Publications

Book Chapter:

1. A. Mishra, Abhishek Tiwari, Macro-mechanical modeling of 3D printed Material 2020. Materials Forming, Machining and Tribology. Ed.: **Davim**, J. Paul. *Springer*.(Accepted)
2. P. Sharma, P. Pal, A. Mishra, M. Bhandwal, A. Sharma. (2019). A Novel System for Exhaust Emission Reduction of Diesel Engine by Using Electrochemical Technique. In: Saha P., Subbarao P., Sikarwar B. (eds) *Advances in Fluid and Thermal Engineering*. Lecture Notes in Mechanical Engineering. Springer, Singapore**.** https://doi.org/10.1007/978-981-13-6416-7_23.

Patents:

1. A smart temperature measuring system with minimal human intervention: Application No.: 202111020581 (Filed)
2. Smarty Bins – A smart way to manage domestic waste- 201911035770 (Filed)

Journal papers:

1. Taufeeq Ahmad, A. Mishra, Subrata Ghosh (2020). Identifying Efficient Cooling Approach and Heat Flow Analysis of Cylindrical Lithium-ion Batteries. Journal of Power Sources. (**Submitted-SCI**)
2. Shashi Kala, A. Mishra, (2021) Battery recycling opportunity and challenges in India. Materials Today: Proceedings. (Scopus) **(**https://doi.org/10.1016/j.matpr.2021.01.927).
3. A. Mishra and Kulbir Singh (2020). Radiation damage modeling of austenitic steels for cyclic loading. Materials Today: Proceedings, 43,298-302. (Scopus) https://doi.org/10.1016/j.matpr.2020.11.666.
4. Shashi Kala, A. Mishra and Vishesh Shukla (2020). Battery technologies and its future prospects. Journal of Indian Chemical Society, 97, 10a, 1-5 (SCI).
5. A. Mishra, R. Suresh Kumar,G. Sasikala and P. Chellapandi, (2018). Temperature rate dependent modelling of thermal ratcheting behaviour. *Journal of Structural Engineering (JOSE)*; 45, 1, 67-74. (Scopus).
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7. A. Mishra, P. Chellapandi, R. Suresh Kumar and G. Sasikala. Effect of Temperature Rate Term while Predicting Thermal Ratcheting of a Thin Cylinder due to Cyclic Temperature Variation. *Transactions of the Indian Institute of Metals.* 2015; 68: 161-169. (SCI)
8. A. Mishra, P. Chellapandi, R. Suresh Kumar and G. Sasikala. Comparative study of cyclic hardening behavior of SS 316L using time independent and dependent constitutive modeling: A simplified semi-implicit integration approach. *Transactions of the Indian Institute of Metals.* 2015; 68; 623-631. (SCI)

9. A. Mishra, R. Suresh Kumar, and P. Chellapandi. Progressive deformation behaviour of thin cylindrical shell under cyclic temperature variation using Combined Hardening Chaboche Model. *Latin American Journal of Solids and Structure.* 2014; 11:980-992. (SCI)
10. A. Mishra, R. Suresh Kumar, G. Sasikala and P. Chellapandi. Influence of the frequency of level fluctuations with reference to progressive deformation of thin cylindrical shell. *Procedia Engineering* 2014; 86:95 –102. (SCOPUS)
11. A. Mishra, R. Suresh Kumar, and P. Chellapandi. Time dependent ratcheting of thin cylindrical shell due to axial temperature variation using visco-plastic model. *International Journal of Engineering and Technology.* 2014; 6: 234-237. (EI-Inspec).

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1. Shashi Kala, A. Mishra, Vishesh Shukla (2020). Battery Technologies and its future prospects. Energy and Environmental Technologies for Sustainable Development (CHEM-CONFLUX2020**),** Feb 14-16, 2020. MNNIT Allahabad.
2. Henry Isaac, A. Mishra, and Abhishek Kumar Tiwari. Computational assessment of inter vertebral disc bulging with postural change. Indian Conference on Applied Mechanics (INCAM 2019), July, 3-5, 2019, IISc Bangalore.
3. A. Mishra, R. Suresh Kumar,G. Sasikala and P. Chellapandi. Temperature rate dependent modelling of thermal ratcheting behaviour. Indian Conference on Applied Mechanics (INCAM 2017), July 5-7, 2017, MNNIT, Allahabad.
4. A. Mishra, R. Suresh Kumar, G. Sasikala and P. Chellapandi. Significance of thermo-mechanical interaction in thermal ratcheting behavior. 7th International Conference on Creep, Fatigue and Creep fatigue Interaction (CF-7), January 19-22, 2016, Indira Gandhi Centre for Atomic Research, Kalpakkam, India
5. A. Mishra, P. Chellapandi, R. Suresh Kumar and G. Sasikala. Effect of Temperature Rate Term while Predicting Thermal Ratcheting of a Thin Cylinder due to Cyclic Temperature Variation. International Symposium for Research Scholars on Metallurgy, Materials Science and Engineering (ISRS-2014), Dec-11-12, 2014, IITM, India.
6. A. Mishra, R. Suresh Kumar, G. Sasikala and P. Chellapandi. Influence of the frequency of level fluctuations with reference to progressive deformation of thin cylindrical shell. First International conference on Structural Integrity (ICONS-2014), Feb-4-7, 2014, IGCAR, Kalpakkam.
7. A. Mishra, R. Suresh Kumar and P. Chellapandi. Shakedown study of thin cylindrical shell due to moving temperature distribution using Combined Hardening Chaboche Model. Indian Conference on Applied Mathematics (INCAM 2013), 4th-6th July 2013, IIT Madras, India.
8. A. Mishra, R. Suresh Kumar and P. Chellapandi. Simulation of Thermal Ratcheting of thin cylindrical shell due to moving temperature distribution using Combined Hardening Chaboche Model. International Conference on Pressure Vessel and Piping (OPE 2013), 13th-16th February, 2013, Mamallapuram, Chennai, India.