

Year: 2023

Publication Details (Journal Papers/Book Chapters/Conference Papers)

1. Sangeeta Das, Preetam Bezbarua, Shubhajit Das (2023) Sustainable Nanomaterial Coatings for Anticorrosion: A Review, Nanomaterials for Sustainable Tribology, Edited By Ankush Raina, Mir Irfan Ul Haq, Patricia Iglesias Victoria, Sudan Raj Jegan Mohan, Ankush Anand, <https://www.routledge.com/Nanomaterials-for-Sustainable-Tribology/Raina-Haq-Victoria-Mohan-Anand/p/book/9781032306902#>
2. Preetam Bezbarua, Sangeeta Das, Shubhajit Das (2023) Machining investigation of textured tungsten carbide tools, Materials Today: Proceedings, Volume 76, Part 3, 542-550. <https://doi.org/10.1016/j.matpr.2022.11.161>
3. Mallick D, Sharma P, Bora BJ, Baruah D, Bhowmik R, Barbhuiya SA, D Balakrishnan. Mechanistic investigation of pyrolysis kinetics of water hyacinth for biofuel employing isoconversional method. *Sustainable Energy Technologies and Assessments* 57 (2023): 103175, DOI: 10.1016/j.seta.2023.103175.
4. P P Borah, K K Pathak, A Gupta, S Roy, B Das, Experimental study of a solar air heater with modified absorber plate through square obstacles with threaded pin fins, Applied Thermal Engineering, 228 (2023): 120544, DOI: <https://doi.org/10.1016/j.applthermaleng.2023.120544>.

Year: 2022

Publication Details (Journal Papers/Book Chapters/Conference Papers)

1. Kankan K Pathak, Thermo Hydraulic Analysis of slightly inclined finned channel under natural convection, Journal of Applied Fluid Mechanics (J), <https://doi.org/10.47176/JAFM.15.04.33307>.
2. Kankan K Pathak, A comparative numerical study of estimation of velocity components in mixed convection through vertical shrouded plate finned channel, ASME J. Thermal Sci. Eng. Appl.(J), <https://doi.org/10.1115/1.4055264>.

3. Aunshuman Chatterjee, Performance Analysis of Francis Turbine Test Rig, *International Journal of Latest Trends in Engineering and Technology (J)*, <http://dx.doi.org/10.21172/1.202.01>.
4. Debarshi Mallick, Biohythane production from organic waste: challenges and techno-economic perspective, *Waste-to-Energy Approaches Towards Zero Waste (B)*, <https://doi.org/10.1016/B978-0-323-85387-3.00011-2>.
5. Debarshi Mallick, Pyrolysis Characterization of Biomass Feedstock Using Thermogravimetric Analysis, *Recent Advances in Thermo fluids and Manufacturing Engineering (C/B)*, <https://doi.org/10.1007/978-981-19-4388->
6. Sharmi Dev Sharma, Emerging commercial opportunities for conversion of waste to energy: aspect of gasification technology, *Waste-to-Energy Approaches Towards Zero Waste (B)*, <https://doi.org/10.1016/B978-0-323-85387-3.00012-4>.
7. Rajib Bhowmik, Emerging commercial opportunities for conversion of waste to energy: aspect of gasification technology, *Waste-to-Energy Approaches Towards Zero Waste (B)*, <https://doi.org/10.1016/B978-0-323-85387-3.00012-4>.
8. Kankan K Pathak, Impact of Biofertilizers in Sustainable Growth of Agriculture Sector, *Handbook of Biomass Valorisation for Industrial Applications (B)*, <https://doi.org/10.1002/9781119818816.ch21>.
9. Kankan K Pathak, A study of internet of things in smart grid and smart grid security, *Advances in smart energy systems (B)*, <https://link.springer.com/book/9789811924118>.
10. Kankan K Pathak, Environmental Management of Industrial Effluent through Bioremediation Techniques, *Bioremediation of Industrial Effluents (B)*, Accepted for publication (Springer).
11. Himangshu S Brahma, Emerging commercial opportunities for conversion of waste to energy: aspect of gasification technology, *Waste-to-Energy Approaches Towards Zero Waste (B)*, <https://doi.org/10.1016/B978-0-323-85387-3.00012-4>.
12. Aunshuman Chatterjee, Experimental determination of flexural strength of Bholuka Bamboo (*Bambusa Balcooa*) of Assam, India , *Materials Today: Proceedings (J)*, Accepted for publication (Elsevier).

