



# KONGUNADU COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

NAMAKKAL - TRICHY MAIN ROAD, THOTTIAM, TRICHY

DEPARTMENT OF AGRICULTURAL ENGINEERING

FACULTY PUBLICATIONS

INTERNATIONAL / NATIONAL JOURNELS

Academic Year 2025 - 2026

| S.NO | DETAILS                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Sungoum, C., <b>Kiruthika, G.</b> , Dhairiyasamy, R. <i>et al.</i> Desirability-Based Multiobjective Optimization of Layer Thickness, Infill Density, and Print Speed in Sustainable Carbon–Polylactic Acid Fused Deposition Modeling. <i>J. of Materi Eng and Perform</i> (2026). <a href="https://doi.org/10.1007/s11665-026-14146-w">https://doi.org/10.1007/s11665-026-14146-w</a>                                         |
| 2    | Chongkol Sungoum, <b>Gopinath V</b> , Rakesh Varma Kadupu, Xianpeng Wang, Ratchagaraja Dhairiyasamy, Subhav Singh. “Steady-state Engine Evaluation of Nanoparticle-enhanced Renewable Fuel with Fixed-dose Additive Dispersion”. <i>J. Environ. Nanotechnol.</i> , Vol. 15(1), 196-211 (2026) <a href="https://doi.org/10.13074/jent.2026.03.2612012">https://doi.org/10.13074/jent.2026.03.2612012</a>                        |
| 3    | Wasurat Bunpheng, <b>V. Gopinath</b> , Ratchagaraja Dhairiyasamy, Deekshant Varshney, Subhav Singh, Choon Kit Chan. “Self-healing catechol–metal PDMS networks with ultra-low WVTR for flexible photovoltaic roof encapsulation in solar electric vehicles”. Volume 11, April 2026, 101880 <a href="https://doi.org/10.1016/j.nxmte.2026.101880">https://doi.org/10.1016/j.nxmte.2026.101880</a>                               |
| 4    | Wasurat Bunpheng, <b>Gopinath Varudharajan</b> , Vadivel Muthurathinam Rajavel Muthaiah, Ratchagaraja Dhairiyasamy, Subhav Singh, Choon Kit Chan. “Ultrasonically dispersed Al–B <sub>4</sub> C composites with engineered interfaces and graphene tribofilms for high energy efficiency applications”. (2026) <a href="https://doi.org/10.1590/1517-7076-RMAT-2025-0954">https://doi.org/10.1590/1517-7076-RMAT-2025-0954</a> |
| 5    | <b>P. Dineshkumar</b> , M. Raja, M. Venkatesan, M. Dineshkumar. “Performance evaluation of a trapezoidal solar pond using magnesium sulphate (MgSO <sub>4</sub> )”. <i>International Journal of Applied Power Engineering (IJAPE)</i> Vol. 15, No. 1, March 2026, pp. 403~411 ISSN: 2252-8792, DOI: 10.11591/ijape.v15.i1.pp403-411                                                                                            |
| 6    | Vasudevan Devarajan, Venkatesan Manickam, <b>Dineshkumar Periyannan</b> , Vinoth Kumar Jayakumar. “Experimental investigation of surfactants in stability and thermal conductivity of GCN-based nanofluids”. <i>AIP Conf. Proc.</i> 3385, 020032 (2026). <a href="https://doi.org/10.1063/5.0316247">https://doi.org/10.1063/5.0316247</a>                                                                                     |
| 7    | <b>Gopinath Varudharajan</b> , Ratchagaraja Dhairiyasamy, Sivakumar jaganathan, Rakesh Varma Kadupu. “Enhancing agricultural engine efficiency with Pongamia biodiesel: A case study in thermal performance and emissions”. Volume 79, March 2026, 107808.                                                                                                                                                                     |
| 8    | D. Vasudevan, K. Gowtham, S. Cheran, M. Venkatesan, <b>P. Dineshkumar</b> , A. Karthikeyand. “Fabrication of barium oxide nanoparticles as a promising thermal barrier coating for protecting corrosion in various metal surfaces”. Vol. 21, No. 6, November–December 2025, pp. 845–858                                                                                                                                        |
| 9    | Madhanagopal Adhikesavan, Ratchagaraj Dhairiyasamy, <b>Prabhu Mottaiyan</b> , Subhav Singh, ‘Synergistic Reinforcement Strategies: Nanosilica with Graphene Versus MoS <sub>2</sub> in High-Performance Glass/Epoxy Composites’, <i>International Journal of Materials Engineering and Performance</i> , DOI: <a href="https://doi.org/10.1007/s11665-025-12399-5">https://doi.org/10.1007/s11665-025-12399-5</a>              |