



PUBLICATIONS

1. INTERNATIONAL/ NATIONAL JOURNALS

- (i) **Optimal Main Heat Transport System Configuration for a Nuclear Power Plant**
Avinash J. Gaikwad, Naresh K. Maheshwari, K. Obaidurrahman, Aniket Gupta and Santosh K. Pradhan
Nuclear Engineering and Design, Volume 359, April 1, 2020, 110474
- (ii) **Investigation of Human Factors Using HFACS Framework- A Case Study for Unintended Reactor Trip Events in NPP**
M. Karthick, C. Senthil Kumar and T. Paul Robert
Reliability, Safety and Hazard Assessment for Risk-Based Technologies, Proceedings of ICRESH 2019, Book Series: Lecture Notes in Mechanical Engineering, Springer 2020
- (iii) **Investigation of Human Errors using Fuzzy-Bayesian belief Networks**
M. Karthick, C. Senthil Kumar, T. Paul Robert and V. Balasubramaniyan
Reliability and Risk Assessment in Engineering: Proceedings of INCRS-2018, Book Series: Lecture Notes in Mechanical Engineering, Springer 2020
- (iv) **Exchange Current Density of Uranium at Liquid Cadmium in LiCl-KCl eutectic**
Krishan Kumar, Suddhasattwa Ghosh, B. Prabhakara Reddy
J. Electrochem Soc. India Vol: 65 (3-4) July-Oct 2019 pp.192-194
- (v) **Investigation of Skin Reactions in Complex Interventional Radiology Procedures**
A. R. Kulkarni, P. Akhilesh, S. Mahalakshmi, S. D. Sharma
Radioprotection 2019, Vol. 54(1), pp. 61-65

2. INTERNATIONAL CONFERENCE

- (i) **Structural and Optical properties of Cerium doped Strontium Borophosphate Glasses**
P. Ramakrishna, S. K. Panda, P. Vinod Kumar, D. K. Mohapatra, H. N. Jena and B. S. Panigrahi
Proc. of the 6th International Conference on 'Luminescence and its Applications-2019' (ICLA-2019), Pt. Ravishankar Shukla University, Raipur; January 7-10, 2019, pp 121
- (ii) **Structural Integrity Assessment of Turbine Driven Feed Pump Line due to Water Hammer**
C. Nachiketa, T. Ramesh, Utkarsh S., Bishnoi Lalaram
Proc. of the Structural Mechanics in Reactor Technology (SMiRT 25), August 2019, Charlotte, North Carolina, USA
- (iii) **Simulation of External Flood Routing inside Plant Building using Fluid Structure Interaction Technique**
Bishnoi Lalaram, Edumukkala Rakesh, Alajpur Sandeep, Roshan A D, Pisharady Ajai, Acharya Sourav
Proc. of the Structural Mechanics in Reactor Technology (SMiRT 25), August 2019, Charlotte, North Carolina, USA
- (iv) **Safety Assessment of Appurtenances of Containment Structure for Design Extension Condition**
Bishnoi Lalaram, Mashetty Santosh, Pisharady A, Roshan A D, Harshan Abhijit, Acharya Sourav
Proc. of the Structural Mechanics in Reactor Technology (SMiRT 25), August 2019, Charlotte, North Carolina, USA

