

DAFTAR PUSTAKA

- FAO, 2016. *AQUASTAT website. Food and Agriculture Organization of the United Nations*. [Online]
Available at: http://www.fao.org/nr/water/aquastat/water_use/index.stm
[Accessed 23 April 2018].
- Abadjieva, T. & Sephiri, P., 2000. *Investigations on Some Properties of no-Fines Concrete*. Rotterdam (Netherlands), in-house publishing.
- Adin, A. & Rebhun, M., 1987. Deep-Bed Filtration: Accumulation-Detachment Model Parameters. *Chemical Engineering Science*, 42(5), pp. 1213-1219.
- Aditya, F., 2008. *Campuran Semen Agar Beton Berkualitas*. 16 September - 13 Oktober ed. Jakarta: Tabloid RUMAH.
- Alaica, A. L., Dolatabadi, M. H., Sucic, A. & Shehata, M., 2010. *Optimizing The Strength And Permeability of Pervious Concrete*. Nova Scotia, Canada, Civil Engineering, Ryerson University.
- Al-Layla, M. A., Ahmad, S. & Middlebrooks, E. J., 1977. *Water Supply Engineering Design*. Iraq: Rainbow-Bridge Book Co..
- Alonso, J. L. et al., 1999. Comparison and Recovery of Escherichia coli and Thermotolerant Coliforms in Water with a Chromogenic Medium Incubated at 41 and 44.5°C. *Applied and Environmental Microbiology*, 65(8), pp. 3746-3749.
- American Association of State Highway and Transportation Officials , AASHTO Designation: T 84-00 (2004) & ASTM Designation: C 128-97. *Standard Method of Test for Specific Gravity and Absorption of Fine Aggregate*. Purdue University: AASHTO.
- American Public Health Association, 1999. *Standard Methods for the Examination of Water and Wastewater*. 20th ed. Washington, DC: APHA, AWWA, WEF.
- Amirtharajah, A., 1988. Some Theoretical and Conceptual Views of Filtration. *Journal AWWA & JSTOR*, 80(12, Filtration), pp. 36-46.
- Anisa, S. R., 2014. *Berita Satu*. [Online]
Available at: <http://www.beritasatu.com/kesra/173180-indonesia-bisa-mengalami-krisis-air-tahun-2025.html>
[Accessed 24 April 2018].

- APRIA SYSTEMS, 2018. *Equipment based on membranes*. [Online]
Available at: http://www.apriasystems.es/products-01_membrane-technology.php
[Accessed 23 January 2018].
- Badan Pusat Statistik, 2017. *Statistik Kesejahteraan Rakyat (Welfare Statistics) 2017*. Jakarta: Badan Pusat Statistik (BPS-Statistics Indonesia).
- Baker, R. W., 2012. *Membrane Technology and Application*. Third ed. Newark, California: John Wiley and Sons Ltd.
- Barton, J. M. H. & Buchberger, S. G., 2007. Effect of Media Grain Shape on Particle Straining during Filtration. *Journal of Environmental Engineering - ASCE*, 133(2), pp. 211-219.
- Baruth, E. E., 2005. *Water Treatment Plant Design*. Fourth Edition ed. s.l.:McGraw-Hill, Inc. & American Water Works Association.
- Bergendahl, J. A. & Grasso, D., 2003. Mechanistic Basis for Particle Detachment from Granular Media. *Environmental Science & Technology*, 37(10), pp. 2317-2322.
- Bergendahl, J. & Grasso, D., 2000. Prediction of colloid detachment in a model porous media: hydrodynamics. *Chemical Engineering Science*, Issue 55, pp. 1523-1532.
- Berg, H. C., 2004. *E. coli in Motion*. - ed. Verlag New York: AIP Press - Springer.
- Bevan, M. A. & Prieve, D. C., 1999. Direct Measurement of Retarded van der Waals Attraction. *Langmuir - American Chemical Society*, Volume 15, pp. 7925-7936.
- Black, J. G., 2012. *Microbiology Principles and Explorations*. 8th ed. Virginia: John Wiley & Sons, Inc..
- BPOM, 2008. InfoPOM Badan Pengawas Obat dan Makanan Republik Indonesia. *Pengujian Mikrobiologi Pangan*, - Maret, pp. 1-11.
- Bradford, S. A. & Kim, H., 2010. Implications of Cation Exchange on Clay Release and Colloid-Facilitated Transport in Porous Media. *Journal of Environmental Quality*, XI-XII(39), pp. 2040-2046.
- Britannica Illustrated Science Library, 2008. *Weather and Climate*. Editorial Sol 90 ed. Printed in China: Encyclopaedia Britannica, Inc..
- Brown, P. P. & Lawler, D. F., 2003. Sphere Drag and Settling Velocity Revisited. *Journal of Environmental Engineering - ASCE*, (3)(129), pp. 222-231.

