

Publications

The following are the research publications resulted from the present thesis work.

- K. P. Mredula, D.C. Vakaskar, *IEEE Xplorer*, **Unified approach for solving initial valued and boundary valued Ordinary Differential Equations using wavelet collocation method**,
Print ISBN: 978-1-4799-0726-7, (2014).
- K. P. Mredula, D.C. Vakaskar, *Indian Journal of Industrial and Applied Mathematics Vol. 8, No. 1, JanJune 2017*, **Collocation method using wavelet for partial differential equation**, pp. 14 – 23, (2017).
- K. P. Mredula, D.C. Vakaskar, *European Journal of Engineering Research and Science Vol. 2, No. 3, March 2017*, **Haar Wavelet Implementation to Various Partial Differential Equations**, 44, (2017).
- K. P. Mredula, D.C. Vakaskar, *Palestine Journal of Mathematics*, **Collocation methods general approach for ordinary differential equations**, Vol 7(2), 2018, accepted.
- K.P.Mredula, V. D. Pathak, B. M. Shah, *Alexandria Engineering Journal, Elsevier*, **Wavelet based finite volume Godunov method for solving inviscid burger equation**, communicated.

- K. P. Mredula, D.C. Vakaskar, Oleg V. Kravchenko, *Theory in Biosciences, Springer*, Evolution of amphibian embryo model simulation, communicated.
- K. P. Mredula, D.C. Vakaskar, An Overview of Wavelets and Multiresolution Analysis, *Proceedings of National Seminar on Analysis, Geometry and Applications*, 7th - 8th March (2013).
- D.C.Vakaskar, K.P.Mredula, Generalized wavelet collocation for ordinary differential equation, National conference on Recent Advances in Mathematics, published in Journal of Marathwada Mathematical Society Aurangabad, December (2014).
- K. P. Mredula., D.C. Vakaskar, Simulation of amphibian embryo using finite volume framework , *International conference in Advances in Scientific computing IIT Madras*, Nov (2016).
- O.V. Kravchenko(Oleg V.K), K.P.Mredula and D.C.Vakaskar, Investigation of algorithms utilizing wavelets to solve various partial differential equations, *PIERS2017 St Petersburg*, [http: //piers.org/piers2017StPetersburg](http://piers.org/piers2017StPetersburg),(2017).