

DAFTAR PUSTAKA

- Ali, M., Fathurrahman, A., dan Ramdhani, A., 2018, Identification of the Characteristics and Patterns of Clean Water Consumption at the Household Level, *Journal of Environmental Management*, **225**(1): 105-117. <https://doi.org/10.14716/ijtech.v9i7.2509>
- Badan Standardisasi Nasional, 2004, SNI 06-6989.14-2004, *Air dan Air Limbah - Bagian 14: Cara Uji BOD (Biochemical Oxygen Demand)*. BSN: Jakarta.
- Badan Standardisasi Nasional, 2009, SNI 6989.72:2009. *Air dan Air Limbah - Bagian 72: Cara Uji Iodometri (Tiosulfat) untuk Penentuan Oksigen Terlarut (DO)*. BSN: Jakarta.
- Badan Standardisasi Nasional, 2005, SNI 06-6989.25-2005, *Air dan Air Limbah - Bagian 25: Cara Uji Kekeruhan dengan Turbidimeter*, BSN: Jakarta.
- Bakri, B., Selintung, M., Nahmadi, R.N., Ihsan, M., dan Arai, Y., 2019, The Effectiveness of PAC and Chitosan Usage in Jeneberang River Raw Water Treatment, *Journal Science and Engineering*, **6**(7): 1-6. DOI:[10.1088/1757-899X/676/1/012028](https://doi.org/10.1088/1757-899X/676/1/012028)
- Bratby, J, 2016, *Coagulation and flocculation in water and wastewater treatment*, IWA publishing.
- Dharminder, S., Kumar, R., dan Choudhary, P., 2019, The Clean Water: The Basic Need of Human and Agriculture. *Water Research & Technology*, **8**(4): 129-142. DOI: [10.1027/IJCS.2022218235](https://doi.org/10.1027/IJCS.2022218235)
- Ding, S., Chu, W., Bond, T., Cao, Z., Xu, B., dan Gao, N., 2018, Contribution of amide-based coagulant polyacrylamide as precursors of haloacetamides and other disinfection by-products. *Chemical Engineering Journal*, **350**: 356-363. <https://doi.org/10.1016/j.cej.2018.06.002>
- Dwidewitra, P.R., Huda, M.M., dan Rachmanto, A.T., 2024, Pengaruh Konsentrasi Koagulan Terhadap Proses Pengolahan Air Di PDAM Surya Sembada Kota Surabaya, *Jurnal Teknik*, **2**(2): 145-153. DOI:[10.61132/globe.v2i2.313](https://doi.org/10.61132/globe.v2i2.313)
- Ekoputri, S. F., Rahmatunnissa, A., Nulfaidah, F., Ratnasari, Y., Djaeni, M., dan Sari, D. A., 2024, Pengolahan air limbah dengan metode koagulasi flokulasi pada industri kimia. *Jurnal Serambi Engineering*, **9**(1): 7781-7787.
- El-taweel, R.M., et.al, 2023, A review of coagulation explaining its definition, mechanism, coagulant types, and optimization models; RSM, and ANN. *Current Research in Green and Sustainable Chemistry*, **6**: 100358. doi.org/10.1016/j.crgsc.2023.100358
- Fakhriyah, Yeyendra, dan Marianti, A., 2021, Integrasi Smart Water Management Berbasis Kearifan Lokal Sebagai Upaya Konservasi Sumber Daya Air di Indonesia. *Indonesian Journal of Conservation*, **10**(1): 67-41. doi.org/10.15294/ijc.v10i1.31036
- Fitria, D., Komala, P.S., dan Vendela, D., 2022, Pengaruh Waktu Flokulasi Pada Proses Koagulasi Flokulasi Dengan Biokoagulan Kelor Untuk Menyisihkan Kadar Besi Air Sumur. *Jurnal Reka Lingkungan*, **10**(2), 165-174. <https://doi.org/10.26760/rekalingkungan.v10i2.165-174>