- Bullard, J. W. et al., 2011. Mechanisms of cement hydration. *Cement and Concrete Research*, Issue 41, pp. 1208-1223.
- Burek, P. et al., 2016. The Water Futures and Solutions Initiative of IIASA. *IDRiM*, pp. 23-26.
- Burhani, R. & Astuti, D. D., 2015. *Pelayanan air minum Indonesia dinilai masih buruk*. [Online]
Available at: <https://www.antaranews.com/berita/531459/pelayanan-air-minum-indonesia-dinilai-masih-buruk>
- Carroll, K. C., Butel, J. S., Morse, S. A. & Mietzner, T., 2016. *Jawetz, Melnick & Adelberg's Medical Microbiology*. 27th Edition ed. California: Mc Graw Hill Education.
- Casey, T. J., 1997. *Unit Treatment Processes in Water and Wastewater Engineering*. Chichester: John Wiley & Sons Ltd,.
- Choksuchart, P., Heran, M. & Grasmick, A., 2002. Ultrafiltration enhanced by coagulation in an immersed membrane system. *Elsevier*, 145(Desalination), pp. 265-272.
- Clark, M. M., 2009. *Transport Modeling for Environmental Engineers and Scientists*. Second ed. New Jersey: A John Wiley & Sons, Inc., Publication.
- Clever, M. et al., 2000. Process water production from river water by ultrafiltration and reverse osmosis. *Elsevier*, 131(1-3), pp. 325-336.
- Coutelieris, F. A. & Delgado, J. M. P. Q., 2012. *Transport Processes in Porous Media - Advanced Structured Materials*. Verlag Berlin Heidelberg: Springer.
- Crittenden, J. C. et al., 2012. *MWH's Water Treatment Principles and Design*. 3th ed. New Jersey: John Wiley & Sons, Inc..
- Dijk, J. C. v., 2007. *Drinking Water - Water Treatment Technology*. Delft: TU-Delft (Delft University of Technology).
- Droste, R. L., 1997. *Theory and Practice of Water and Wastewater Treatment*. New York, Chichester, Brisbane, Toronto, Singapore: John Wiley & Sons, Inc..
- Edwards, D., Donn, A. & Meadowcroft, C., 2001. Membrane solution to a "significant risk" *Cryptosporidium* groundwater source. *ELSEVIER*, 137(Desalination), pp. 193-198.
- Emmitsburg, M., 2012. *FEMA Filter Manual - an Overview*. s.l.:US Army Corps of Engineers Building Strong.

- Enger, E. D. & Smith, B. F., 2010. *Environmental Science A Study of Interrelationships*. Twelfth Edition ed. Washington: McGraw-Hill Companies, Inc.
- EPA, 1990. *Technologies for Upgrading Existing or Designing New Drinking Water Treatment Facilities*, Cincinnati: Office of Drinking Water, Center for Environmental Research Information, U.S. Environmental Protection Agency.
- EPA, 2000. *The History of Drinking Water Treatment*, s.l.: United States Environmental Protection Agency.
- Fagerlund, G., 1977. The international cooperative test of the critical degree of saturation method of assessing the freeze/thaw resistance of concrete. *Materiaux Et Constructions*, 10(4), p. 231–253.
- Fair, G. M., Hatch, L. P. & Jr., H. E. H. a., 1933. Fundamental Factors Governing The Streamline Flow of Water Through Sand [with Discussion]. *American Water Works Association with JSTOR*, 25(11), pp. 1551-1565.
- Falkenmark, M. & Widstrand, C., 1992. Population Bulletins. *Population and Water Resources: A Delicate Balance*, November, 47(3), pp. 1-36.
- FAO, 2012. *Coping with water scarcity An action framework for agriculture and food security*, Rome: Food and Agriculture Organization of The United Nations.
- Fardiaz, S., 1993. *Analisis Mikrobiologi Pangan*. Jakarta: Raja Grafindo Persada.
- Gambhir, M. L., 2004. *Concrete Technology*. Third ed. New Delhi: Tata McGraw-Hill.
- Gani, M. S. J., 1997. *Cement and Concrete*. Victoria, Australia: Chapman & Hall.
- GE Power & Water, 2011. *Chestnut Avenue Water Works*, Singapore: General Electric Company.
- Giancoli, D. C., 2016. *Physics Principles with Applications*. 7th (Global Edition, not U.S. Edition) ed. Edinburgh Gate: Pearson Education Limited.
- Goldman, A. J., Cox, R. G. & Brenner, H., 1967. Slow Viscous Motion of a Sphere Parallel to a Plane Wall - II - Couette Flow. *Chemical Engineering Science*, Volume 22, pp. 653-660.
- Grolimund, D., Barmettler, K. & Borkovec, M., 2007. 1 Colloid Facilitated Transport in Natural Porous Media: Fundamental Phenomena and Modelling. In: F. H. Frimmel, F. v. d. Kammer & H. Flemming, eds. *Colloidal Transport in Porous Media*. Berlin: Springer-Verlag Berlin Heidelberg, pp. 3-24.

