

# PUBLICATIONS

## INTERNATIONAL JOURNAL

1. Seik Mansoor Ali and Sudhansu Singh, "Critical heat flux model for heated horizontally oriented cylindrical vessel and its application to PHWR calandria under severe accident scenario", *International Communications in Heat and Mass Transfer*, 147 (2023) 106923.
2. Kota, S.B, Ali, S.M., Jayanti, S. "CFD Study of Thermal Stratification in a Scaled-Down, Toroidal Suppression Pool of Fukushima Daiichi Type BWR". *Fluids* 2023, 8, 20. <https://doi.org/10.3390/fluids8010020>
3. Kota, S.B., Ali, S.M., Jayanti, S. "Thermal Stratification Characteristics in a Reduced Scale Toroidal Suppression Pool. In: *Advances in Clean Energy and Sustainability. Green Energy and Technology*". Springer, Singapore. [https://doi.org/10.1007/978-981-99-2279-6\\_34](https://doi.org/10.1007/978-981-99-2279-6_34)
4. K.N.V. Adinarayana, P. Mangarjuna Rao and Seik Mansoor Ali, "Analysis of coupled two-phase natural circulation loops by developing HEM and DFM based numerical models", *International Journal of Thermal Sciences*, 194 (2023) 108584.
5. L. Thilagam, D. K. Mohapatra, "Preliminary neutronics analysis for generation III+ VVER design VVER-1200", *Elsevier Journal "Nuclear and Particle Physics Proceedings"*, Volume 341, December 2023, Pages 98-103, <https://doi.org/10.1016/j.nuclphysbps.2023.10.002>
6. M. R. Priya, L. Thilagam, S. Renuga, D. K. Mohapatra, "Estimation of photoppeak efficiency for IAEA gamma standards of different geometries using HPGe and 3"x3" NaI(Tl) gamma spectrometry systems", *Elsevier Journal "Nuclear and Particle Physics Proceedings"*, Volume 341, December 2023, Pages 44-47, <https://doi.org/10.1016/j.nuclphysbps.2023.09.016>.
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8. S. Renuga, L. Thilagam, M. R. Priya, D. K. Mohapatra, "Estimation of Self-absorption Correction Coefficients for Gross-alpha Activity Measurements", *Elsevier Journal "Nuclear and Particle Physics Proceedings"*, Volumes 339-340, November 2023, Pages 49-52, <https://doi.org/10.1016/j.nuclphysbps.2023.07.014>.
9. P. Vinodkumar, R. K. Padhi, Sitakanta Panda, P. Ramakrishna and B. S. Panigrahi "Effect of Ce codoping on the thermoluminescence dosimetry and photoluminescence behavior of SrBPO5: Dy/Sm/Eu" *Radiation Physics and Chemistry*, Volume 215, February 2024, 111317. <https://doi.org/10.1016/j.radphyschem.2023.111317>
10. Pradeep Kamaraj, Chidambaram Sabarathinam, H. Seshadri, Ganesh Nagappan "Characterization of colloids in coastal groundwater special focuses on their association with Cs and Sr", *Total Environment Research Themes*, 6(2023), 100036
11. B.S.Manisha Singh, Nabin Kumar Dhal, Manish Kumar, D.K. Mohapatra, H.Seshadri and Monalisha Nayak, "Retaliation of *Alstoniascholaris* (L.) R.Br. to caesium and strontium in hydroponics: effect on morpho physiology and induction of enzymatic defence", *Environmental Monitoring and Assessment*, (2023), 195:703, pp 1-

12. Talukdar D. and Bera S., 'Case Studies on Radioactivity and Decay Heat Contribution from Coating Materials of Irradiated Accident Tolerant Fuel for PHWR', Nuclear and Particle Physics Proceedings, Science Direct, Volume 341, December 2023, Pages 59-61. <https://doi.org/10.1016/j.nuclphysbps.2023.09.025>.
13. Singh, Meghraj, D. Datta, and Anurag Gupta. "Modelling and optimization of dosimeters in the product box for commissioning dosimetry at gamma irradiator using Voronoi Diagram algorithm." Radiation Physics and Chemistry 210 (2023): 111011.
14. Pandey, A., Sahani, G., & Sharma, P. K. (2023). Analysis of events reported from industrial radiation facilities. Nuclear and Particle Physics Proceedings, 336, 48-50.
15. Singh, B., Sahani, G., Prasad, V., Watts, A., & Kumar, R. (2023). India's Growing Nuclear Medicine Infrastructure and Emergence of Radiotheranotics in Cancer Care: Associated Challenges and the Opportunities to Collaborate. Indian Journal of Nuclear Medicine, 38(3), 201-207.
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18. Subrata Bera, R.S. Rao, S.C. Utkarsh, "Modelling of spent fuel dissolution process for assessment of criticality safety margin", Nuclear and Particle Physics Proceedings, Volume 341, 2023, Pages 75-80, ISSN 2405-6014, <https://doi.org/10.1016/j.nuclphysbps.2023.09.022>.