

ACKNOWLEDGMENT

This research was supported by the Department of Nuclear Engineering and Engineering Physics Faculty of Engineering, Universitas Gadjah Mada, Yogyakarta through Dana Masyarakat UGM of Fiscal Year 2017.

REFERENCES

- [1] United Nations, *The 2015 Revision of World Population Prospects*, Department of Economic and Social Affairs, New York, 2015.
- [2] T. Bruckner, *Technology-specific Cost and Performance Parameters*, Cambridge University Press, Cambridge, 2014.
- [3] Standing, Mark Dowdal, and William J.F, *Floating Nuclear Power Plant and Associated Technologies in the Northern Areas*, Norwegian Radiation Protection Authority, Østerås, 2008.
- [4] International Atomic Energy Agency, *Status Report 73 - KLT-40S*, IAEA, Vienna, 2010.
- [5] OKBM Afrikantov, KLT-40S Reactor Plants for Small Nuclear Plants, Nizhny Novgorod: OKBM Afrikantov.
- [6] V. I. Kostin, Yu.K. Panov, V. I. Polunichev, and I. E. Shamamin, "Floating Power Generating Unit with a KLT-40S Reactor System for Desalinating Seawater", *Atomic Energy*, vol. 1, no. 102, pp. 31-35, 2007.
- [7] S.M. Dmitriev, A.V. Varentsov, A.A. Dobrov, D. V. Doronkov, A. N. Pronin, V. D. Sorokin, and A. E. Khrobostov, "Computational and Experimental Investigations of the Coolant Flow in the Cassette Fissile Core of a KLT-40S Reactor", *Journal of Engineering Physics and Thermophysics*, vol.90, no. 4, pp. 941-950, 2017.
- [8] S. M. Dmitriev, A. V. Varentsov, D. V. Doronkov, M.A. Leghchanov, and D. N. Solentsev, "Calculation Studies Severe Accident KLT-40s", *Materialy Konferentsii KMS*, chapter 1, article no. 16, Podolsk, 2012.
- [9] G. V. Kulikalov, A. V. Vatulin, S. A. Ershov, Yu. V. Konovalov, A. V. Morozov, V. I. Sorokin, V. V. Fedotov, V. Yu. Shishin, and V. A. Ovchinnikov, "Particulars of The Behavior under Irradiation of Dispersion Fuel Elements with Uranium Dioxide + Aluminium Alloy Fuel Composition", *Atomic Energy*, Vol.117, no. 4, pp. 251-256, 2015.
- [10] S. M. Dmitriev, A. A. Dobrov, M. A. Legchanov, and A. E. Khrobostov, "Modeling of Coolant Flow in The Fuel Assembly of the Reactor of A Floating Nuclear Power Plant Using The LOGOS CFD Program", *Journal of Engineering Physics and Thermophysics*, Vol. 88, no. 5, pp. 1297-1303, 2015.
- [11] S. M. Dmitriev, D. V. Doronkov, M. A. Legchaniv, A. N. Pronin, D. N. Solncev, V. D. Sorokin, and A. E. Hrobostov, "Investigating Hydrodynamic Characteristic and Peculiarities of the Coolant Flow Behind a Spacer Grid of a Fuel Rod Assembly of Floating Nuclear Power Unit", *Thermophysics and Aeromechanics*, Vol. 23, no. 3, pp. 369-378, 2016.
- [12] D. F. Baybakov, A. V. Godovykh, I. S. Martynov, "The dependence of the nuclide composition of the fuel core loading on multiplying and breeding properties of the KLT-40S nuclear facility", *Nuclear Energy and Technology*, vol. 2, pp. 183-190, 2016.
- [13] W. M. Stacey, *Nuclear Reactor Physics*, WILEY-VCH, Weinheim, 2007