- Hadley, D., Dolch, W. & Diamond, S., 2000. On the occurrence of hollow-shell hydration grains in hydrated cement paste. *Cement and Concrete Research*, Issue 30, pp. 1-6.
- Hall, C. & Hoff, W. D., 2009. *Water Transport in Brick, Stone and Concrete*. 2nd ed. Boca Raton: CRC Press Taylor & Francis Group.
- Harvey, R. A., Cornelissen, C. N. & Fisher, B. D., 2013. *Lippincott's Illustrated Reviews Microbiology*. 3th ed. Philadelphia: Lippincott Williams & Wilkins, a Wolters Kluwer business.
- Hidayat, S., 2009. *Semen Jenis & Aplikasinya*. pertama ed. Jakarta Selatan: Penerbit PT Kawan Pustaka.
- Hiemenz, P. C. & Rajagopalan, R., 1997. *Principles of Colloid and Surface Chemistry*. Third Edition, Revised and Expanded ed. New York: Marcel Dekker, Inc..
- Holt, E. E., 2001. *Early age autogenous shrinkage of concrete*. Finland: Julkaisija-Utgivare-Publisher.
- Hornbogen, E., Eggeler, G. & Werner, E., 2012. *Werkstoffe - Aufbau und Eigenschaften von Keramik-, Metall-, Polymer- und Vervundwerkstoffen*. 10., neu bearbeitete Auflage ed. Deutschland: Springer.
- Howe, K. J. et al., 2012. *Principles of Water Treatment*. New Jersey: John Wiley & Sons, Inc.
- Huang, J. Y. C. & Basagoiti, J., 1989. Effect of Solids Property on Rates of Solids Dislodgment. *J. Environ. Eng.*, (1)(115), pp. 3-19.
- Hubbe, M. A., 1984. Theory of Detachment of Colloidal Particles From Flat Surfaces Exposed to Flow. *Elsevier Science Publishers B. V.*, 12(Colloids and Surfaces), pp. 151-178.
- Huisman, L., 2004. *Rapid Filtration*. 2nd (reprinted September 2004) ed. Delft: TU-Delft (Delft University of Technology).
- IDE Technologies, 2016. *Sorek Project*. [Online]
Available at: <http://www.ide-tech.com/projects-2-2/our-projects/>
[Accessed 5 January 2016].
- Ika, S., 2013. Waspada Krisis Air. *Buletin Info Risiko Fiskal (IRF)*, Waspada Krisis Air, September, p. 3.
- Indrawan, R. & Yaniawati, P., 2016. *Metodologi Penelitian Kuantitatif, Kualitatif, dan Campuran untuk Manajemen, Pembangunan, dan Pendidikan*. Edisi Revisi ed. Bandung: PT Refika Aditama.

