



DAFTAR PUSTAKA

- [1] *Evaluation of high temperature gas cooled reactor performance: Benchmark analysis related to initial testing of HTTR and HTR-10.* Laporan teknis IAEA TecDoc-1382, IAEA, 2003.
- [2] Xu Yuanhui. “The HTR-10 project and its further development”. *HTR-2002: Proceedings of the conference on high temperature reactors*, number INIS-XA-524 in 1, hal. 1–8, Beijing, 2002. Institute of Nuclear Energy Technology, IAEA-INIS.
- [3] Kurt Kugeler dan Zuoyi Zhang. *Modular High-temperature Gas-cooled Reactor Power Plant*. Springer, 2019. Diakses dari <http://dx.doi.org/10.1007/978-3-662-57712-7>.
- [4] Shang-chien Wu, Jinn-jer Peir dan J H Liang. “Burnup Computation for HTR-10 Using Layer-to-Layer Movement”. *Proceedings of the 21st International Conference on Nuclear Engineering*, Chengdu, 2013. ASME. Diakses dari <http://dx.doi.org/10.1115/ICONE21-16485>.
- [5] Paul K Romano, Nicholas E Horelik, Bryan R Herman, Adam G Nelson, Benoit Forget dan Kord Smith. “OpenMC : A state-of-the-art Monte Carlo code for research and development”. *Annals of Nuclear Energy*, 2014. Diakses dari <http://dx.doi.org/10.1016/j.anucene.2014.07.048>.
- [6] Paul Romano. *The OpenMC Monte Carlo Code*. MIT-CPRG, 2020. Diakses dari <https://docs.openmc.org/en/stable/index.html>, 6 Desember 2020.
- [7] Christoph Kloss dan Christoph Goniva. “LIGGGHTS - OPEN SOURCE DISCRETE ELEMENT SIMULATIONS OF GRANULAR MATERIALS BASED ON LAMMPS”. *Materials Fabrication, Properties, Characterization and Modeling*, 2:781–788, 2011. Diakses dari <http://dx.doi.org/10.1002/9781118062142.ch94>.
- [8] DCS. *LIGGGHTS(R)-PUBLIC Documentation, Version 3.X.* DCS, 2018. Diakses dari <https://www.cfdem.com/media/DEM/docu/Manual.html>, 6 Desember 2020.
- [9] Yu-shi Tang, Zai-zhe Yin, Li-guo Zhang, Qiu-ju Guo, Jian-zhu Cao dan Jie-juan Tong. “The application of the DEM-based burnup construction method in the pebble burnup history analysis in HTR-10”. *Nuclear Engineering and Design*, 349(April):1–7, 2019. Diakses dari <https://doi.org/10.1016/j.nucengdes.2019.04.013>.
- [10] William K Terry, Leland M Montierth, Joshua J Cogliati, Abderrafi M Ougouag, J Blair Briggs, Leland M Montierth, Hans D Gougar dan Virginia F Dean.



EVALUATION OF THE INITIAL CRITICAL CONFIGURATION OF THE HTR-10 PEBBLE-BED REACTOR. Laporan teknis NEA/NSC/DOC(2006)1, IRPhEP INL, 2006.

