

List of Publications

- 1) Investigation on fluid flow heat transfer and frictional properties of Al₂O₃ nanofluids used in shell and tube heat exchanger. **D Barik**, Araj TG, RoyReby. Research Square, 2020
- 2) Investigation and separation of waste solar panels. P Jayapradha, **D Barik**, A Jeeyaudeen, PNM Sanjoop, M Prahaladha. Materials Today: Proceedings, 2020
- 3) Experimental investigation of Lawsonia inermis L. biofuel as fuel in a diesel engine. S Aravind, **D Barik**, P Ragupathi, G Vignesh. Materials Today: Proceedings, 2020
- 4) Production methods of aluminium foam: A brief review. R Karuppasamy, **D Barik**. Materials Today: Proceedings, 2020
- 5) Production of open-Cell Metallic Foam Made of LM6 Aluminum Alloy through Sand Casting. R Karuppasamy, **D Barik**, MS Dennison, pp. 15136 – 15141, 2020
- 6) Electricity Generation from Exhaust Waste Heat of Internal Combustion Engine Using Al₂O₃ Thermoelectric Generators. P Ragupathi, **D Barik**, G Vignesh, S Aravind. Journal of Applied Science and Engineering Vol 23 No. 1, pp55-60, 2020
- 7) Experimental analysis on turning of AISI 4340 steel using non-textured, dimple textured and MoS₂ coated dimple textured carbide cutting inserts at the rack surface, G Vignesh, **D Barik**, P Ragupathi, S Aravind, Materials Today: Proceedings, 2020
- 8) Combined adjustment of injection timing and compression ratio for an agricultural diesel engine fuelled with Nahar methyl ester, SK Dash, P Lingfa, **D Barik**, International Journal of Ambient Energy, pp1-13, 2020
- 9) Effects of waste chicken fat derived biodiesel on the performance and emission characteristics of a compression ignition engine, **D Barik**, R Vijayaraghavan, International Journal of Ambient Energy Vol. 41 No.1, pp88-97, 2020
- 10) Investigation on the effect of aluminium foam made of A413 aluminium alloy through stir casting and infiltration techniques. R Karuppasamy, **D Barik**, NM Sivaram, MS Dennison. International Journal of Materials Engineering Innovation Vol. 11 No. 1, pp34-50, 2020
- 11) Turning operation of AISI 4340 steel in flooded, near-dry and dry conditions: a comparative study on tool-work interface temperature. MS Dennison, NM Sivaram, **D Barik**, S Ponnusamy. Mechanics and Mechanical Engineering Vol. 23 No. 1, pp172-182, 2019
- 12) Energy from Toxic Organic Waste for Heat and Power Generation. **D Barik**. Woodhead Publishing, 2019
- 13) Toxic Waste From Biodiesel Production Industries and Its Utilization. G Vignesh, **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp 69-82, 2019
- 14) Energy extraction from toxic waste originating from food processing industries. **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp17-42, 2019
- 15) Paper Industry Wastes and Energy Generation From Wastes. PM Gopal, NM Sivaram, **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp83-97, 2019
- 16) Toxic waste from textile industries. NM Sivaram, PM Gopal, **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp43-54, 2019
- 17) Economic Factors for Toxic Waste Management. **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp195-203, 2019

- 18) Toxic waste from leather industries. NM Sivaram, **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp55-67, 2019
- 19) Toxic Waste From Municipality. A Sam, **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp7-16, 2019
- 20) Health hazards of medical waste and its disposal. KK Padmanabhan, **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, pp99-118, 2019
- 21) Introduction to energy from toxic organic waste for heat and power generation. **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, 2018
- 22) Comprehensive Remark on Waste to Energy and Waste Disposal Problems. **D Barik**. Energy from Toxic Organic Waste for Heat and Power Generation, 2018
- 23) Effective Utilization of Job Shop Scheduling in Auto Industries with the aid of Social Spider Optimization. KB Gavali, AK Bewoor, **D Barik**. Journal of Green Engineering Vol. 8 No. 4, pp475-496, 2018
- 24) Effect of compression ratio on combustion performance and emission characteristic of a direct injection diesel engine fueled with upgraded biogas–Karanja methyl ester–diethyl. **D Barik**, A Kumar, S Murugan. Energy & Fuels Vol 32 No. 4, pp 5081-5089, 2018
- 25) Combined effect of compression ratio and diethyl ether (DEE) port injection on performance and emission characteristics of a DI diesel engine fueled with upgraded biogas (UBG). **D Barik**, S Murugan, S Samal, NM Sivaram. Fuel 209, pp339-349, 2017
- 26) Combustion analysis of the diesel–biogas dual fuel direct injection diesel engine–the gas diesel engine. **D Barik**, AK Satapathy, S Murugan. International Journal of Ambient Energy Vol. 38 No. 3, pp259-266, 2017
- 27) Performance Enhancement in Job Shop Scheduling with the Aid of Hybrid Social Spider Optimization and Gray Wolf Optimization. PS Gavali KB, Bewoor A, **Barik D**. International Journal of Applied Engineering Research Vol. 12 No. 21, pp10530-10540, 2017
- 28) Job shop scheduling with the aid of hybrid social spider optimization and gray wolf optimization with industrial scheduling case study. **BarikDebabrata**, Gavali KB, Bewoor A. International Journal of Mechanical Engineering and Technology (IJMET) Vol. 8 No. 10, 2017
- 29) Experimental investigation on the behavior of a direct injection diesel engine fueled with Karanja methyl ester-biogas dual fuel at different injection timings. **D Barik**, S Murugan, NM Sivaram, E Baburaj, PS Sundaram. Energy 118, pp127-138, 2017
- 30) Experimental investigation on the behavior of a DI diesel engine fueled with raw biogas–diesel dual fuel at different injection timing. **D Barik**, S Murugan. Journal of the Energy Institute Vol. 89 No. 3, pp373-388, 2016
- 31) Effects of diethyl ether (DEE) injection on combustion performance and emission characteristics of Karanja methyl ester (KME)–biogas fueled dual fuel diesel engine. **D Barik**, S Murugan. Fuel 164, pp286-296, 2016
- 32) Effects of pilot fuel injection timing on the performance and emission characteristics of a diesel engine fuelled with biogas. **D Barik**, S Murugan. International Journal of Oil, Gas and Coal Technology Vol. 13 No.4, pp407-427, 2016
- 33) An artificial neural network and genetic algorithm optimized model for biogas production from co-digestion of seed cake of karanja and cattle dung. **D Barik**, S Murugan. Waste and biomass valorization Vol. 6 No. 6, pp1015-1027, 2015
- 34) Assessment of sustainable biogas production from de-oiled seed cake of karanja-an organic industrial waste from biodiesel industries. **D Barik**, S Murugan. Fuel 148, pp25-31, 2015