- Isovic, M. S., Markovski, G. & Cecez, M., 2012. Shrinkage strain of concrete causes and types. *Gradevinar*, 64(9), pp. 727-734.
- Israelachvili, J. N., 2011. *Intermolecular and Surface Forces*. Third Edition ed. Amsterdam: Elsevier.
- Ives, K. J., 1970. Rapid Filtration. *Water Research*, Volume 4, pp. 201-223.
- Iwasaki, T., Jr., J. J. S. & Stanley, W. E., 1937. Some Notes on Sand Filtration [with Discussion]. *American Water Works Association with JSTOR*, 29(10), pp. 1591-1602.
- Jawetz, Melnick & Adelberg's, 2007. *Medical Microbiology*. 24th ed. San Francisco: McGraw-Hill's - Access Medicine.
- Johnson, G. A., 1914. Present Day Water Filtration Practice. *Journal (American Water Works Association)*, 1(1), pp. 31-80.
- Joko, T., 2010. *Unit Produksi dalam Sistem Penyediaan Air Minum*. Edisi Pertama ed. Yogyakarta: Graha Ilmu.
- Kamulyan, B., 2014. *Karakteristik Hidraulik Filtrasi Dan Cucibalik Filter Beton, Disertasi*, Yogyakarta: Departemen Teknik Sipil dan Lingkungan Fakultas Teknik Universitas Gadjah Mada.
- Kamulyan, B., Nurrochmad, F., Triatmadja, R. & Sunjoto, 2011. *The Head Loss Development and Turbidity Removal of the Filtration using Concrete Sand Filter with Various Cement to Sand Ratio*. Yogyakarta, UGM-AUN/SEED-Net, pp. 17-20.
- KC-online, 2017. *Kabar-Cirebon.com*. [Online]
Available at: <http://www.kabar-cirebon.com/2017/05/tahun-2025-pulau-jawa-krisis-air-bersih/>
[Accessed 10 May 2018].
- Kementerian PPN/Bappenas, 2014. *Rencana Pembangunan Jangka Menengah Nasional 2015-2019, Buku I Agenda Pembangunan Nasional*. Jakarta: Kementerian Perencanaan Pembangunan Nasional/Badan Perencanaan Pembangunan Nasional Republik Indonesia.
- Kementerian PUPR, 2015. *Penanganan Bidang Air Minum, Panduan Penyelenggaraan Infrastruktur Permukiman*. Volume 2 ed. Jakarta: Kementerian Pekerjaan Umum dan Perumahan Rakyat, Direktorat Jenderal Cipta Karya.
- Kementerian PUPR, 2017. *Buku Kinerja PDAM 2017*. Jakarta: Badan Peningkatan Penyelenggaraan Sistem Penyediaan Air Minum, Kementerian Pekerjaan Umum dan Perumahan Rakyat Republik Indonesia.

- Kretzschmar, R., Borkovec, M., Grolimund, D. & Sticher, H., 1997. Experimental determination of colloid deposition rates and collision efficiencies in natural porous media. *Water Resources Research*, 33(5), pp. 1129-1137.
- Kurdowski, W., 2014. *Cement and Concrete Chemistry*. Krakow, Poland: Springer Science + Business Media B.V..
- Kurniawan, R., 2015. *Himpunan Mahasiswa Teknik Sipil dan Lingkungan Institut Pertanian Bogor*. [Online]
Available at: <http://himatesil.lk.ipb.ac.id/2015/07/27/permasalahan-ketersediaan-air-bersih-dan-solusinya/>
[Accessed 11 May 2018].
- Laine, J. M., Vial, D. & Moulart, P., 2000. Status after 10 years of operation - overview of UF technology today. *Elsevier*, 131(Desalination), pp. 17-25.
- Lam, L., Wong, Y. & Poon, C., 2000. Degree of hydration and gel/space ratio of high-volume fly ash/cement systems. *Cement and Concrete Research*, Volume 30, pp. 747-756.
- Lang, J. S. et al., 1993. Investigating Filter Performance as a Function of the Ratio of Filter Size to Media Size. *Journal American Water Works Association*, pp. 122-130.
- Leclerc, H., Schwartzbrod, L. & Dei-Cas, E., 2002. Microbial Agents Associated with Waterborne Diseases. *Critical Reviews in Microbiology*, 28(4), pp. 371-409.
- Levich, V. G., 1962. *Physicochemical Hydrodynamics*. Englewood Cliffs, N.J.: Prentice-Hall, Inc..
- Liang, Y., 2014. *Transport and Retention of Stabilized Silver Nanoparticles in Porous Media, Dissertation..* Guangxi, China: Forschungszentrum Jülich GmbH.
- Lutterodt, G., 2012. *Transport of Multiple Escherichia Coli Strains in Saturated Porous Media*. Delft: Unpublish-Dissertation of Delft University of Technology.
- Maadji, R., Triatmadja, R., Nurrochmad, F. & Sunjoto, 2016. *Reduksi Bakteri E. Coli dalam Filtrasi Filter Beton untuk Air Minum*. Semarang, Himpunan Ahli Teknik Hidraulik Indonesia (HATHI), pp. 648-658.
- Maadji, R., Triatmadja, R., Nurrochmad, F. & Sunjoto, 2016. *The Development of Concrete Filter for Drinking Water Filtration*. Bali, Indonesia Association of Hydraulics Engineers.

