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List of Publications

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1. R. K. Pandey, S. Sharma, and K. Kumar, Collocation method for generalized Abel's integral equations, ***Journal of Computational and Applied Mathematics***, **302, 118-128, 2016 (Elsevier).**
2. S. Sharma, R. K. Pandey, and K. Kumar, Collocation method with convergence for generalized fractional integro-differential equations, ***Journal of Computational and Applied Mathematics,*** **342, 419-430, 2018 (Elsevier).**
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4. K. Kumar, R. K. Pandey, and S. Sharma, Approximations of Fractional Integrals and Caputo Derivatives with Application in Solving Abel's Integral Equations, ***Journal of King Saud University-Science,*** **2018 (Elsevier).**
5. K. Kumar, R. K. Pandey, and S. Sharma, Numerical Schemes for the Generalized Abel's Integral Equations, ***International Journal of Applied and Computational Mathematics,*** **4 (2), pp. 68, 2018. (Springer).**
6. S. Sharma, R. K. Pandey, and K. Kumar, Galerkin and Collocation Methods for Weakly Singular Fractional Integro-differential Equations, ***Iranian Journal of Science and Technology*** *(Under Revision)*.
7. K. Kumar, R. K. Pandey, S. Sharma, Numerical Scheme with Convergence for Generalized Time–Fractional Telegraph-Type Equation, ***Numerical Methods for Partial Differential Equations***, *(Under Revision)*.
8. S. Sharma, R. K. Pandey, and K. Kumar, Bernstein's Approximation of Generalized Abel's Integral Equation with Application in Tomography, ***Indian Journal of Pure and Applied Mathematics***, *(Under Review)*.

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List of Publications

The work carried out under the thesis led to the following publications:

1. **Rakhi Tiwari**, Santwana Mukhopadhyay, "Boundary integral equations formulation for fractional order thermoelasticity", ***Computational Methods in Science and Technology***, 2014, 20(2), 49-58.

2. **Rakhi Tiwari**, Santwana Mukhopadhyay, "On harmonic plane wave propagation under fractional order thermoelasticity: an analysis of fractional order heat conduction equation", ***Mathematics and Mechanics of Solids***, Online available 2015, DOI: 10.1177/1081286515612528.

3. **Rakhi Tiwari**, Santwana Mukhopadhyay, "Investigation on magneto-thermoelastic disturbances induced by thermal shock in an elastic half space having finite conductivity under dual phase-lag heat conduction", ***Computational Methods in Science and Technology***, 2016, DOI: 10.12921/cmst.2016.0000019.

4. **Rakhi Tiwari**, Santwana Mukhopadhyay, "Analysis of wave propagation in presence of a continuous line heat source under heat transfer with memory dependent derivatives", ***Mathematics and Mechanics of Solids*** **(Accepted Jan' 2017)**.

5. **Rakhi Tiwari**, Santwana Mukhopadhyay, "On electro-magneto-thermoelastic plane waves under Green- Naghdi theory of thermoelasticity-II", ***Journal of Thermal Stresses*** **(Under revision)**.

6. **Rakhi Tiwari**, Santwana Mukhopadhyay, "On magneto-thermo-elastic wave propagation in a finitely conducting medium under thermoelasticity of type I, II and III", ***Archives of Mechanics*** **(Under review)**.

List of Conference Presentations

1. **Rakhi Tiwari** and Santwana Mukhopadhyay, "Reciprocity theorem and its applications to fractional order thermoelasticity", ***National Conference of the Mathematical Society on Recent trends in Mathematical Modelling and Simulations***, BHU, Feb 3-4, 2014.

2. **Rakhi Tiwari** and Santwana Mukhopadhyay, " A comparative study of magneto-thermo-elastic plane waves with finite conductivity under thermoelasticity of type I, II and III", ***International Conference on Mathematical Techniques in Engineering Applications***, Graphic Era University, Dehradun, April 29-30, 2016.

3. **Rakhi Tiwari** and Santwana Mukhopadhyay, "An analysis of electro-magneto-thermoelastic plane waves under Green-Naghdi theory of thermoelasticity", ***International Conference on Mathematical Modeling and Simulation***, Department of Mathematics, BHU, Aug 29-31, 2016.

4. **Rakhi Tiwari** and Santwana Mukhopadhyay, "Analysis of plane wave propagation under fractional order thermoelasticity", ***International Conference of Mathematical Analysis and its Applications***, Department of Mathematics, IIT Roorkee, Nov 28- Dec 02, 2016.

5. **Rakhi Tiwari** and Santwana Mukhopadhyay, "Wave propagation in presence of a continuous line heat source with memory dependent derivative heat transfer", ***International Conference of the Indian Mathematics Consortium (TIMC) in Corporation with American Mathematical Society (AMS)***, DST, BHU, Dec 14-17, 2016.

List of Publications

(Published /Accepted/ Communicated)

1. R. K. Pandey, S. Sharma, and K. Kumar, Collocation method for generalized Abel's integral equations, ***Journal of Computational and Applied Mathematics***, **302, 118-128, 2016 (Elsevier).**
2. S. Sharma, R. K. Pandey, and K. Kumar, Collocation method with convergence for generalized fractional integro-differential equations, ***Journal of Computational and Applied Mathematics,*** **342, 419-430, 2018 (Elsevier).**
3. K. Kumar, R. K. Pandey, and S. Sharma, Comparative study of three numerical schemes for fractional integro-differential equations, ***Journal of Computational and Applied Mathematics***, **315, 287-302, 2017 (Elsevier).**
4. K. Kumar, R. K. Pandey, and S. Sharma, Approximations of Fractional Integrals and Caputo Derivatives with Application in Solving Abel's Integral Equations, ***Journal of King Saud University-Science,*** **2018 (Elsevier).**
5. K. Kumar, R. K. Pandey, and S. Sharma, Numerical Schemes for the Generalized Abel's Integral Equations, ***International Journal of Applied and Computational Mathematics,*** **4 (2), pp. 68, 2018. (Springer).**
6. S. Sharma, R. K. Pandey, and K. Kumar, Galerkin and Collocation Methods for Weakly Singular Fractional Integro-differential Equations, ***Iranian Journal of Science and Technology*** *(Under Revision)*.
7. K. Kumar, R. K. Pandey, S. Sharma, Numerical Scheme with Convergence for Generalized Time–Fractional Telegraph-Type Equation, ***Numerical Methods for Partial Differential Equations***, *(Under Revision)*.
8. S. Sharma, R. K. Pandey, and K. Kumar, Bernstein's Approximation of Generalized Abel's Integral Equation with Application in Tomography, ***Indian Journal of Pure and Applied Mathematics***, *(Under Review)*.