

Jacob Koshy Mulamootil

List of Publications

Journal Publications

1. **Mulamootil, J.K.**, Rath, S. and Dash, S.K., 2021. Relative importance of temperature-dependent properties in non-Newtonian natural convection around curved surfaces. *International Communications in Heat and Mass Transfer*, 124, p.105263.
<https://doi.org/10.1016/j.icheatmasstransfer.2021.105263>
Impact Factor: 5.683
2. **Mulamootil, J.K.** and Dash, S.K., 2020. Augmentation and diminution of non-Boussinesq effects due to non-Newtonian power-law behavior in natural convection. *International Journal of Thermal Sciences*, 151, p.106263.
<https://doi.org/10.1016/j.ijthermalsci.2020.106263>
Impact Factor: 3.744
3. **Mulamootil, J.K.** and Dash, S.K., 2019. Significance of non-Oberbeck-Boussinesq effects augmented by power-law rheology in natural convection studies around fins. *Physics of Fluids*, 31(9), p.093104.
<https://doi.org/10.1063/1.5115185>
Impact Factor: 3.521
4. **Mulamootil, J.K.** and Dash, S.K., 2018. Numerical investigation of natural convection heat transfer from an array of horizontal fins in non-Newtonian power-law fluids. *ASME Journal of Heat Transfer*, 140(2), p.022501.
<https://doi.org/10.1115/1.4037537>
Impact Factor: 2.021

Conference proceedings

1. **Mulamootil, J.K.**, Rath S. and Dash, S.K., 2019. Augmentation of non-Boussinesq effects due to shear-rate dependent viscosity in natural convection from fins. *14th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics*, Wicklow, Ireland, July 22-24, 2019, p.227-232.
2. Rath S., **Mulamootil, J.K.** and Dash, S.K., 2019. Regimes of validity of the Boussinesq approximation for natural convection from a vertical cylinder in power-law fluids. *14th International Conference on Heat Transfer, Fluid Mechanics and Thermodynamics*, Wicklow, Ireland, July 22-24, 2019, p.1319-1324.
3. **Mulamootil, J.K.**, Manish M., Prasad B. and Ravikrishna R.V., 2022. Insights to the Near-nozzle Flow Characteristics of Pressure Swirl Atomizers used in Aero Engines. *ILASS-Asia 22nd Annual Conference on Liquid Atomization and Spray Systems*, IIT Indore, India, October 2022, p.510-516.