- [11] T Setiadipura dan D Irwanto. “Preliminary Neutronic Design of High Burnup OTTO Cycle Pebble Bed Reactor”. *Atom Indonesia*, 41:7–15, 2015. Diakses dari <http://dx.doi.org/10.17146/aij.2015.350>.
- [12] Amin Abedi dan Naser Vosoughi. “Neutronic simulation of a pebble bed reactor considering its double heterogeneous nature”. *Nuclear Engineering and Design*, 253:277–284, 2012. Diakses dari <http://dx.doi.org/10.1016/j.nucengdes.2012.08.030>.
- [13] Javier Ortensi, Sebastian Schunert, Yaqi Wang, Vincent Laboure, Frederick Gleicher dan Richard C Martineau. *Benchmark Analysis of the HTR-10 with the MAMMOTH Reactor Physics Application*. Laporan teknis INL/EXT-18-45453, Idaho National Laboratory, Idaho, 2018. Diakses dari <http://dx.doi.org/10.2172/1468643>.
- [14] Christoph Kloss, Christoph Goniva, Alice Hager dan Stefan Amberger. “Models , algorithms and validation for opensource DEM and CFD-DEM”. *Progress in Computational Fluid Dynamics*, 12(Juni):140–152, 2012. Diakses dari <http://dx.doi.org/10.1504/PCFD.2012.047457>.
- [15] Lauri Halla-aho. *Development of an HTR-10 model in the Serpent reactor physics code*. Master’s thesis, Lappeenranta University of Technology, 2014.
- [16] Mohamed A Alzamly, Moustafa Aziz, Alya A Badawi, Hanaa Abou, Abdel Rraouf dan A Gadallah. “Burnup analysis for HTR-10 reactor core loaded with uranium and thorium oxide”. *Nuclear Engineering and Technology*, 52(4):674–680, 2020. Diakses dari <https://doi.org/10.1016/j.net.2019.09.012>.
- [17] Weston M Stacey. *Nuclear Reactor Physics*. Wiley-VCH, 3 edition, 2018.
- [18] Charles D Harmon, Robert D Busch, Judith F Briesmeister dan R Arthur Forster. *Criticality Calculations with MCNP*. Laporan teknis LA-12827-M, Los Alamos National Laboratory, 1994.
- [19] R Holly, Michael Lorne dan D Jack. *Production and Depletion Calculations using MCNP*. Laporan teknis LA-UR-12-2, Los Alamos National Laboratory, 2012.
- [20] Michael L Fensin, Michael R James, John S Hendricks dan John T Goorley. *The New MCNP6 Depletion Capability*. Laporan teknis LA-UR-11-0, Los Alamos National Laboratory, 2012.



- [21] Jack D Galloway, Holly R Trellue, Jack D Galloway dan Holly R Trellue. *UPGRADES TO Monteburns, VERSION 3.0*. Laporan teknis LA-UR-1200, Los Alamos National Laboratory, 2012.
- [22] Sung-min Kim dan Myung Hyun Kim. “A Study on MCNPX-CINDER90 System for Activation Analysis”. *Transactions of the Korean Nuclear Society Autumn Meeting Pyeongchang, Korea.*, INIS-46 RN(October):5–8, 2014.
- [23] C Josey, B Forget dan K Smith. “High Order Methods for the Integration of the Bateman Equations and Other Problems of the Form of $y = F(y, t)y$ ”. *Journal of Computational Physics*, 2017. Diakses dari <http://dx.doi.org/10.1016/j.jcp.2017.08.025>.
- [24] Zechuan Ding. “Solving Bateman Equation for Xenon Transient Analysis Using Numerical Methods”. *ICEMP 2018*, 01004, 2018. Diakses dari <http://dx.doi.org/10.1051/matecconf/201818601004>.
- [25] Denise B Pelowitz. *MCNPX TM USER 'S MANUAL, Version 2.7.0*. 2.7.0. Los Alamos National Laboratory, la-cp-11-0 edition, 2011.
- [26] Brycen L Wendt, Leslie Kerby, Aaron G Tumulak, Jaakko Leppanen dan Mark DeHart. *Advancement of Functional Expansion Tallies Capabilities in Serpent 2*. Laporan teknis LA-UR-18-2672, Los Alamos National Laboratory, San Fransisco, 2018.
- [27] Vasudevan Lakshminarayanan. “Zernike polynomials : A guide”. *Journal of Modern Optics*, 58(April):545–561, 2011. Diakses dari <http://dx.doi.org/10.1080/09500340.2011.633763>.
- [28] Yanheng Li dan Wei Ji. “Pebble Flow and Coolant Flow Analysis Based on a Fully Coupled Multi-Physics Model Pebble Flow and Coolant Flow Analysis Based on a Fully Coupled Multiphysics Model”. *Nuclear Science And Engineering*, 173(November):150–162, 2013. Diakses dari <http://dx.doi.org/10.13182/NSE12-13>.
- [29] Kang Seog Kim. *Specification for the VERA Depletion Benchmark Suite*. Laporan teknis CASL-X-2015-1014-000, CASL, 2015. Diakses dari <http://dx.doi.org/10.2172/1256820>.
- [30] A J Koning, D Rochman, J Sublet, N Dzysiuk, M Fleming dan S Van Der Marck. “TENDL : Complete Nuclear Data Library for Innovative Nuclear Science and Technology”. *Nuclear Data Sheets*, 155:1–55, 2019. Diakses dari <https://doi.org/10.1016/j.nds.2019.01.002>.
- [31] Jeremy Lloyd, A C Kahler, Austin P Mccartney dan Daniel A Rehn. “NJOY21 : Next generation nuclear data processing capabilities”. *EPJ Web of Conferences*, 09040, 2017.



