

## DAFTAR PUSTAKA

- [1] Christina Nunez, “Micro-nuclear reactors: up to 20MW, portable, safer,” *energypost.eu*, 2021. [https://energypost.eu/micro-nuclear-reactors-up-to-20mw-portable-safer/#:~:text=Scientists are working on micro,for the Argonne National Laboratory. \(accessed Mar. 14, 2022\).](https://energypost.eu/micro-nuclear-reactors-up-to-20mw-portable-safer/#:~:text=Scientists are working on micro,for the Argonne National Laboratory. (accessed Mar. 14, 2022).)
- [2] Raffaella Testoni, Andrea Bersano, and Stefano Segantin, “Review of nuclear microreactors: Status, potentialities and challenges,” *Prog. Nucl. Energy*, vol. 138, p. 103822, 2021, doi: <https://doi.org/10.1016/j.pnucene.2021.103822>.
- [3] Nuclear Innovation Alliance, “ADVANCED NUCLEAR REACTOR TECHNOLOGY - A PRIMER,” 2021. [Online]. Available: <https://nuclearinnovationalliance.org/advanced-nuclear-reactor-technology-primer>
- [4] Andang Widi Harto, “Draft Paten Desain Reaktor Nuklir Mikro MRHP,” 2020.
- [5] N. M. Schaeffer, *Reactor Shielding for Nuclear Engineers*. Springfield, Virginia: U. S. ATOMIC ENERGY COMMISSION Office of Information Services, 1973.
- [6] Gallaher; R. B and Kitzes A. S, “SUMMARY REPORT ON PORTLAND CEMENT CONCRETES FOR SHIELDING (ORNL-1414),” United States, 1953. doi: 10.2172/4391118.
- [7] M. M. Sadawy and R. M. El Shazly, “Nuclear radiation shielding effectiveness and corrosion behavior of some steel alloys for nuclear reactor systems,” *Def. Technol.*, vol. 15, no. 4, pp. 621–628, 2019, doi: <https://doi.org/10.1016/j.dt.2019.04.001>.
- [8] Ahmed S. Ouda, “Development of high-performance heavy density concrete using different aggregates for gamma-ray shielding,” *Prog. Nucl. Energy*, vol. 79, pp. 48–55, Mar. 2015, doi: 10.1016/J.PNUCENE.2014.11.009.
- [9] I. Akkurt and A. M. El-Khayatt, “The effect of barite proportion on neutron and gamma-ray shielding,” *Ann. Nucl. Energy*, vol. 51, pp. 5–9, Jan. 2013, doi: 10.1016/J.ANUCENE.2012.08.026.
- [10] Totsawat Daungwilailuk, Chadet Yenchai, Wisarute Rungjaroenkitti, Phoosak Pheinsusom, Chinnapat Panwisawas, and Withit Pansuk, “Use of barite concrete for radiation shielding against gamma-rays and neutrons,” *Constr. Build. Mater.*, vol. 326, p. 126838, Apr. 2022, doi: 10.1016/J.CONBUILDMAT.2022.126838.
- [11] Amir Hamzah, Hery Adrial, Ihda Husnayani, and Pande Made Udiyani, “Alternative design of temporary spent fuel storage of Indonesian RDNK