Year: 2021

Publication Details (Journal Papers/Book Chapters/Conference Papers)

1. Rajib Bhowmik, Predicting the elastic properties of hemp fiber- A comparative study on different polymer composite, Materials Today: Proceedings (J), <https://doi.org/10.1016/j.matpr.2021.09.562>.
2. Sangeeta Das, Composites for Sensors and Actuators, Reference Module in Materials Science and Materials Engineering (B), <https://doi.org/10.1016/B978-0-12-803581-8.11906-X>.
3. Sangeeta Das, Functionally Grade Composite Material Production, Reference Module in Materials Science and Materials Engineering(B), <https://doi.org/10.1016/B978-0-12-803581-8.11880-6>.
4. Sangeeta Das, Properties for Polymer, Metal and Ceramic Based Composite Materials, Reference Module in Materials Science and Materials Engineering(B), <https://doi.org/10.1016/B978-0-12-803581-8.11897-1>.
5. Sangeeta Das, Green Machining Techniques- A review, Green Tribology (B), <https://doi.org/10.1201/9781003139386-10>.
6. Rajib Bhowmik, Shorea robusta (Sal) fallen leaves briquette: A potential bioenergy fuel for rural community, Innovations in Sustainable Energy and Technology(B), https://link.springer.com/chapter/10.1007/978-981-16-1119-3_23.
7. Kankan K Pathak, Thermal Analysis of a Steam Turbine Unit of Namrup Thermal Power Plant, Assam, India, International conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021) (C/B), <https://link.springer.com/book/9789811977084>.
8. Kankan K Pathak, Experimental study of free convective heat transfer from shrouded finned horizontal channel, International conference on Progressive Research in Industrial & Mechanical Engineering (PRIME - 2021) (C/B), <https://link.springer.com/book/9789811977084>.

Year: 2020

Publication Details (Journal Papers/Book Chapters/Conference Papers)

1. Debarshi Mallick, Co-gasification of biomass blends: Performance evaluation in circulating fluidized bed gasifier, Energy(J), <https://doi.org/10.1016/j.energy.2019.116682>
2. Kankan K Pathak, Thermal performance of heat sinks with variable and constant heights: An extended study, International Journal of Heat and Mass Transfer(J), <https://doi.org/10.1016/j.ijheatmasstransfer.2019.118916>
3. Sangeeta Das, WEDM investigation and fuzzy logic modelling of AA7075/SiC metal matrix composites, Materials Today: Proceedings(J), <https://doi.org/10.1016/j.matpr.2020.02.434>
4. Sangeeta Das, Modelling and turning investigations of Al2024 based metal matrix composites, Materials Today: Proceedings(J), <https://doi.org/10.1016/j.matpr.2020.02.409>
5. Sangeeta Das, Optimization of wear coefficient and coefficient of friction of borosilicate glass ceramics using Taguchi coupled grey fuzzy logic technique, Materials Today: Proceedings(J), <https://doi.org/10.1016/j.matpr.2020.03.262>
6. Sangeeta Das, Mechanical, surface morphological multi-objective optimization of tribological properties of V₂O₅ doped lead calcium titanate borosilicate glass ceramics, Ceramics International (J), <https://doi.org/10.1016/j.ceramint.2020.04.252>
7. Sangeeta Das, Electrical Study of Lead Calcium Titanate Borosilicate Glass Ceramics, Advances in Lightweight Materials and Structures, Springer Proceedings in Materials (B), https://doi.org/10.1007/978-981-15-7827-4_36.
8. Sangeeta Das, Dielectric and Impedance Spectroscopic Characteristics of Lead Calcium Titanate Borosilicate Glass Ceramics, Glass Physics and Chemistry (J), <https://doi.org/10.1134/S108765962101003X>.
9. Rakesh Nath, Design and Parametric Evaluation of a Staircase Climbing Forklift, International Research Journal of Engineering and Technology (IRJET) (J), <https://www.irjet.net/archives/V7/i7/IRJET-V7I7499>.
10. Rakesh Nath, A Review on Second Generation Biodiesel Blending & their Future Perspectives, International Journal of Engineering Research and Applications (IJERA) (J), <https://doi.org/10.9790/9622-1008015159>.

11. Swapnaneel Sarma, Effectiveness of Japanese Encephalitis Warning System developed by North Eastern Space Application Centre in case fatality ratio mitigation in three districts of Assam, 2nd International Conference on Future Learning Aspects of Mechanical Engineering (C/B), https://doi.org/10.1007/978-981-15-9956-9_38
12. Kankan K.Pathak, Impact of Bioenergy on Environmental Sustainability, Biomass Valorization to Bioenergy. Energy, Environment, and Sustainability. Springer, Singapore (B), https://doi.org/10.1007/978-981-15-0410-5_10, 04.
13. Sangeeta Das, Impact of Bioenergy on Environmental Sustainability, Biomass Valorization to Bioenergy. Energy, Environment, and Sustainability. Springer, Singapore (B), https://doi.org/10.1007/978-981-15-0410-5_10.
14. Bhabajit Baruah, Sustainable Development Goals in context to BRICS Countries, Solar Energy (Springer, Singapore) (B), https://doi.org/10.1007/978-981-15-0675-8_2.
15. Rakesh Nath, Sustainable Development Goals in context to BRICS Countries, Solar Energy (Springer, Singapore) (B), https://doi.org/10.1007/978-981-15-0675-8_2.

