

## DAFTAR PUSTAKA

- Afrizal, Kamil. (2009). *Studi Perilaku Semen Instan Geopolimer Berbahan Dasar Fly Ash dan Metakaolin*. Skripsi Teknik Sipil. Universitas Indonesia
- Allahverdi, A. ; Skvara, F. (2004a). Sulfuric Acid Attack on Hardened Paste of Geopolymer Cement Part 1: Mechanism of Corrosion at Relative High Concentrations. *Ceramics-Silikaty*. 49.4: 155-229
- Allahverdi, A. ; Skvara, F. (2004b). Sulfuric Acid Attack on Hardened Paste of Geopolymer Cement Part 2: Corrosion Mechanism at Mild and Relatively Low Concentrations. *Ceramics-Silikaty* . 50.1: 1-4
- Astutiningsih, Sotya & Liu, Yinong. (2006, Mei). *Synthetic Alumina Silica Glass for Geopolymer Precursor*. Paper presented at International Conference on Pozzolan, Concrete and Geopolymer, Khon Kaen, Thailand
- Barbosa, VF. ; Mackenzie, K.J.D. ; Thaumaturgo, C. (2000). Synthesis and characterisation of materials based on inorganic polymers of alumina and silica: Sodium polysialate polymers. *International Journal of Inorganic Material*, 2.:309-317
- Chalee, w. & Jaturapitakkul, C.. (2009). Effect of W/B ratios and fly ash finenesses on chloride diffusion coefficient of concrete in marine environment. *Materials and Structures* . 42 : 505-514
- Duxon, P. ; Fernandez-Jimenez, A. ; Provis, J.L. ; Lukey, G.C. ; Palomo, A. ; van Deventer, J.S.J. dkk. (2007a). Geopolymer technology: the current state of the art. *J Mater Sci*. 42: 2917–2933
- Duxon, P. SW Mallicoat . GC Lukey . WM Kriven . JSJ Van Deventer . (2007b) . The Effect of Alkali and Si/Al Ratio on the Development of Mechanical Properties of Metakaolin-Based Geopolymers. *Colloids and Surfaces A: Physicochem Eng.Aspects* 292: 8-20
- Davidovits, Joseph. (1991). Geopolymers: Inorganicpolymeric New Materials, *Journal of Thermal Analysis vol 37*: 633-1656
- Davidovits, J. (2008). *Geopolymer Chemistry and Applications* . Prancis: Institut Géopolymère
- Fernandez-Jimenez, A ; Garcia-Lodeiro, I. ; Palomo, A. (2007). Durability of alkali-activated fly ash cementitious materials. *J Mater Sci*. 42:3055–3065
- Gedde, U.W. (1995). *Polymer Physics*. edisi pertama. Chapman & Hall: London