- reactor,” *AIP Conf. Proc.*, vol. 2180, p. 20013, Dec. 2019, doi: 10.1063/1.5135536/FORMAT/PDF.
- [12] MW Shaver, AM Casella, RS Wittman, and BS McDonald, “Radiation Detection Computational Benchmark Scenarios,” Springfield, Virginia, 2013. [Online]. Available: [https://www.pnnl.gov/main/publications/external/technical\\_reports/PNNL-22794.pdf](https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-22794.pdf)
- [13] Andang Widi Harto, “METODE MONTE CARLO DAN APLIKASINYA DALAM PERHITUNGAN RADIASI NUKLIR PADA BNCT (BORON NEUTRON CAPTURE CANCER THERAPY),” 2014, [Online]. Available: <https://repository.ugm.ac.id/id/eprint/275014>
- [14] Ned Xoubi, “Neutrons and Gamma-Ray Dose Calculations in Subcritical Reactor Facility Using MCNP,” *Atoms*, vol. 4, no. 3. 2016. doi: 10.3390/atoms4030020.
- [15] V. Gopalakrishnan, “Chapter 1 - Introduction,” in *Physics of Nuclear Reactors*, P. Mohanakrishnan, O. P. Singh, and K. Umasankari, Eds. Academic Press, 2021, pp. 1–86. doi: <https://doi.org/10.1016/B978-0-12-822441-0.00001-7>.
- [16] N. Petoussi-Hens *et al.*, “Conversion Coefficients for Radiological Protection Quantities for External Radiation Exposures,” *Ann. ICRP*, vol. 40, no. 2–5, pp. 1–257, 2010, doi: 10.1016/j.icrp.2011.10.001.
- [17] Nicholas Tsoulfanidis, *MEASUREMENT & DETECTION OF RADIATION*, 4th ed. Boca Raton: CRC Press, 2015.
- [18] Guoqing Zhang, “Monte Carlo Simulation of Mixed Neutron-Gamma Radiation Fields and Dosimetry Devices,” Karlsruhe Institut für Technologie (KIT), 2011. [Online]. Available: [http://inis.iaea.org/search/search.aspx?orig\\_q=RN:43103584](http://inis.iaea.org/search/search.aspx?orig_q=RN:43103584)
- [19] R. Walker and M. Grotenhuis, “A SUMMARY OF SHIELDING CONSTANTS FOR CONCRETE,” Office of Scientific and Technical Information ({OSTI}), Nov. 1961. doi: 10.2172/4813435.
- [20] Ronald J. McConn, Christopher J. Gesh, Richard T. Pagh, Robert A. Rucker, and Robert Williams III, “Compendium of Material Composition Data for Radiation Transport Modeling,” Jul. 2011. [Online]. Available: <http://www.osti.gov/servlets/purl/1023125-QtpCud/>
- [21] ASTM, “A955M-96 Standard Specification for Deformed and Plain Stainless Steel Bars for Concrete Reinforcement [Metric],” vol. 1.04. ASTM International, West Conshohocken, PA, 1996. doi: 10.1520/a0955\_a0955m-20c.
- [22] Badan Standarisasi Nasional (BSN), “Persyaratan Beton Struktural untuk Bangunan Gedung SNI 2847:2019,” *Standar Nasional Indonesia*, no. 8. p.



720, 2019.