- Fu, C., et.al, 2023, Optimizing the Flocculation Effect of Cationic Polyacrylamide Prepared with UV-Initiated Polymerization by Response Surface Methodology, *Water*, **15**(6): 1200. <https://doi.org/10.3390/w15061200>
- Gasmi, A., et.al, 2022, Comparative study of chemical coagulation and electrocoagulation for the treatment of real textile wastewater: Optimization and operating cost estimation. *ACS omega*, **7**(26): 22456-22476. <https://doi.org/10.1021/acsomega.2c01652>
- Gheraout, D, 2020, Coagulation Process for Water Treatment: Understanding the Mechanisms. *Journal of Water Process Engineering*, **7**(8): 1-18. DOI:[10.4236/oalib.1106636](https://doi.org/10.4236/oalib.1106636)
- Ghony, M.A., Jessica, dan Hariyadi, A., 2024, Pengaruh Penggunaan Chemical Poly Aluminium Chloride (PAC) dan Polyacrylamide (PAM) terhadap Proses Penjernihan Air di Purifier PLTU Tanjung Enim, *Jurnal Ilmiah Teknik dan Sains*, **1**(3): 147-153. <https://doi.org/10.62278/jits.v1i3.26>
- Gkotsis, P., Mitrakas, M dan Zouboulis, A., 2023, A Novel Process For the On-Site Preparation and Application of Polyferric Chloride For Surface Water Treatment. *Journal Sustainability*, **1**(5): 164 - 170. doi.org/10.3390/su152316416
- Hikmarina, N., Sari, D.F., dan Prasetyo, H., 2023, Pemanfaatan Serabut Pinang dan Tempurung Kelapa dalam Sistem Penyaringan Air Bersih di Jambi, *Jurnal Teknologi Lingkungan*, **14**(2): 89-102.
- Hennecke, D., Bauer, A., Herrchen, M., Wischerhoff, E., dan Gores, F., 2018, Cationic polyacrylamide copolymers (PAMs): environmental half life determination in sludge-treated soil. *Environmental Sciences Europe*. **30**(1): 16. DOI: [10.1186/s12302-018-0143-3](https://doi.org/10.1186/s12302-018-0143-3)
- Joshi, S.J., dan Abed, R.M., 2017, Biodegradation of polyacrylamide and its derivatives. *Environmental Processes*. **4**(2): 463-476. doi.org/10.1007/s40710-017-0224-0
- Kementerian Kesehatan RI, 2010, *Peraturan Menteri Kesehatan Republik Indonesia Nomor 492/MENKES/PER/IV/2010 tentang Persyaratan Kualitas Air Minum*, Jakarta: Kementerian Kesehatan RI.
- Komala, R., Subroto, Sisnayanti, Dwipayana, H., dan Nurlela, 2024, Comparison of Alum and Poly Aluminum Chloride Coagulant Performance on Turbidity and pH of Lematang Enim PDAM Raw Water, *Jurnal Ilmiah Matematika dan Ilmu Pengetahuan Alam*, **21**(1): 30-38. <https://doi.org/10.31851/sainmatika.v21i1.13749>
- Kristianto, H., Jennifer, A., Sugih, A.K., dan Prasetyo, S., 2020, Potensi Polisakarida Dari Limbah Buah-Buahan Sebagai Koagulan Alami Dalam Pengolahan Air Dan Limbah Cair, *Jurnal Rekayasa Proses*, **14**(2): 108-127. <https://doi.org/10.22146/jrekpros.57798>
- Liu, S., Zhuang, X., dan Wang, C., 2021, Aplikasi Polialuminium Koagulan Klorida Di Sungai Perkotaan Pengolahan Air Mempengaruhi Komunitas Mikroba Di Sungai Sedimen, *Air (Swiss)*, **13**(13): <https://doi.org/10.1016/j.inoche.2025.114885>

- Łukasiewicz, E., 2025, Coagulation-Sedimentation in Water and Wastewater Treatment: Removal of Pesticides, Pharmaceuticals, PFAS, Microplastics, and Natural Organic Matter, *Water*, **17**(21): 3048. <https://doi.org/10.3390/w17213048>
- Mansour, H., dan Khelifa, A., 2023, Application of Natural Flocculants in Water Treatment: A Sustainable Approach. *Water Science and Technology*, **89**(3): 765-779.
- Mansri, A., Bendraoua, A., Benmoussa, A., dan Benhabib, K., 2015, New Polyacrylamide [PAM] Material Formulations For The Coagulation/Flocculation/Decantation Process, *Journal of Polymers and the Environment*, **23**(4): 580-587. DOI:[10.1007/s10924-015-0734-7](https://doi.org/10.1007/s10924-015-0734-7)
- Maraschin M., Hedlund K.F.F., dan Carissimi E., 2020, Acidification And Flocculation Of Sludge From A Water Treatment Plant: New Action Mechanisms, *Separation and Purification Technology*, **25**(2): 117-417. <https://doi.org/10.1016/j.seppur.2020.117417>
- Matilainen, A., Vepsäläinen, M., dan Sillanpää, M., 2010, Natural Organic Matter Removal By Coagulation During Drinking Water Treatment: A Review, *Advances in Colloid and Interface Science*, **159**: 189-197. <https://doi.org/10.1016/j.cis.2010.06.007>
- Mayasari, R., Hastarina, M., dan Apriyani, 2019, Analisis Turbidity Terhadap Dosis Koagulan dengan Metode Regresi Linear (Studi Kasus di PDAM Tirta MMusi Palembang), *Jurnal Intergrasi Sistem Industri*, **6**(2): 117-125.
- Mursitaningrum, A.P., Fricilia, D.K., dan Adhani, L., 2024, Efektivitas Koagulan PAC dan Aluminium Sulfat dengan Kombinasi Flokulan pada Limbah Cair Pabrik Sepeda Motor, *Jurnal Sains dan Edukasi Sains*, **7**(2): 90-95. <https://doi.org/10.24246/juses.v7i2p90-95>
- Maćczak, P., Kaczmarek, H., dan Ziegler-Borowska, M., 2020, Recent Achievements In Polymer Bio-Based Flocculants For Water Treatment, *Materials*, **13**(18): 3951. <https://doi.org/10.3390/ma13183951>
- Nikitina, A.A., et.al, 2021, Application Of Polyacrylamide Flocculant For Stabilization Of Anaerobic Digestion Under Conditions Of Excessive Accumulation Of Volatile Fatty Acids, *Applied Sciences*, **11**(1): 100. <https://doi.org/10.3390/app11010100>
- Nyström, F., Nordqvist, K., Herrmann, I., Hedström, A., dan Viklander, M., 2020, Laboratory scale evaluation of coagulants for treatment of stormwater. *Journal of Water Process Engineering*, **36**: 101271. <https://doi.org/10.1016/j.jwpe.2020.101271>
- Pemerintah Republik Indonesia, 2021, *Peraturan Pemerintah Republik Indonesia Nomor 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup*, Jakarta: Sekretariat Negara.
- Riva, F.A., Sumiyanti, S., dan Sarminingsih, A., 2022, Pengaruh Variasi PAC, Soda Ash dan Polimer terhadap Penyisihan pH dan Warna pada Unit Instalasi Pengolahan Air Minum di Pekanbaru, *Jurnal Ilmu Lingkungan*, **20**(4): 769-776. <https://doi.org/10.31602/ann.v10i2.13081>