- Hardjito, D and B.V. Rangan. (2005). Development and Properties of Low Calcium Fly Ash-Based Geopolymer Concrete. *Research Report GC1: Australia*
- Kefei Li ; Zhaoyuan Chen ; Huizhen Lian. (2008). Concepts and requirements of durability design for concrete structures: an extensive review of CCES01. *Materials and structures*. 41 : 717-731
- Khale , D. dan Chaudhary, R. (2007). Mechanism of Geopolimerization and Factors Influencing its Development: a Review. *J Mater Sci*. 42: 729-746
- Kong, D.L.Y. ; Sanjayan, J.G. ; Sagoe-Crentsil, K. (2008). Factors affecting the performance of metakaolin geopolymers exposed to elevated temperatures. *J Mater Sci*. 43:824–831
- Kroschwitz, Jacqueline(ed). (1990). *Polymers: Polymer Characterization and Analysis*. New York : John Wiley and Sons
- Li Fangxian ; Chen Youzhi ; Long Shizong ; Chen Jie .(June, 2009). Properties and microstructure of Marine Concrete with Composite Mineral Admixture. *Journal of Walum University of Technology-Mater. Sci. Ed*
- Lloyd, Redmund R. ; Provis, John L. ; Van Deventer, Jannie S.J. . (2009). Microscopy and Microanalysis of Inorganic Polymer Cements.1: Remnent Fly Ash Particles. *J. Mater.Sci*. DOI 10.1007/s10853-008-3077-0
- Luz Granizo, M ; Blanco-Varela, M.T. ; Martinez-Ramirez, S. (2007). Alkali activation of metakaolins: parameters affecting mechanical, structural and microstructural properties. *J Mater Sci*. 42:2934–2943
- Lohaus, Ludger & Anders, Steffen . ( 2007).Advances in Construction Materials 2007. In Christian U. Grosse (ed). *Ductility and Fatigue Behaviour of Polymer-Modified and Fiber-Reinforced High Performance Concrete* (pp 165-172). Berlin: Springer
- Miranda, JM ; Fernandez-Jimenez, A ; Gonzalez, J.A. ; Palomo, A. (2005). Corrosion Resistance in activated fly ash mortars. *Cement and Concrete Research*. 35: 1210-1217
- Medeiros, M. & Helene, P. .(2008). Efficacy of surface hydrophobic agents in reducing water and chloride ion penetration in concrete. *Material and Structures*. 41 : 59-71
- Nairn, J.D. Blackburn ; M. Wilson. (2001). Research and Development of Fly Ash: Opportunity or Alchemy. *18<sup>th</sup> Annual International Pittsburgh Coal Conference*. New Castle Australia

- Provis, J.L. . P. Duxon . J.S.J. Van Deventer and G.C. Luckey. (2005). “The Role of Mathematical Modelling and Gel Chemistry in Advancing Geopolymer Technology”, *Chemistry Engineering Res. Des.* .83: 853-860
- Raina,V.K. (1989). *Concrete for Construction Facts and Practice*. New Delhi:Tata McGraw-Hill Publishing
- Ryu, J.S. & Otsuki, N. (2002). Application of electrochemical techniques for the control of cracks and steel corrosion in concrete. *Journal of Applied Electrochemistry*. 32:635-639
- Siddique, (2008). *Waste Materials and By-Products in Concrete*. New York: Springer
- Skvara,F. ; Kopecky, L. ; Nemecek, J. Bittnar, Z. (2006). Microstructure of Geopolymer Materials Based on Fly Ash. *Ceramics-Silikaty* . 50(4) : 208-215
- Song, X.J. ; Marosszeky, M; Brungs, M. ; Munn, R. . (2005) Durability of Fly Ash Based Geopolymer Concrete Against Sulphuric Acid Attack.
- Swastika, Niken. (2007). *Pembuatan dan Karakterisasi Geopolimer dari Bahan Fly Ash PLTU Paiton*. Skripsi Jurusan Kimia FMIPA. Institut Teknologi Sepuluh Nopember Surabaya
- Van Deventer , J.S.J . JL Provis. P Duxon . GC Luckey . (2006). Reaction Mechanism in Geopolymeric Conversion of Inorganic Waste to Useful Products” . *Journal of Hazardous Materials*. Article in Press
- Van Jaarsveld, J.G.S. and J.S.J. Van Deventer . 1999. The Effect of Metal Contaminants on Formation and Properties of Waste-Based Geopolymers, *Cement and Concrete Research* . 29: 1189-1200
- Wallah, S.E. and B.V. Rangan. (2006). Low Calcium Fly Ash-Based Geopolymer Concrete: Long Term Properties. *Research Report GC2: Perth*
- Windholtz, Martha (Ed). (1976) . *The Merck Index An Encyclopedia of Chemicals and Drugs*. Merck & Co, Inc: USA
- Xu, J.Z., Zhou, Y.L., Chang, Q., & Qu, H.Q. (2006). Study on the factor of affecting the immobilization of heavy metals in fly ash-based geopolymers. *Materials Letters* , 60, 820-822
- Zongjin, Li ; Zung Ding ; Yunsheng Zhang. (2001). Development of Sustainable Cementitious Materials. International Workshop on Sustainable Development and Concrete Technology. 55-74