- (v) **Probabilistic Seismic Hazard Analysis of an Alluvial Site**
Bishnoi Lalaram, Roshan A D, Pisharady A, Mohammed Vengasseri Anis
Proc. of the Structural Mechanics in Reactor Technology (SMiRT 25), August 2019, Charlotte, North Carolina, USA
- (vi) **An Approach for Safety Assessment Using Reliability Analysis: A Case Study**
Dhanesh B. Nagrale, Santosh K. Pradhan, Avinash J. Gaikwad, L. R. Bishnoi
International Conference on System Automation, Reliability, Quality Control, Safety, Maintenance & Management (ICSARQCSMM2019), Jawaharlal Nehru Technological University, Anantapur College of Engineering, Anantapur, Andhra Pradesh, December 11 -13, 2019
- (vii) **Performance Analysis of Calandria Vault Dew Point Monitoring System**
Prashant Sharma, Nrependra Kumar, Mukesh Singhal, A. J. Gaikwad
3rd International and 25th National 'Heat and Mass Transfer Conference-2019 (IHMTTC-2019), Indian Institute of Technology (IIT) Roorkee, December 28-31, 2019
- (viii) **Calculation of view Factor of 37 Pin Fuel Bundle for Indian PHWR using Monte Carlo Method**
Aniket P. Gupta, Prashant Sharma, Bhanu Prakash B., R. S. Rao, A. J. Gaikwad
3rd International and 25th National 'Heat and Mass Transfer Conference-2019' (IHMTTC-2019), Indian Institute of Technology (IIT), Roorkee, December 28-31, 2019
- (ix) **CFD Analysis Case Study-Identify Wall Thinning issue in Feeder Pipes**
Dhanesh B. Nagrale, S. K. Pradhan, R. S. Rao, A. J. Gaikwad
3rd International and 25th National 'Heat and Mass Transfer Conference-2019' (IHMTTC-2019), Indian Institute of Technology (IIT), Roorkee, December 28-31, 2019
- (x) **Comparison of Physics Characteristics of Pressurized Water Reactor Type Advanced Light Water Reactors**
L. Thilagam, D. K. Mohapatra
Proc. of the 7th International Conference on Advances in Energy Research (ICAER 2019), Indian Institute of Technology (IIT) Bombay, Mumbai, December 10-12, 2019

3. NATIONAL CONFERENCES/ SYMPOSIUM/WORKSHOPS

- (i) **Theoretical and Experimental Investigations Pertaining to the Corrosion Aspects of Zr-2.5%Nb with Organic Impurities**
Krishan Kumar, H. Seshadri, Arup Dasgupta, D. K. Mohapatra, V. Balasubramaniyan
Proc. of DAE-BRNS 14th Biennial Symposium on Nuclear and Radiochemistry (NUCAR-2019), Mumbai, January 15-19, 2019
- (ii) **Synthesis and Characterization of Cerium doped Strontium Borophosphate Glasses for HLW Immobilization**
P. Ramakrishna, B. S. Panigrahi, D. K. Mohapatra, H. N. Jena
DAE-BRNS 14th Biennial Symposium on 'Nuclear and Radiochemistry-2019' (NUCAR-2019), Mumbai, January 15-19, 2019
- (iii) **Exchange Current Density Measurements in LiCl-KCl Eutectic Melt for Pyroprocessing Applications**
Gurudas Pakhui, Suddhasattwa Ghosh, Krishan Kumar, P. Venkatesh, B. Prabhakara Reddy
DAE-BRNS 14th Biennial Symposium on 'Nuclear and Radiochemistry-2019' (NUCAR-2019), Mumbai, January 15-19, 2019