- Seo, D., Oh, K., Im, W., dan Lee, H. L., 2018, Hydrolysis of cationic polyacrylamide and its effect on flocculation of ground calcium carbonate, *BioRes*, **13**(3): 5303-5318. DOI: 10.15376/biores.13.3.5303-5318
- Siswanto, S. H., Fuady, A. R., Siswanto, A. D. P., dan Yulianingsih, I., 2025, Pengaruh Penambahan Polyacrylamide (PAM) Terhadap pH, Total Dissolved Solid, dan Kekeruhan dengan Metode Jar Test pada Water Treatment Plant di PPSPDM Migas Cepu. *Jurnal Nasional Pengelolaan Energi MigasZoom*, **7**(1): 17-26. <https://doi.org/10.37525/mz/2025-1/646>
- Tamjidillah, M., Ramadhan, N.M., Anggono, C.A dan Bonazir, R., 2023, Peran Koagulan PAC Pada Pengolahan Air Bersih dan Air Minum Terintegrasi Regional Banjarnakula, *Jurnal Teknik Mesin*, **8**(2): 198-203.
- Toding, A., Arifin, M., dan Sutopo, Y.K.D., 2021, Evaluasi dan Arahan Peningkatan Pelayanan Air Bersih di Kota Makassar. *Jurnal Wilayah & Kota Maritim (Journal of Regional and Maritime City Studies)*, **9**(1). <https://doi.org/10.20956/jwkm.v9i1.1188>
- Trus, I., Gomelya, M., dan Kryzhanovska, Y., 2023, The use of coagulants from industrial waste in water treatment processes. *Journal of Chemical Technology and Metallurgy*, **58**(1), 178-186.
- World Health Organization, dan United Nations Children's Fund, 2025, *Progress on household drinking water, sanitation and hygiene 2000–2024*. WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. <https://data.unicef.org/resources/jmp-report-2025/>
- Xiong, B., Loss, R.D., Shields, D., Pawlik, T., Hochreiter, R., Zydney, A.L., dan Kumar, M., 2018, Polyacrylamide Degradation And Its Implications In Environmental Systems, *NPJ Clean Water*, **1**(1): 17. <https://doi.org/10.1038/s41545-018-0016-8>
- Zhang, H., Jiang, J., Shang, S., Song, Z., dan Song, J., 2018, Novel Rosin-Based, Hydrophobically Modified Cationic Polyacrylamide For Kaolin Suspension Flocculation. *Journal of Applied Polymer Science*, **135**(33): 46637. <https://doi.org/10.1002/app.46637>
- Zhang, L., Liu, X., Wang, T., Tang, H dan Jia, Y., 2023, The Effect of pH/PAC the Coagulation of Anionic Surfactant Wastewater Generated in the Cosmetic Production, *Journal of Environmental Chemical Engineering*, **11**(2): 38-47. <https://doi.org/10.1016/j.ensm.2025.104295>
- Zhao, S., Chen, Y., Wu, G., Li, J., Ren, Y., dan Duan, X., 2023, Investigation on nanofiltration membrane fouling behaviour of cation-induced apam in strontium-bearing mine water, *Journal of Environmental Chemical Engineering*, **11**(5), 110940.
- Zhao, Y.X., et.al, 2013, Cationic polyacrylamide as coagulant aid with titanium tetrachloride for low molecule organic matter removal. *Journal of hazardous materials*, **258**, 84-92. <https://doi.org/10.1016/j.jhazmat.2013.04.044>