold for cartilage tissue engineering, *Biomaterials* 24, p4853-4858.
- Chiono V, Tonda-Turo C, Ciardelli G., 2009, Chapter 9: Artificial scaffolds for peripheral nerve reconstruction, 87, p173-98.
- Cocco A., Masin S.,C., 2010, The Law of Elasticity. University of Padua, Italy, 31, 647-657
- Dhirisma, F. 2014. Formulasi Membran Hidrogel Berpori Berbasis Kombinasi HPMC (*Hydroxy Propyl Methyl Cellulose*) Dan Gelatin Dengan Metode *Gas Foaming* Serta Penetapan Karakteristik Fisik-Mekanik. FKIK. Universitas Muhammadiyah Yogyakarta, Yogyakarta
- Dlukha, R. 2014. Formulasi Membran Hidrogel Berpori Berbasis Kombinasi HPMC (*Hydroxy Propyl Methyl Cellulose*) Dan Gelatin Dengan Metode *Ice Particle Leaching* Serta Penetapan Karakteristik Fisik – Mekanik. FKIK. Universitas Muhammadiyah Yogyakarta, Yogyakarta

- Dutta, J. 2012. Synthesis and Characterization of  $\gamma$ -irradiated PVA/PEG/CaCl<sub>2</sub> Hydrogel for Wound Dressing. Department of Chemistry, Disha Institute of Management and Technology, Satya Vihar, India
- El Fray, M., Pilaszkiwicz, A., Swieszkowski, W. & Kurzydowski, K. J. (2007) Morphology assessment of chemically modified cryostructured poly(vinyl alcohol) hydrogel. *European Polymer Journal* 43, 2035-2040.
- Fathi, Ali., Barnard, M., Ravarian R., Dehghani, F., 2006. Fabrication of Porous Chitosan/Bioactive Glass Hydrogels in an Aqueous Media Using CO<sub>2</sub> as a Gas Foaming Agent *School of Chemical and Biomolecular Engineering, The University of Sydney, Sydney*
- Fatimi, A., Tassin, J-F., Turczyn, R., Axelos, M.AV., dan Weiss, P, 2 *Gelation Studies of a cellulose-based biohydrogel: the influence of pH, temperature and sterilization, Acta Biomater*, 5(9), p3423-3432
- Fernandes LL, Resende XC, Tavares SD, Soares AG, 2011, Cytocompatibility Of Chitosan And Collagen-Chitosan Scaffolds For Tissue Engineering, *Polimeros*, Vol 21, p 1-6.
- Ganji F, Vasheghani-Farahani S dan Vasheghani-Farahani E, 2010, "Theoretical Description of Hydrogel Swelling: A Review", *Iranian Polymer Journal* 19 (5), 2010, p375-398.
- Gualandi C. *Porous Polymeric Bioresorbable Scaffold for Tissue Engineering. Springer Theses* 2011:1-30.
- Murtaza, 2012, *Ethyl Cellulose Microparticles: A Review*, vol. 69, no.1, pp. 11-22
- Gilson K., M.S. Ktm., H.B. Lee, 2006, *A Manual for Biomaterials Scaffold Fabrication Technology*, vol 4
- Gurdag, G and Shokat Sarmad. 2013. Cellulose Graft Copolymers: Synthesis, Properties, and Applications. Department of Chemical Engineering, Istanbul University, Istanbul, Turkey
- Hoffman, A.S., 2002. Hydrogels for biomedical Application, *Advanced Drug Delivery Review*, 54 : 3-12
- International ASM, 2004, Introduction to Tensile Testing, Second Edition, Materials Park, Ohio, USA
- Jacquemoud, C., Bruyere-Garnier, K. Dan Coret, M, 2007, Methodology to determine failure characteristics of planar soft tissues using a dynamic tensile test, *Journal of Biomechanics* 40(2), p468-475.
- Junianto K, Haetami dan I. Maulina, 2006. Produksi gelatin dari tulang ikan dan pemanfaatannya sebagai bahan dasar pembuatan cangkang kapsul. Laporan Penelitian Hibah Bersaing IV Tahun I. Fakultas Perikanan dan Ilmu Kelautan Universitas Padjadjaran.
- Kailas, Satish., 2012. Mechanical Properties of Metals. Indian Institute of Science, Bangalore, India
- Kang, H. G., S. Y. Kim, and Y. M. Lee, 2006, *Novel porous gelatin scaffolds by overrun/particle leaching process for tissue engineering applications*, *Journal of Biomedical Materials Research B*, vol. 79, no. 2, p388–39.