- Maadji, R., Triatmadja, R., Nurrochmad, F. & Sunjoto, 2017. *Characteristics of Concrete Filter for Drinking Water*. Kuala Lumpur, Malaysia, International Association for Hydro-Environment Engineering and Research -IAHR- & USAINS Holdings Sdn. Bhd..
- Maadji, R., Triatmadja, R., Nurrochmad, F. & Sunjoto, 2017. *The Concrete Filter Mix Design for Water Treatment*. Gorgan, Iran, The International Association of Hydrological Science (IAHS).
- Maekawa, K., Chaube, R. & Kishi, T., 1999. *Modelling of Concrete Performance Hydration, microstructure formation and mass transport*. New York: Taylor & Francis or Routledge's collection of thousands of eBooks.
- Martin, M. J. et al., 1996. Scaling Bacterial Filtration Rates in Different Sized Porous Media. *Journal of Environmental Engineering* , 122(5), pp. 407-415.
- Martins, A. A., Laranjeira, P. E., Braga, C. H. & Mata, T. M., 2009. Chapter 5. Modeling of Transport Phenomena in Porous Media Using Network Models. In: K. S. Tian, ed. *Progress in Porous Media Research*. s.l.:Nova Science Publishers, Inc., pp. 165-261.
- Martys, N. S. & Ferraris, C. F., 1997. Capillary Transport in Mortars and Concrete. *Cement and Concrete Research*, 27(5), pp. 747-760.
- Masduqi, A. & Assomadi, A. F., 2012. *Operasi & Proses Pengolahan Air*. Surabaya: ITS Press.
- McCain, G. N. & Dewoolkar, M. M., 2010. Porous Concrete Pavement: Mechanical and Hydraulic Properties. *Transportation Research Record: Journal of the Transportation Research Board*, 2164(09), pp. 1 - 19.
- McDowell-Boyer, L. M., Hunt, J. R. & Sitar, N., 1986. Particle Transport Through Porous Media. *Water Resources Research*, 22(13), pp. 1901-1921.
- McLellan, S. L., Daniels, A. D. & Salmore, A. K., 2001. Clonal Populations of Thermotolerant Enterobacteriaceae in Recreational Water and Their Potential Interference with Fecal Escherichia coli Counts. *American Society for Microbiology*, 67(10), pp. 4934-4938.
- McNair, D. R., Sims, R. C., Sorensen, D. L. & Hulbert, M., 1987. Schmutzdecke Characterization of Clinoptilolite-Amended Slow Sand Filtration. *Journal (American Water Works Association)*, 79(12, Filtration), pp. 74-81.
- Michael J. Pelczar, J. & Chan, E., 2013. *Dasar-Dasar Mikrobiologi I*. Jakarta: UI-Press.
- Molle, F. & Mollinga, P., 2003. Water poverty indicators: conceptual problems and policy issues. *Water Policy*, Volume 5, pp. 529-544.

- Moridpour, S., 2014. *Sustainable Reverse Osmosis Desalination (Master of Engineering Thesis)*. s.l.:School of Aerospace, Mechanical and Manufacturing Engineering, RMIT University, Australia.
- Muller, v. I., 2006. *Influence of Cellulose Ethers on the Kinetics of Early Portland Cement Hydration, Dissertation*. Karlsruhe: Universitätsverlag Karlsruhe.
- Mulyono, T., 2005. *Teknologi Beton*. Yogyakarta: Penerbit ANDI.
- Murdock, L. J. & Brook, K. M., 1999. *Bahan dan Praktek Beton*. Cetakan ketiga ed. Jakarta: Penerbit Erlangga.
- Murthy, V. N. S., 2010. *Geotechnical Engineering Principles & Practices of Soil Mechanics & Foundation Engineering*. New York: Marcel Dekker, Inc..
- Neithalath, N., Weiss, J. & Olek, J., 2008. *Predicting the Permeability of Pervious Concrete (Enhanced Porosity Concrete) from Non-Destructive Electrical Measurements*, New York: CiteSeerX.
- Neville, A. M., 2004. *Properties of concrete*. Fourth and Final Edition Standards updated to 2002 ed. Harlow: Pearson Education Limited.
- Neville, A. M. & Brooks, J. J., 2010. *Concrete Technology*. 2nd ed. Harlow: Pearson Education Limited.
- Newman, J. & Choo, B. S., 2003. *Advanced Concrete Technology; Processes*. Burlington: Elsevier Butterworth Heinemann.
- Nirmala, R., 2016. *Beritagar.id*. [Online]
Available at: <https://beritagar.id/artikel/berita/lebatnya-hujan-dan-ancaman-krisis-air-bersih>
[Accessed 10 May 2018].
- Noble, R. T. & Fuhrman, J. A., 2001. Enteroviruses detected by reverse transcriptase polymerase chain reaction from the coastal waters of Santa Monica Bay, California: low correlation to bacterial indicator levels. In: J. Porter, ed. *The Ecology and Etiology of Newly Emerging Marine Diseases*. Netherlands: Kluwer Academic Publishers, pp. 175-184.
- Nugraha, P. & Antoni, 2004. *Teknologi Beton dari Material, Pembuatan, ke Beton Kinerja Tinggi*. Yogyakarta: Penerbit ANDI.
- Obla, K. & Sabnis, G., 2015. *Pervious Concrete for Sustainable Development*, Maryland: ResearchGate.
- Ogbonnaya, I., Kyoji, S. & Hiroshi, F., 2009. The Geotechnical Properties of Sands with Varying Grading in a Stress-Controlled Ring Shear Tests. *Electron. J. Geotech. Eng.*, Volume 14, pp. 1-21.

