

## DAFTAR PUSTAKA

- Ahdanisa, Aghnia (2016). Kajian Release Behavior Hidrogel CRF Poli (Vinil Alkohol) dengan *Crosslinker* Glutaraldehida. FPMIPA UPI.
- Ahmed, E. M. (2015). Hydrogel : Preparation , characterization , and applications : A review. *Journal of Advanced Research*, 6(2), 105–121. <https://doi.org/10.1016/j.jare.2013.07.006>
- Akhtar, M. F., Hanif, M., & Ranjha, N. M. (2016). Methods of synthesis of hydrogels, A review. *Saudi Pharmaceutical Journal*, 24(5), 554–559. <https://doi.org/10.1016/j.jsps.2015.03.022>
- Azeem, B., Kushaari, K., Man, Z. B., Basit, A., & Thanh, T. H. (2014). Review on materials & methods to produce controlled release coated urea fertilizer. *Journal of Controlled Release*, 181(1), 11–21. <https://doi.org/10.1016/j.jconrel.2014.02.020>
- Baker, M. I., Walsh, S. P., Schwartz, Z., & Boyan, B. D. (2012). A review of polyvinyl alcohol and its uses in cartilage and orthopedic applications. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, 100 B(5), 1451–1457. <https://doi.org/10.1002/jbm.b.32694>
- Bassett, J. (1994). *Kimia Analisis Kuantitatif Anorganik*. EGC: Jakarta.
- Bhattarai, N., et al. (2010). Chitosan-based Hydrogels for Controlled, Localized Drug Delivery. *Adv. Drug. Deliver. Rev.*9(1), 83-99.
- Bruna, F., et al. (2009). Layered double hydroxides as adsorbents and carriers of the herbicide (4-chloro-2-methylphenoxy)acetic acid (MCPA): Systems Mg-Al,Mg-Fe and Mg-Al-Fe. *J. Hazard. Mater.*168(2-3), 1476-1481.
- Calabria, L., et.al. (2012). Soy protein isolate/poly(lactic acid) injection-molded biodegradable blends for slow release of fertilizers. *Ind. Crop. Prod.* 36(1), 41-46.

**Fathyah Zulfa Maulidah, 2018**

**PROFIL PELEPASAN KALIUM KLORIDA KE DALAM MEDIA AQUA-DM  
MELALUI MEMBRAN HIDROGEL PVA-GA-POM**

Universitas Pendidikan Indonesia | [repository.upi.edu](http://repository.upi.edu) |  
[perpustakaan.upi.edu](http://perpustakaan.upi.edu)

- Chen, Z. P., et al. (2014). *Controlled release of free doxorubicin from peptide–drug conjugates by drug loading*. *J. Hazard. Mater.* 191, 123-130.
- Distantina, S., Rochmadi, Fahrurrozi, M., & Wiratni. (2013). Preparation and characterization of glutaraldehyde-crosslinked kappa carrageenan hydrogel. *Engineering Journal*, 17(3), 57–66. <https://doi.org/10.4186/ej.2013.17.3.57>
- Dong, Y. C., et al. (2011). Preparation and catalytic activity of Fe alginate gel beads for oxidative degradation of azo dyes under visible light irradiation. *Catal. Today* 175(1), 346-355.
- Erizal, et al. (2008). The Effect of Hydrogel Dressing Copolymer Poli(vinylpirrolidone)(PVP)-k-Carrageenan Prepared by Radiation and Healing Times on The Radius Reductions Burn Injured Of Wistar White Rat. *Indo J Chem*, Vol 8, No 2, 272.
- Erizal, et al. (2012). *Pengaruh Teknik Beku Leleh dan Dosis Iradiasi Gamma pada Pelepasan Resorsinol dari Matriks Hidrogel Polivinilalkohol*. 15-21.
- Ganji, F., Vasheghani-farahani, S., & Vasheghani-farahani, E. (2010). Theoretical Description of Hydrogel Swelling: A Review, 19(5), 375–398.
- Gómez-Martínez, F. J., et al. (2009). Lignin-based formulations to prevent pesticides pollution. *J. Hazard. Mater.* 168(1), 220-225.
- Gómez-Martínez, et al. (2013). Gluten-based bioplastics with modified controlled-release and hydrophilic properties. *Ind. Crop. Prod.* 43, 704-710.
- Hassan, C. M., & Peppas, N. A. (2000). Structure and Applications of Poly(vinyl alcohol) Hydrogels Produced by Conventional Crosslinking or by Freezing/Thawing Methods. *Biopolymers PVA Hydrogels, Anionic Polymerisation Nanocomposites*, 153, 37–65. [https://doi.org/10.1007/3-540-46414-X\\_2](https://doi.org/10.1007/3-540-46414-X_2)
- Hendrawan, Khoerunnisa, F., Sonjaya, Y., & Chotimah, N. (2016). Physical and chemical characteristics of alginate-poly (vinyl

**Fathyah Zulfa Maulidah, 2018**

**PROFIL PELEPASAN KALIUM KLORIDA KE DALAM MEDIA AQUA-DM MELALUI MEMBRAN HIDROGEL PVA-GA-POM**

Universitas Pendidikan Indonesia | [repository.upi.edu](http://repository.upi.edu) | [perpustakaan.upi.edu](http://perpustakaan.upi.edu)

