



DAFTAR PUSTAKA

- Acar, I. and Atalay, M. U. (2016) "Recovery potentials of cenospheres from bituminous coal fly ashes," *Fuel*. Elsevier Ltd, 180, pp. 97–105. doi: 10.1016/j.fuel.2016.04.013.
- Ahmaruzzaman, M. (2010) "A review on the utilization of fly ash," *Progress in Energy and Combustion Science*. Elsevier Ltd, 36(3), pp. 327–363. doi: 10.1016/j.peccs.2009.11.003.
- Andersson, B. *et al.* (2011) *Computational fluid dynamics for engineers, Computational Fluid Dynamics for Engineers*. doi: 10.1017/CBO9781139093590.
- ANSYS Inc. (2014a) *Ansys Fluent Theory Guide 16*. USA: ANSYS Inc.
- ANSYS Inc. (2014b) *Ansys Fluent User's Guide 16*. USA.
- Bartoňová, L. (2015) "Unburned carbon from coal combustion ash: An overview," *Fuel Processing Technology*, 134, pp. 136–158. doi: 10.1016/j.fuproc.2015.01.028.
- Blissett, R. S. and Rowson, N. A. (2012) "A review of the multi-component utilisation of coal fly ash," *Fuel*. Elsevier Ltd, 97, pp. 1–23. doi: 10.1016/j.fuel.2012.03.024.
- Borm, P. J. A. (1997) "Toxicity and Occupational Health Hazards Fly Ash (CFA). A Review of Data and Comparison to Coal Mine Dust," *Annn. Occup. Hyg*, 41(6), pp. 659–676.
- Boycott, A. E. (1920) "Sedimentation of blood corpuscles," *Nature*, p. 532. doi: 10.1038/104532b0.
- BPS (2017) *Produksi Barang Tambang Mineral, Badan Pusat Statistik*. Available at: <https://www.bps.go.id/dynamic/table/2016/01/28/1126/produksi-barang-tambang-mineral-1996-2015.html> (Accessed: March 3, 2019).
- Breeze, P. (2015) "Fluidized Bed Combustion and Coal Gasification," in *Coal-Fired Generation*. London: Elsevier Ltd., pp. 41–52.
- Brown, G. G. *et al.* (1978) *Unit Operations*. New York: John Wiley & Sons, Inc.
- Chen, P.-Y. (1977) "Table of Key Lines in X-Ray Powder Diffraction Patterns of Minerals in Clays and Associated Rocks," *Indiana Geological Survey Occasional Paper*, (21), pp. 1–67.
- Craig, H., Feuerborn, H.-J. and Weir, A. (2013) "Coal Combustion Products: A Global Perspective," *World of Coal Ash (WOCA) Conference*.
- Elghobashi, S. (1994) "On predicting particle-laden turbulent flows," *Applied Scientific Research*, 52(4), pp. 309–329. doi: 10.1007/BF00936835.
- ESDM (2019) *Handbook of Energy & Economic Statistic of Indonesia*. Jakarta: Ministry of Energy and Mineral Resources Republic of Indonesia.
- Fomenko, E. V *et al.* (2013) "Composition and Morphology of Fly Ash Cenospheres Produced from the Combustion of Kuznetsk Coal," *Energy & fuels*, 27, pp. 5440–5448. doi: 10.1021/ef400754c.
- Glinicki, M. A., Józwiak-Niedzwiedzka, D. and Dabrowski, M. (2019) "The influence of fluidized bed combustion fly ash on the phase composition and microstructure of cement paste," *Materials*, 12(7). doi: 10.3390/ma12172838.
- Hirajima, T. *et al.* (2010) "Recovery of cenospheres from coal fly ash using a dry separation process : Separation estimation and potential application," *International Journal of Mineral Processing*. Elsevier B.V., 95(1–4), pp. 18–24. doi: 10.1016/j.minpro.2010.03.004.
- Hirsch, C. (2007) *Numerical Computation of Internal & External Flows, Volume 1*. 2nd ed. UK: John Wiley & Sons Ltd.
- Hower, J. C. (2012) "Petrographic examination of coal-combustion fly ash," *International Journal of Coal Geology*. Elsevier B.V., 92, pp. 90–97. doi: 10.1016/j.coal.2011.12.012.