- Oss, C. J. v., 1994. *Interfacial Forces in Aqueous Media*. Buffalo, New York: Marcel Dekker, Inc..
- Persatuan Insinyur Indonesia, 2016. Mengelola Air Bersih. *Insinyur dan Air Bersih*, I Maret, pp. 1-8.
- Phan, H. D. & Le, T. A., 2012. Effect of Aggregate Type on The Properties of Porous Concrete. *Journal of Engineering Technology and Education The 2012 International Conference on Green Technology and Sustainable Development (GTSD 2012)*, pp. 148-153.
- Pinder, G. F. & Gray, W. G., 2008. *Essentials of Multiphase Flow and Transport in Porous Media*. New Jersey: John Wiley & Sons, Inc..
- Pokja AMPL, 2015. *Pokja AMPL Kelompok Kerja Air Minum dan Penyehatan Lingkungan*. [Online]
Available at: <http://www.ampl.or.id/digilib/read/isu-isu-strategis-permasalahan/4998>
[Accessed 11 May 2018].
- Popovics, S., 1992. *Concrete Materials, Properties, Specifications and Testing*. Second Edition ed. New Jersey: Noyes Publications.
- Priyadarshana, T., Jayathunga, T. & Dissanayake, R., 2013. *Pervious Concrete - A Sustainable Choice In Civil Engineering And Construction*, Sri Lanka: University of Moratuwa.
- Purchas, D. B. & Sutherland, K., 2002. *Handbook of Filter Media*. s.l.:Elsevier Science & Technologys Books.
- Puspitasari, M. A., 2015. *Pelayanan Air Minum Indonesia Terburuk Se ASEAN*. [Online]
Available at: <https://nasional.tempo.co/read/721230/pelayanan-air-minum-indonesia-terburuk-se-asean>
- Rajagopalan, R. & Tien, C., 1976. Trajectory Analysis of Deep-Bed Filtration with the Sphere-in-cell Porous Media Model. *AIChE Journal (An Official Publication of The American Institute of Chemical Engineering)*, 22(3), pp. 523-533.
- Rajpoot, H. C., 2015. *Mathematical Analysis of Three Externally Touching Circles*, Gorakhpur, India: notionpress.com.
- Ramadyanto, W., 2013. PDAM: Perusahaan Daerah Air Minum?. *Buletin Info Risiko Fiskal (IRF), Waspada Krisis Air*, September, pp. 4-7.
- Rautenbach, R., 1997. *Membranverfahren; Grundlagen der Modul-und Anlagenauslegung*. Berlin: Springer.