- alcohol) based controlled release hydrogel. *Journal of Environmental Chemical Engineering*, 4(4), 4863–4869.  
<https://doi.org/10.1016/j.jece.2016.03.043>
- Hennink, W. E., & van Nostrum, C. F. (2012). Novel crosslinking methods to design hydrogels. *Advanced Drug Delivery Reviews*, 64(SUPPL.), 223–236.  
<https://doi.org/10.1016/j.addr.2012.09.009>
- Kirk, R.E. dan Othmer, D.F. (1979). *Encyclopedia of Chemical Technology*, 3<sup>rd</sup> ed., vol 15-20, The Inter Science Encyclopedia, Inc.: New York.
- Kiernan, J. A. (2000). Formaldehyde, formalin, paraformaldehyde and glutaraldehyde: What they are and what they do. *Microscopy Today*, 00–1(c), 8–12.
- Lin, C. C., & Metters, A. T. (2006). Hydrogels in controlled release formulations: Network design and mathematical modeling. *Advanced Drug Delivery Reviews*, 58(12–13), 1379–1408.  
<https://doi.org/10.1016/j.addr.2006.09.004>
- Mandal, B., et al (2013). Synthesis of interpenetrating network hydrogel from poly(acrylic acid-co-hydroxyethyl methacrylate) and sodium alginate: Modeling and kinetics study for removal of synthetic dyes from water. *Carbohyd. Polym.* 98(1), hlm. 257-269.
- Mansur, H.S., et. al. (2008). FTIR Spectroscopy Characterization of Poly (Vinyl Alcohol) Hydrogel with Different Hydrolysis Degree and Chemically Crosslinked with Glutaraldehyde. *Material Sciences and Engineering*, 28(4), 539-548.
- Mariana, A. M., et al. (2014). HPMC layered tablets modified with chitosan and xanthan as matrices for controlled-release fertilizers. *J. Appl. Polym. Sci.* 131(19), 5.
- Mathur, A. M., Moorjani, S. K., & Scranton, A. B. (1996). Methods for Synthesis of Hydrogel Networks: A Review. *Journal of Macromolecular Science, Part C: Polymer Reviews*, 36(2), 405–430.  
<https://doi.org/10.1080/15321799608015226>

**Fathyah Zulfa Maulidah, 2018**

**PROFIL PELEPASAN KALIUM KLORIDA KE DALAM MEDIA AQUA-DM  
MELALUI MEMBRAN HIDROGEL PVA-GA-POM**

Universitas Pendidikan Indonesia | repository.upi.edu |  
perpustakaan.upi.edu

- Nurdin, S.U, Suharyono A.S., dan Samsul R. 2008. Karakteristik Fungsional Polisakarida Pembentuk Gel Daun Cincau Hijau (*Premna Oblongifolia Merr.*). Jurnal Teknologi dan Industri Hasil Pertanian Volume 13, No. 1 : 4-9.
- Paradossi, G., Cavalieri, F., Chiessi, E., Spagnoli, C., & Cowman, M. K. (2003). Poly(vinyl alcohol) as versatile biomaterial for potential biomedical applications. *Journal of Materials Science: Materials in Medicine*, 14(8), 687–691. <https://doi.org/10.1023/A:1024907615244>
- Rachmawati, A.K. 2009. Ekstraksi Dan Karakterisasi Pektin Cincau Hijau (*Premna oblongifolia. Merr*) Untuk Pembuatan Edible Film. [skripsi] Surakarta : Universitas Sebelas Maret.
- Saeed, R., & Abdeen, Z. U. (2015). Kinetics of desorption of KCl from polyvinyl alcohol-borate hydrogel in aqueous-alcoholic solvents at different temperatures. *Russian Journal of Physical Chemistry A*, 89(11), 2126–2131. <https://doi.org/10.1134/S0036024415110163>
- Sen, C., & Das, M. (2017). Self-supporting-film from starch , poly ( vinyl alcohol), and glutaraldehyde : *Optimization of composition using response surface methodology*, 44436, 1–11. <https://doi.org/10.1002/app.44436>
- Thermo Fisher. (2013). *Introduction to Fourier Transform Infrared Spectroscopy*. American : Thermo Fisher Scientific Inc.
- Trinh, T. H., & KuShaari, K. (2016). Dynamic of Water Absorption in Controlled Release Fertilizer and its Relationship with the Release of Nutrient. *Procedia Engineering*, 148, 319-326, <https://doi.org/10.1016/j.proeng.2016.06.444>
- Zhao, W., Jin, X., Cong, Y., & Fu, J. (2012). Degradable natural polymer hydrogels for articular cartilage tissue engineering, (November). <https://doi.org/10.1002/jctb.3970>
- Zu, Y., Zhang, Y., Zhao, X., Shan, C., Zu, S., Wang, K., ... Ge, Y.(2012).

Preparation and characterization of chitosan-polyvinyl alcohol blend hydrogels for the controlled release of nano-insulin.

**Fathyah Zulfa Maulidah, 2018**

**PROFIL PELEPASAN KALIUM KLORIDA KE DALAM MEDIA AQUA-DM MELALUI MEMBRAN HIDROGEL PVA-GA-POM**

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

*International Journal of Biological Macromolecules*, 50(1),  
82–87. <https://doi.org/10.1016/j.ijbiomac.2011.10.006>

**Fathyah Zulfa Maulidah, 2018**

*PROFIL PELEPASAN KALIUM KLORIDA KE DALAM MEDIA AQUA-DM  
MELALUI MEMBRAN HIDROGEL PVA-GA-POM*

Universitas Pendidikan Indonesia | repository.upi.edu |  
perpustakaan.upi.edu