- Isabel, S.-R. and Ward, C. R. (2008) "Coal Combustion," in *Applied Coal Petrology*. London: Elsevier Ltd., pp. 85–117.
- Kiani, A., Zhou, J. and Galvin, K. P. (2015) "A Pilot Scale Study of Cenosphere Recovery and Concentration using the Inverted Reflux Classifier," *Minerals Engineering*. Elsevier Ltd, 79, pp. 17–23. doi: 10.1016/j.mineng.2015.04.019.
- Kleinhans, U. *et al.* (2019) "Large Eddy Simulation of a particle-laden flow around a cylinder: Importance of thermal boundary layer effects for slagging and fouling," *Fuel*, 241(December 2018), pp. 585–606. doi: 10.1016/j.fuel.2018.12.056.
- Kolay, P. K. and Bhusal, S. (2014) "Recovery of hollow spherical particles with two different densities from coal fly ash and their characterization," *Fuel*. Elsevier Ltd, 117, pp. 118–124. doi: 10.1016/j.fuel.2013.09.014.
- Li, J. *et al.* (2014) "Recovery and concentration of buoyant cenospheres using an Inverted Reflux Classifier," *Fuel Processing Technology*, 123, pp. 127–139. doi: 10.1016/j.fuproc.2014.01.04
- Li, Y. and Wu, H. (2012) "Ash Cenosphere from Solid Fuels Combustion . Part 1 : An Investigation into Its Formation Mechanism Using Pyrite as a Model Fuel," *Energy & fuels*, 26, pp. 130–137. doi: 10.1021/ef201173g.
- Menteri Energi dan Sumber Daya Mineral (2018) *Pengesahan Rencana Usaha Penyediaan Tenaga Listrik PT Perusahaan Listrik Negara (Persero) Tahun 2018 s.d. 2027*. Republik Indonesia.
- Morley, R. J., Pisupati, S. V. L. N. and Scaroni, A. W. (2017) *Coal Utilization, Encyclopædia Britannica, inc.* Available at: <https://www.britannica.com/topic/coal-utilization-122944> (Accessed: March 4, 2020).
- Peraturan Presiden Republik Indonesia (2017) *Rencana Umum Energi Nasional*. Indonesia.
- Petrus, H. T. B. M. *et al.* (2011) "Performance of dry-separation processes in the recovery of cenospheres from fly ash and their implementation in a recovery unit," *International Journal of Mineral Processing*. Elsevier B.V., 98(1–2), pp. 15–23. doi: 10.1016/j.minpro.2010.09.002.
- PT. Bukit Pembangkit Innovative (2013) *Profil Perusahaan*. Available at: <https://www.bpi-ipp.com/profil.php> (Accessed: February 25, 2020).
- Ranjbar, N. and Kuenzel, C. (2017) "Cenospheres : A review," *Fuel*. Elsevier Ltd, 207, pp. 1–12. doi: 10.1016/j.fuel.2017.06.059.
- Rosita, W. *et al.* (2020) "Sequential particle-size and magnetic separation for enrichment of rare-earth elements and yttrium in Indonesia coal fly ash," *Journal of Environmental Chemical Engineering*. Elsevier, 8(1), p. 103575. doi: 10.1016/j.jece.2019.103575.
- Sadrehaghighi, I. (2020) *Turbulence Modeling - A Review*. Annapolis: ResearchGate. doi: 10.13140/RG.2.2.35857.33129/2.
- Sekretariat Jenderal Dewan Energi Nasional (2019) *Indonesia Energy Outlook 2019*. Edited by S. Abdurrahman, M. Pertiwi, and Walujanto. Jakarta: Dewan Energi Nasional.
- Shih, T.-H. *et al.* (1995) "A New $k-\epsilon$ Eddy-Viscosity Model for High Reynolds Number Turbulent Flow - Model Development and Validation," *Computer Fluids*, 3(24), pp. 227–238.
- Sokol, E. V, Maksimova, N. V and Volkova, N. I. (2000) "Hollow silicate microspheres from fly ashes of the Chelyabinsk brown coals ž South Urals , Russia /," *Fuel Processing Technology*, 67, pp. 35–52.
- Sutijan *et al.* (2019) "Effect of inlet speed on gravitational air separator for cenospheres accumulation from fly ash: Modeling using computational fluid dynamics (CFD),"



- IOP Conference Series: Materials Science and Engineering*, 478(1). doi: 10.1088/1757-899X/478/1/012028.
- Widyawan, A. (2012) *Studi Kinerja Zona Pembakaran Secondary Reformer Pabrik Amoniak PUSRI II dengan Computational Fluid Dynamic*. Universitas Gadjah Mada.
- Wu, W. *et al.* (2019) "Fluidized bed combustion coal fly ash: comparative evaluation for potential use in alkali-activated binders," *International Journal of Coal Preparation and Utilization*, pp. 1–16. doi: 10.1080/19392699.2019.1576647.
- Yao, Z. T. *et al.* (2015) "Earth-Science Reviews A comprehensive review on the applications of coal fly ash," *Earth-Science Reviews*, 141, pp. 105–121. doi: 10.1016/j.earscirev.2014.11.016.
- Zhang, L., Tao, Y. and Yang, L. (2018) "Research on flow field and kinematic characteristics of fly ash particles in rotary triboelectrostatic separator," *Powder Technology*. Elsevier B.V., 336, pp. 168–179. doi: 10.1016/j.powtec.2018.05.055.
- Zyrkowski, M. *et al.* (2016) "Characterization of fly-ash cenospheres from coal-fired power plant unit," *Fuel*, 174, pp. 49–53. doi: 10.1016/j.fuel.2016.01.061.