Year: 2019

Publication Details (Journal Papers/Book Chapters/Conference Papers)

1. Kankan K Pathak, A study of enhanced heat and mass transfer from variable height fin array undergoing natural convection, ASME J. Thermal Sci. Eng. Appl. (J), <https://doi.org/10.1115/1.4044426>
2. Kankan K Pathak, Computational study of mixed convective heat transfer from a shrouded vertical dual-height plate fin array, International Journal of Thermal Sciences (J), <http://dx.doi.org/10.1016/j.ijthermalsci.2019.05.014>
3. Debarshi Mallick, Co–gasification of coal/biomass blends in 50 kWe circulating fluidized bed gasifier, Journal of Energy Institute (J), <https://doi.org/10.1016/j.joei.2019.04.005>

4. Sangeeta Das, Structural, optical, and nuclear magnetic resonance studies of V₂O₅-doped lead calcium titanate borosilicate glasses, *Journal of Physics and Chemistry of Solids(J)*, <https://doi.org/10.1016/j.jpics.2018.10.030>, 19
5. Dheeman Bhuyan, Numerical Investigation of Blood Flow Characteristics Through Cannulated Aorta, *Journal of Biomimetics, Biomaterials and Biomedical Engineering(J)*, <https://doi.org/10.4028/www.scientific.net/jbbbe.43.28>
6. Rakesh Nath, Parametric Evaluation of Beam Deflection on Piezoelectric Material Using Implicit and Explicit Method Simulations: A study in Energy Engineering, Practice, Progress, and Proficiency in Sustainability (B), <https://doi.org/10.4018/978-1-5225-7958-8.ch004>
7. Debarshi Mallick, Detailed study of pyrolysis kinetics of biomass using thermogravimetric analysis, *International conference on Current Trends in Renewable and Alternate Energy (ICRAE) AIP Conference Proceedings 2019 (C/B)*, <https://doi.org/10.1063/1.5096505>
8. Debarshi Mallick, Production and performance analysis of Biodiesel from Algae, *International Conference in Advanced Materials for Energy Science and Technology (Carbon - Science and Technology (ISSN 0974-0546) (C/J)*, <https://doi.org/10.13140/RG.2.2.24513.61284>
9. Debarshi Mallick, Pyrolysis kinetics of water hyacinth using thermogravimetric analysis, *International Conference in Advanced Materials for Energy Science and Technology (Carbon - Science and Technology) (ISSN 0974-0546) (C/J)*, <https://doi.org/10.13140/RG.2.2.24513.61284>
10. Rajat K.Kakati, Production and performance analysis of Biodiesel from Algae, *International Conference in Advanced Materials for Energy Science and Technology (Carbon - Science and Technology) (ISSN 0974-0546) (C/J)*, <https://doi.org/10.13140/RG.2.2.24513.61284>
11. Rajat K.Kakati, Pyrolysis kinetics of water hyacinth using thermogravimetric analysis, *International Conference in Advanced Materials for Energy Science and Technology (Carbon - Science and Technology) (ISSN 0974-0546) (C/J)*, <https://doi.org/10.13140/RG.2.2.24513.61284>
12. Sangeeta Das, Applications of Tribology on Engine Performance, *Automotive Tribology (B)*, https://doi.org/10.1007/978-981-15-0434-1_16

13. Aunshuman Chatterjee, Application of back propagation neural network in predicting hc emission from i. C. Engines, International Journal of Latest Trends in Engineering and Technology (J), <http://dx.doi.org/10.21172/1.133.09>
14. Dheeman Bhuyan, A Brief History of Prosthetics and Orthotics of the Lower Body and Their Types, Research Anthology on Emerging Technologies and Ethical Implications in Human Enhancement (B), <https://doi.org/10.4018/978-1-7998-8050-9.ch018>
15. Dheeman Bhuyan, Design of a Prosthetic Ankle Complex: A Study in Biomimetic System Design, Research Anthology on Emerging Technologies and Ethical Implications in Human Enhancement (B), <https://doi.org/10.4018/978-1-7998-80509.ch019>
16. Dheeman Bhuyan, Design of Prosthetic Heart Valve and Application of Additive Manufacturing, Research Anthology on Emerging Technologies and Ethical Implications in Human Enhancement (B), <https://doi.org/10.4018/978-1-7998-8050-9.ch024>