- [32] Paul Romano dan Sterling Harper. “Nuclear data processing capabilities in OpenMC”. *EPJ Web Conf.*, 06011(ND2016):2–5, 2017.
- [33] M B Chadwick, M Herman, P Oblož, B Pritychenko, G Arbanas, R Arcilla, R Brewer, D A Brown, R Capote, A D Carlson, Y S Cho, H Derrien, K Guber, G M Hale, S Hoblit, S Holloway, T D Johnson, T Kawano, B C Kiedrowski, H Kim, S Kunieda, N M Larson, L Leal, J P Lestone, R C Little, E A Mccutchan, R E Macfarlane, M Macinnes, C M Mattoon, R D Mcknight, S F Mughabghab, G P A Nobre, G Palmiotti, A Palumbo, M T Pigni, V G Pronyaev, R L Vogt, S C Van Der Marck, A Wallner, M C White, D Wiarda dan P G Young. “ENDF / B-VII . 1 Nuclear Data for Science and Technology : Cross Sections , Covariances , Fission Product Yields and Decay Data”. *Nuclear Data Sheets*, 112:2887–2996, 2011.
- [34] M B Chadwick, P Oblož, M Herman, N M Greene, R D Mcknight, D L Smith, P G Young, R E Macfarlane, G M Hale, S C Frankle, A C Kahler, T Kawano, R C Little, D G Madland, P Moller, R D Mosteller, P R Page, P Talou, H Trellue, M C White, W B Wilson, R Arcilla, C L Dunford, S F Mughabghab, B Pritychenko, D Rochman, A A Sonzogni, C R Lubitz, T H Trumbull, J P Weinman, D A Brown, D E Cullen, D P Heinrichs, D P Mcnabb, H Derrien, M E Dunn, N M Larson, L C Leal, A D Carlson, R C Block, J B Briggs dan E T Cheng. “ENDF / B-VII . 0 : Next Generation Evaluated Nuclear Data Library for Nuclear Science and Technology”. *Nuclear Data Sheets*, 107:2931–3060, 2006.
- [35] Harl’O M Fisher. *A Nuclear Cross Section Data Handbook LA-11711-M*. Laporan teknis LA-11711-M, Los Alamos National Laboratory, 1989.
- [36] D A Brown, M B Chadwick, R Capote, A C Kahler, A Trkov, M W Herman, A A Sonzogni, Y Danon, A D Carlson, M Dunn, D L Smith, G M Hale, G Arbanas, R Arcilla, C R Bates, B Beck, B Becker, F Brown, R J Casperson, J Conlin, D E Cullen, M Descalle, R Firestone, T Gaines, K H Guber, A I Hawari, J Holmes, T D Johnson, T Kawano, B C Kiedrowski, A J Koning, S Kopecky dan L Leal. “ENDF/B-VIII.0: The 8th Major Release of the Nuclear Reaction Data Library with CIELO-project Cross Sections, New Standards and Thermal Scattering Data”. *Nuclear Data Sheets*, 148:1–142, 2018. Diakses dari <http://www.sciencedirect.com/science/article/pii/S0090375218300206>.
- [37] L Snoj dan M Ravnik. “Calculation of power density with MCNP in TRIGA reactor”. *Proceedings of the International Conference Nuclear Energy for New Europe 2006*, hal. 5, Slovenia, 2006. Nuclear Society of Slovenia. Diakses dari http://inis.iaea.org/search/search.aspx?orig{_}q=RN:38115400.
- [38] Uner Colak dan Volkan Seker. “Monte Carlo Criticality Calculations for a Pebble Bed Reactor with MCNP”. *Nuclear Science And Engineering*, 149(December 2014):131–137, 2005.



- [39] Volkan Seker dan Uner Colak. “HTR-10 full core first criticality analysis with MCNP”. *Nuclear Engineering and Design*, 222:263–270, 2003. Diakses dari [https://doi.org/10.1016/S0029-5493\(03\)00031-1](https://doi.org/10.1016/S0029-5493(03)00031-1).
- [40] Hammam Oktajianto, Evi Setiawati, Khoirul Anam dan Heri Sugito. “Analysis of High Temperature Reactor Control Rod Worth for the Initial and Full Core Analysis of High Temperature Reactor Control Rod Worth for the Initial and Full Core”. *International Conference on Advances in Nuclear Science and ENgineering*, volume 799. IOP Publishing, 2015. Diakses dari <http://dx.doi.org/10.1088/1742-6596/755/1/011001>.