- (iv) **HRA Techniques for Risk Assessment in NPPs**
C. Senthil Kumar
Human Reliability Program in Industries of National Importance by National Institute of Advanced Studies (NIAS) and Texas A&M University-USA at NIAS, Bengaluru, April 24-26, 2019
- (v) **Lanthanide-activated CaBPO₅ Phosphors for Phototherapy and LEDs Applications**
Sitakanta Panda, P. Vinodkumar, P. Ramakrishna, U. Madhusoodanan, B.S. Panigrahi
National Conference on Advanced Materials and Environmental Sciences (NCAMES-2019), Kalinga University, Naya Raipur, October 14-15, 2019
- (vi) **Thermal Neutron Dosimetry using ⁶LiF:Mg,Ti (MTS-6) and ⁷LiF:Mg,Ti (MTS-7) based Thermoluminescence Detectors**
L. Thilagam, M. R. Priya, D. K. Mohapatra
Proc. of the 22nd National Symposium on Radiation Physics (NSRP-22), Jawaharlal Nehru University (JNU), New Delhi, November 8- 10, 2019
- (vii) **Investigation of Attenuation Characteristics of Advanced Shield Materials for Typical Light Water Reactor (LWR) Spectrum**
L. Thilagam, M. R. Priya, D. K. Mohapatra
Proc. in the 22nd National Symposium on Radiation Physics (NSRP-22), Jawaharlal Nehru University (JNU), New Delhi, November 8-10, 2019
- (viii) **Management of High Activity Sealed Sources in Radiotherapy: Requirements for addressing a key Disposal issue in India**
P. K. Dixit, S. Mahalakshmi, Smriti Sharma, G. Sahani and P. K. Dash Sharma
Annual Conference of Association of Medical Physicist of India (AMPICON-2019), Kolkata, November 7-9, 2019
- (ix) **Performance Evaluation of Indigenously developed Ru-106 Eye Plaque for Sealed Source Classification**
Smriti Sharma, S. Mahalakshmi, G. Sahani and P. K. Dash Sharma
Annual Conference of Association of Medical Physicist of India (AMPICON-2019), Kolkata, November 7-9, 2019
- (x) **Radiation Safety in Interventional Radiology: Regulatory Requirements**
Rajib Lochan Sha, R. K. Chaturvedi, G. Sahani and P. K. Dash Sharma
Annual Conference of Association of Medical Physicist of India (AMPICON-2019), Kolkata, November 7-9, 2019
- (xi) **Type Approval Testing of ⁶⁰Co Based Indigenous Radiography Camera COCAM-120 for Industrial NDT Applications: Regulatory Perspective**
S. Pathak, G. Bokam, G. K. Panda, P. Tandon and P. K. Dash Sharma
National Conference of Indian Society for Non-Destructive Testing (NDE-2019), Bengaluru; December 5-7, 2019
- (xii) **Radiation Surveillance Procedure in Industrial Radiography**
G. Bokam, S. Pathak, G. K. Panda, P. Tandon and P. K. Dash Sharma
National Conference of Indian Society for Non-Destructive Testing (NDE-2019), Bengaluru; December 5-7, 2019

- (xiii) **Regulatory Requirements and Radiation Safety Aspects for Yttrium-90 based Radioembolization Procedure for the treatment of Hepatocellular Carcinoma**
Jolly Joseph K. and Pankaj Tandon
Annual Conference of Society of Nuclear Medicine (SNMICON 2019), Mumbai, December 12-15, 2019
- (xiv) **Quality Assurance Protocol of Atomic Energy Regulatory Board (AERB) for the Nuclear Medicine Imaging Equipment**
Namitha K. K., Pankaj Tandon, S. C. Kheruka and Jolly Joseph
Annual Conference of Society of Nuclear Medicine (SNMICON 2019), Mumbai, December 12-15, 2019
- (xv) **Removal of Nitrate from Aqueous Stream using in-house Synthesized zero valent iron nano particles**
Mansi Garg, Krishan Kumar and H. Seshadri
National Technology Day (NDT-2019), IGCAR, Kalpakkam, July 31, 2019
- (xvi) **Investigation of Optically Stimulated Luminescence (OSL) response of common workplace materials for retrospective Dosimetry**
M.R. Priya and L. Thilagam
National Technology Day (NDT-2019), IGCAR, Kalpakkam, July 31, 2019
- (xvii) **Spatio-temporal Surveillance of Coastal Environment around NPPs**
C. Jayalakshmi, C. Anandan and C. Senthil Kumar
National Technology Day (NDT-2019), IGCAR, Kalpakkam, July 31, 2019
- (xviii) **Remediation of Areas affected by Radioactive Contamination**
H. Seshadri
Awareness Newsletter, June 2019