- Reece, J. B. et al., 2014. *Campbell Biology*. Tenth Edition ed. Glenview, USA: Pearson.
- Riefler, N. et al., 2011. Particle Deposition and Detachment in Capillary Sphere Packings. *Chemical Engineering Journal*, Volume 174, pp. 93-101.
- Ryan, J. N. & Elimelech, M., 1996. Colloid mobilization and transport in groundwater, Review. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, Issue 107, pp. 1-56.
- Saffman, P. G., 1965. The Lift on a Small Sphere in a Slow Shear Flow. *J. Fluid Mech.*, 22(part 2), pp. 385-400.
- Said, N. I., 2017. *Teknologi Pengolahan Air Limbah Teori dan Aplikasi*. Jakarta: Penerbit Erlangga.
- Said, N. I. & Herlambang, A., 2008. Pengolahan Air Bersih Dengan Proses Saringan Pasir Lambat Up Flow. In: N. I. Said, ed. *Teknologi Pengolahan Air Minum*. Jakarta Pusat: Pusat Teknologi Lingkungan, Deputi Bidang Teknologi Pengembangan Sumberdaya Alam, Badan Pengkajian dan Penerapan Teknologi, pp. 239-283.
- Said, N. I. & Yudo, S., 2008. Masalah dan Strategi Penyediaan Air Bersih di Indonesia. In: *Teknologi Pengolahan Air Minum "Teori dan Pengalaman Praktis"*. Jakarta Pusat: Badan Pengkajian dan Penerapan Teknologi, pp. 80-106.
- Salvato, J. A., Nemerow, N. L. & Agardy, F. J., 2003. *Environmental Engineering*. 5th ed. New Jersey: John Wiley & Sons, Inc..
- Sari, H. R. & Atmoko, C., 2017. *Bappenas tekankan pentingnya akses air minum dan sanitasi*. [Online]
Available at: <https://www.antaranews.com/berita/605856/bappenas-tekanan-pentingnya-akses-air-minum-dan-sanitasi>
- Satterfield, Z., 2005. *Filter Backwashing (Tech Brief)*, Morgantown: The National Environmental Services Center at West Virginia University.
- Sawka, M., 2005. Chapter 4 - Water. In: *Dietary reference intakes for water, potassium, sodium, chloride, and sulfate*. s.l.:The National Academies Press, pp. 73-185.
- Sawyer, C. N., McCarty, P. L. & Parkin, G. F., 2003. *Chemistry for Environmental Engineering and Science*. Fifth ed. International Edition: McGraw-Hill Companies, Inc.

- Sembiring, L., 2013. *Pergumulan Pemikiran dalam Sejarah Perkembangan Konsep Keanekaragaman Mikrobial dan Peran Mikrobial Bagi Kemajuan Peradaban Manusia*. Yogyakarta, s.n.
- Shetty, M. S., 1997. *Concrete Technology Theory and Practice*. Reprint 1997 ed. Ram Nagar, New Delhi: S. Chand & Company Ltd..
- Shetty, M. S., 2005. *Concrete Technology Theory and Practice*. Multicolour Illustrative Edition ed. New Delhi: S. Chand & Company LTD..
- Singh, R., 2015. *Membrane Technology and Engineering for Water Purification; Application, Systems Design and Operation*. Second ed. Amsterdam, Boston, Heidelberg, London, New York, Oxford, Paris, San Diego, San Francisco, Singapore, Sydney, Tokyo,,: Elsevier Ltd..
- Soroka, I., 1979. *Portland Cement Paste and Concrete*. 1st ed. London and Basingstoke: The Macmillan Press LTD.
- Sosoro, M. & Reinhardt, H. W., 1996. Effect of Moisture in Concrete on Fluid Absorption. In: H. Jennings, J. Kropp & K. Scrivener, eds. *The Modelling of Microstructure and Its Potential for Studying Transport Properties and Durability*. Saint Remy les Chevreuse: Springer-Science+Business Media, B.V., pp. 443-456.
- Standar Nasional Indonesia , SNI 03-1970-1990. *Metode Pengujian Berat Jenis dan Penyerapan Air Agregat Halus*. Jakarta: Badan Standardisasi Nasional (BSN).
- Suprihatin & Suparno, O., 2013. *Teknologi Proses Pengolahan Air untuk Mahasiswa dan Praktisi Industri*. Bogor: IPB Press.
- Suratt, W. B., Andrews, D. R., Pujals, V. J. & Richards, S. A., 2000. Design considerations for major membrane treatment facility for groundwater. *ELSEVIER-Desalination*, Volume 131, pp. 37-46.
- Taghizadeh, M. M., Torabian, A., Borghei, M. & Hassani, A. H., 2007. A study of feasibility for water purification using vertical porous concrete filter. *Int. J. Environ. Sci. Tech.*, (4)(4), pp. 505-512.
- Tallon, P., Magajna, B., Lofranco, C. & Leung, K. T., 2005. Microbial Indicators of Faecal Contamination in Water: A Current Perspective. *Water Air and Soil Pollution*, 166(-), pp. 139-166.
- Tchnobanoglous, G., Burton, F. L. & Stensel, H. D., 2003. *Wastewater Engineering Treatment and Reuse*. 4th ed. Hong Kong: the McGraw Hill Companies, Inc..
- Tebbutt, T. H. Y., 1990. *BASIC water and wastewater treatment*. Birmingham, England: Butterworth & Co. (Publishers) Ltd..