- Kulvanich P, Leesawat P and Patomchaivivat V (2002). Release characteristics of the matrices prepared from co-spray-dried powders of theophylline and ethylcellulose. *Drug Dev. Ind. Pharm.*, 6:727-739.
- Kumbar, S.G., Laurencin, C.T., 2011, Natural Polymer-Based Porous Orthopedic Fixation Screw for Bone Repair and Regeneration, 20110208190.
- Lanza, R., Langer, R., dan Vacanti, J. P., 2007, Principles of Tissue engineering, *Third Edition* pp. 920–926.
- Ligia L. Fernandes<sup>I</sup>; Cristiane X. Resende<sup>I</sup>; Débora S. Tavares<sup>I</sup>; Gloria A. Soares<sup>I,\*</sup>; Letícia O. Castro<sup>II</sup>; Jose M. Granjeiro<sup>II</sup> Cytocompatibility of chitosan and collagen-chitosan scaffolds for tissue engineering. 2011, *Polímeros* vol.21 no.1 São Carlos
- Lutolf, M. P., Lauer-Fields, J. L., Schmoekel, H. G., Metters, A. T., Weber, F. E., Fields, G. B., and Hubbell, J. A., 2003. Synthetic matrix metalloproteinase-sensitive hydrogels for the conduction of tissue regeneration: engineering cell-invasion characteristics, *Proc. Natl Acad. Sci. USA*, 100, 5413 – 5418
- Lysaght, M, and Cramer, J. (2009) Origins (editorial), *Tissue Engineering*, 15, 7:1449-50
- Maddu A., Kun M., sar S., Hamdani Z., 2006, “*Pengaruh Kelembaban Terhadap Sifat Optik Film Gelatin*”, vol. 10, no. 1,: p30-34
- Ma L, Gao C, Mao Z, Zhou J, Shen J, Hu X, Han C, 2003, Collagen/Chitosan Porous Scaffolds With Improved Biostability For Skin Tissue Engineering. *Biomaterials* 24: 4833-4841.
- Mohsen A, M. A, Aly, A.S., Hrdina, R., Montaser, A.S. and Hebeish, A.,2011. Eco-Synthesis of PVA/Chitosan Hydrogels for Biomedical Application *J Polym Environ*, 19 : 1005-102
- Muyonga J. H, C.G. B dan K.G. Doudu, 2004. Extraction and hysico-chemical characterisation of Nile perch (*Lates niloticus*) skin and bone gelatin. *Food Hydrocolloids*. Vol. 18, p581-592.
- Pal, K., Banthia, A.K., dan Majumdar, K., 2006, “*Polymeric Hydrogels: Characterization and Biomedical Application – A mini review*”, *Designed Monomers and Polymers* 12, p197-220.
- Pal, K., S. Roy, B. Prabhakar, K. Pramanik, and A. Anis, 2009, Polymers in Mucoadhesive Drug Delivery System: A Brief Note, *Design Monomers and Polymers*, vol. 12, 487-488.
- Peter X.Ma, Jennifer Elisseeff 2006, *Scaffolding In Tissue Engineering*, CRC Press, Taylor And Francis Group, USA
- Pettersson, S., 2009, Biodegradable gelatin microcarriers in tissue engineering: In vitro studies on cartilage and bone, LiU-Tryck, Linköping, Sweden.
- Pranoto, Y., Chong Min Lee., Hyun JP., 2006, Characterizations of Fish Gelatin Films Added with Gellan and K-carrageenan, 38(8), 888
- Rofifah N.Y., 2015. Optimasi Formulasi Patch Amoksisilin Berbasis Kombinasi HPMC-PVP sebagai Kandidat Terapi Stomatitis Aftosa Rekuren dan Penetapan

- Karakteristik Fisik-Mekanik. Universitas Muhammadiyah Yogyakarta. Yogyakarta
- Rohaeti E, 2009, *Karakterisasi Biodegradasi Polimer*, Kimia FMIPA, Universitas Gadjah Mada. Yogyakarta
- Rowe R.C, Sheskey P.J, Quinn M.E, 2009, *Handbook of Pharmaceutical Excipients* 6th edition, Pharmaceutical Press and American Pharmacists Association, p159-161.
- Schacht, E.H., 2004. *Polymer chemistry and hydrogel systems*. Department of Organic Chemistry, Belgium
- Schlogl, W., 2012, *Development of Advanced Biomaterials for Bone Tissue Engineering*, Fakultät für Chemie und Pharmazie der Ludwig-Maximilians-Universität München, Deutschland
- Seitz, H., Matthias, S., Drosse, I., Seitz, S., dan Mutschler, W., 2006, *Biomaterials as Scaffold for Bone Tissue Engineering*, *European Journal of Trauma* No. 2.
- Shokri, J., Adibkia, K. 2013. *Application of Cellulose and Cellulose Derivatives in Pharmaceutical Industries*. University of India.
- Soekarto, Soewarno T., (1990), *Penilaian Organoleptik, untuk Industri Pangan dan Hasil Pertanian*, PUSBANGTEPA / Food Technology Development Center, Institut Pertanian Bogor.
- Subia, B., Kundu, J., Kundu, S.C., 2010. *Biomaterial scaffold fabrication techniques for potential tissue engineering applications* *Department of Biotechnology, Indian Institute of Technology, Kharagpur, India*.
- Syed K.H. Gulrez, Saphwan Al-Assaf and Glyn O Philips 2011, *Methods of Preparation, Characterisation and Applications*. Intech
- Yoon DM, Fischer JP. 2007. *Polymeric scaffolds for tissue engineering applications*. CRC Press/Taylor & Francis Group, Boca Raton : 1-18.
- Young, Wong M. Tabata Y. Mikos AG., 2005. *Gelatin as a delivery vehicle for the controlled release of bioactive molecules*. (1-3): 256-74
- Wahyuni, S (2001), *Mempelajari Karakteristik Fisik dan Kimia Edible Film Gelatin Tulang Domba dengan Plasticizer Gliserol*”, Skripsi Jurusan Ilmu Produksi Ternak Fak.Peternakan,IPB.
- Zhu, N and X. Chen., 2013 *Biofabrication of Tissue Scaffold : Advances in Biomaterials Science and Biomedical Applications* 316-317