

List of Publications

(Published/Communicated Papers)

1. **Vinita Devi**, Rahul Kumar Maurya, Vineet Singh, Lagrange Operational Matrix Methods to Lane–Emden, Riccati’s and Bessel’s Equations, published in **International Journal of Applied and computational mathematics** 5 (2019) 79.
2. **Vinita Devi**, Rahul Kumar Maurya, Somveer Singh, Vineet Singh, Lagrange’s operational approach for the approximate solution of two-dimensional hyperbolic telegraph equation subject to Dirichlet boundary conditions, published in **Applied Mathematics and Computation** 367 (2019) 124717.
3. Somveer Singh, **Vinita Devi**, Emran Tohidi, Vineet Singh, An efficient matrix approach for two-dimensional diffusion and telegraph equations with Dirichlet boundary conditions, published in **Physica A** 545 (2019) 123784.
4. **Vinita Devi**, Rahul Kumar Maurya, Vineet Singh, Computational approach based on operational matrix/finite difference for multi-term fractional wave model arise in dielectric medium, communicated in **Numerical Methods for Partial Differential Equations**.
5. Rahul Kumar Maurya, **Vinita Devi**, Vineet Singh, Multistep schemes for one and two dimensional electromagnetic wave models based on fractional derivative approximation, published in **Journal of Computational and Applied Mathematics**, 380 (2020) 112985.
6. Rahul Kumar Maurya, **Vinita Devi**, Nikhil Srivastava, Vineet Singh, An efficient and stable Lagrangian matrix approach to Abel integral and integro-differential equations, published in **Applied Mathematics and Computation**, 374 (2020) 125005.
7. Rahul Kumar Maurya, **Vinita Devi**, Vineet Singh, Stability and convergence of multistep schemes for 1D and 2D fractional model with nonlinear source term, published in **Applied Mathematical Modelling**, 89 (2020) 038.