- Tien, C. & Ramarao, B. V., 2007. *Granular Filtration of Aerosols and Hydrosols*. Second Edition ed. Syracuse, New York: Elsevier Science & Technology Books.
- Tjokrodinuljo, K., 2007. *Teknologi Beton*. Cetakan ketiga, 2012 ed. Yogyakarta: Biro Penerbit KMTS FT UGM.
- Triatmadja, R., 2008. *Kajian Awal Prospek Filter Beton Pasir Sebagai Teknologi Tepat Filtrasi Air Bersih*. Yogyakarta, Jurusan Teknik Sipil dan Lingkungan UGM, pp. K-1 s.d. K-9..
- Tsuji, Y., Tanaka, T. & Ishida, T., 1992. Lagrangian Numerical Simulation of Plug Flow of Cohesionless Particles in a Horizontal Pipe. *Powder Technology*, Volume 71, pp. 239-250.
- TU-Delft, 2004. *Water Treatment Granular Filtration*. Delft: -.
- UNESCO, 2018. *The United Nations World Water Development Report: Nature-Based Solutions for Water*, Paris: The United Nations Educational, Scientific and Cultural Organization.
- United States Environmental Protection Agency, 2000. *The History of Drinking Water Treatment*, Washington, D.C.: EPA report.
- Viessman, J. W., Hammer, M. J., Perez, E. M. & Chadik, P. A., 2014. *Water Supply and Pollution Control*. Eighth Edition ed. Harlow: Pearson Education Limited.
- W. R. Grace & Co.-Conn., 2008. *Pervious Concrete Mix Proportioning Technical Bulletin*. [Online]
Available at:
https://gcpat.com/en/search?search_api_fulltext=Pervious%20Concrete%20Mix%20Proportioning
[Accessed 23 January 2018].
- Wada, Y. et al., 2016. Modeling global water use for the 21st century: the Water Futures and Solutions (WFaS) initiative and its approaches. *Geoscientific Model Development*, Volume 9, pp. 175-222.
- Washington State Department of Health , 2016. *Questions & Answers Coliform Bacteria and Drinking Water*. Kent; Tumwater; Spokane Valley: WSDH Division of Environmental Health Office of Drinking Water.
- Wenten, I. G., 1997. *Membran untuk Pengolahan Air*, Bandung: Institut Teknologi Bandung, PT. Olah Bumi Mandiri.

- Wenten, I. G., 2002. Recent development in membrane science and its industrial applications. *Songklanakar J. Sci. Technol.*, 24 (Suppl.)(Membrane Sci. & Tech.), pp. 1010-1024.
- Wenten, I. G., 2008. *Ultrafiltration in Water Treatment and Its Evaluation as Pretreatment for Reverse Osmosis System*, Bandung: ResearchGate.
- Wenten, I. G., 2016. *Teknologi Membran: Prospek dan Tantangannya di Indonesia (Orasi Ilmiah Guru Besar ITB)*. Balai Pertemuan Ilmiah ITB: Forum Guru Besar Institut Teknologi Bandung.
- Wilson, B. A., Salyers, A. A., Whitt, D. D. & Winkler, M. E., 2011. *Bacterial Pathogenesis A Molecular Approach*. 3th ed. Washington, DC: American Society for Microbiology (ASM Press).
- Wisnubro, 2017. *BPPT Temukan Inovasi Solusi Ketersediaan Air Bersih*. [Online] Available at: <https://jpp.go.id/teknologi/ipitek/304025-bppt-temukan-inovasi-solusi-ketersediaan-air-bersih> [Accessed 15 May 2018].
- World Health Organization., 2004. *Guidelines for Drinking-water Quality Volume 1 Recommendations*. 3th ed. Geneva: WHO Library Cataloguing-in-Publication Data.
- World Health Organization, 2006. *Guidelines for Drinking-water Quality*. First Addendum to Third Edition Volume 1 Recommendations ed. Geneva, Switzerland: WHO Press.
- Wuryadi, 1990. *Telaah Kelangsungan Hidup Escherichia Coli dalam Air Sumur Gali dan Kaitannya sebagai Indikator Pencemaran Tinja dalam Sistem Air Tanah*. Disertasi, Bogor: Fakultas Pascasarjana Institut Pertanian Bogor.
- Yao, K.-M., Habibian, M. T. & O'Melia, C. R., 1971. Water and Waste Water Filtration: Concepts and Applications. *Environmental Science & Technology*, 5(11), pp. 1105-1112.