- [23] Akhmad Sumarno, Andang Widi Harto, and Sihana, “STUDI PARAMETRIK VARIASI BAHAN BAKAR SEED DAN BLANKET (S&B) PADA MICRO REACTOR HEAT PIPE (MRHP) DENGAN MEMPERTIMBANGKAN KARAKTERISTIK BURNUP,” Universitas Gadjah Mada, Sleman, 2021.
- [24] D. J. Naus, M. F. Marchbanks, and E. G. Arndt, “Evaluation of aged concrete structures for continued service in nuclear power plants,” 1988. [Online]. Available: <https://www.osti.gov/biblio/6878366>
- [25] D. Naus, *Concrete component aging and its significance relative to life extension of nuclear power plants ; prepared by the Oak Ridge National Laboratory*. Washington, D.C. : Springfield, VA: U.S. Nuclear Regulatory Commission, Office of Nuclear Regulatory Research : Available from Supt. of Docs., U.S. G.P.O. ; National Technical Information Service, 1986.
- [26] E06 Committee, “Test method for determining floor tolerances using waviness, wheel path and levelness criteria.” ASTM International, West Conshohocken, PA, 2015. doi: 10.1520/e1486-14.
- [27] Pelowitz Denise B., “MCNPX User’s Manual. Version 2.7.0,” 2011.
- [28] Mohamad Hairie Rabir, Muhammad Rawi Md Zin, Mark Dennis Usang, Abi Muttaqin Jalal Bayar, and Na’Im Syauqi Bin Hamzah, “Neutron flux and power in RTP core-15,” *AIP Conf. Proc.*, vol. 1704, Jan. 2016, doi: 10.1063/1.4940114.
- [29] BAPETEN, “Peraturan Kepala Badan Pengawas Tenaga Nuklir Nomor 4 Tahun 2013 tentang Proteksi dan Keselamatan Radiasi Dalam Pemanfaatan Tenaga Nuklir.” Indonesia, 2013. [Online]. Available: <https://jdih.bapeten.go.id/id/dokumen/peraturan/peraturan-kepala-badan-pengawas-tenaga-nuklir-nomor-4-tahun-2013-tentang-proteksi-dan-keselamatan-radiasi-dalam-pemanfaatan-tenaga-nuklir>
- [30] M. A. N. Giménez and E. M. Lopasso, “Tungsten Carbide compact primary shielding for Small Medium Reactor,” *Ann. Nucl. Energy*, vol. 116, pp. 210–223, Jun. 2018, doi: 10.1016/j.anucene.2018.02.032.
- [31] ARI TRI WIBOWO, “DESAIN LUMPUR PEMBORAN MENGGUNAKAN ADDITIVE BARITE DAN CMC INDUSTRI UNTUK MENGATASI FORMASI SALINITAS TINGGI,” PROGRAM STUDI TEKNIK PERMINYAKAN, 2019. [Online]. Available: <https://repository.uir.ac.id/11490/1/133210188.pdf>
- [32] Endah Safitri, “BETON SEBAGAI PERISAI RADIASI NEUTRON CEPAT,” *MEDIA Tek. SIPIL*, no. Januari 2006, 2006.
- [33] Adjat Sudrajat, Darsa Permana Harta Haryadim, M. Arifi. Mulyono HP, Ridwan Saleh Suhendar, Supriatna Suhala Toton Sentana Kunrat, and



- Triswan Suseno Yudo Mandalawanto, “BAHAN GALIAN INDUSTRI.” Pusat Penelitian dan Pengembangan Teknologi Mineral, Bandung, 1997.
- [34] Fajar Nurjaman, Achmad Shofi, Nurbaiti Marsas P., and Widi Astuti, “Pembuatan Grinding Ball Lokal Untuk Mendukung Industri Pengolahan Mineral Dan Semen Nasional,” *J. Ilm. Inov. dan Pembang. Lampung*, 2013.
- [35] Fajar Nurjaman, “Teknik Pembuatan Steel Grit dan Aplikasinya,” *Pros. Semin. Nas. Teknol. Pengolah. Miner. dan Biomassa 2014*, pp. 133–138, 2014.
- [36] Kementerian Perindustrian Republik Indonesia, “Industri Baja Diminta Tambah Kandungan Lokal,” 2014. <https://www.kemenperin.go.id/artikel/10576/ghs> (accessed May 04, 2023).
- [37] PT. AKS Precision Ball Indonesia, “PT. AKS Precision Ball Indonesia.” <https://aks-ball.co.id/> (accessed May 04, 2023).
- [38] ARYA BUDI PRATAMA, “ANALISA PENGARUH VARIASI PENAMPANG PUNCH BERDIAMETER 5 mm TERHADAP PANJANG BURR PADA PANCI ALUMINIUM SERI 1100 PRODUK METAL SPINNING,” UNIVERSITAS MUHAMMADIYAH SURAKARTA, 2020. [Online]. Available: <http://eprints.ums.ac.id/80363/13/naskah publikasi.pdf>
- [39] PT. Krakatau Steel (Persero) Tbk, “SPECIFICATION PRODUCT.” PT. Krakatau Steel (Persero) Tbk. [Online]. Available: <https://www.krakatausteel.com/pdf/product spec untuk web.pdf>
- [40] JFE Steel Corporation, “STEEL PLATE.” JFE Steel Corporation. [Online]. Available: <https://www.jfe-steel.co.jp/en/products/plate/catalog/c1e-001.pdf>

