Prof. Mukesh Kumar
List of Publications

	All	Since 2019
Citations	922	618
h-index	21	16
i10-index	34	28

- **Mukesh Kumar** and Shristi Srivastava and Dig Vijay Tanwar "Lie symmetries, soliton dynamics, conservation laws and stability analysis of Bogoyavlensky-Konoplechenko system" Optical and Quantum Electronics, Accepted (2024), Impact factor: 2.9
- **Mukesh Kumar** , Sushmita Anand and Dig Vijay Tanwar , "Lie symmetries, solitary wave solutions, and conservation laws of coupled KdV-mKdV equation for internal gravity waves" John Wiley & Sons Ltd, 47(8), 6909-6927 (2024), Impact factor: 2.9.

- Shristi Srivastava and **Mukesh Kumar**, "Nonclassical symmetries, optimal classification, and dynamical behavior of similarity solutions of (3+ 1)-dimensional Burgers equation" Chinese Journal of Physics, Elsevier, 89, 404-416 (2024), Impact factor: 5.

- **Mukesh Kumar** and Shristi Srivastava, "Dynamics of the breather and solitary waves in plasma using the generalized variable coefficient Gardner equation" International Journal of Computer Mathematics, Taylor & Francis, 101(4), 455-482 (2024). Impact factor: 1.8.

- **Mukesh Kumar** and Sushmita Anand , "Lie symmetries, exact wave solutions and conservation laws of nonlinear Bogovalenskii Breaking-Soliton equation for Nerve pulse propagation" International Journal of Applied and Computational Mathematics, Springer, 10(1):35, 1-18 (2024).

- Kumari Manju and **Mukesh Kumar**, "Soliton solutions of the (2+1)-dimensional Nizhnik-Novikov-Veselov equation via the Lie symmetry method and its stability analysis by using bifurcation theory", Physica Scripta, IOP Publishing, 97(12): 125204, 1-17, (2022), Impact factor: 3.081.

- Shitesh Shukla and **Mukesh Kumar,** "Numerical Simulation of Time and Space Fractional Partial Differential Equation via 3-Scale Haar Wavelet", International Journal of Applied and Computational Mathematics, Springer, 8(4):160, 1-19 (2022).

- Dig Vijay Tanwar, **Mukesh Kumar** and Atul Kumar Tiwari, "Lie symmetries, invariant solutions and phenomena dynamics of Boiti–Leon–Pempinelli system", Physica Scripta (IOP Publishing), 97(7): 075209, 1-14 (2022), Impact factor: 3.081.

- Dig Vijay Tanwar and **Mukesh Kumar**, "On Lie symmetries and invariant solutions of Broer–Kaup–Kupershmidt equation in shallow water of uniform depth," Journal of Ocean Engineering and Science, Elsevier, (2022), Impact factor: 4.803. https://doi.org/10.1016/j.joes.2022.04.027.

- **Mukesh Kumar** and Umesh, "Recent Development of Adomian Decomposition Method for Ordinary and Partial Differential Equations", International Journal of Applied and Computational Mathematics, Springer, 8(2):81, 1-25 (2022).

- **Mukesh Kumar** and Kumari Manju, "Symmetry analysis, optimal classification and dynamical structure of exact soliton solutions of (2+1)-dimensional modified Bogoyavlenskii-Schiff equation", Physica Scripta, IOP Publishing, 97(4): 045206, 1-16, (2022), Impact factor: 3.081.

- **Mukesh Kumar** and Kumari Manju, "Lie symmetry transformation, conservation laws and nonlinear self-adjointness of (2+1)-dimensional Date–Jimbo–Kashiwara–Miwa equation", The European Physical Journal Plus, Springer, 137(1): 96, 1-16 (2022), Impact factor: 3.758**.**

- Dig Vijay Tanwar and **Mukesh Kumar,** "Lie symmetries, exact solutions and conservation laws of the Date–Jimbo–Kashiwara–Miwa equation", Nonlinear Dynamics, Springer, 106(4), 3453-3468 (2021), Impact factor: 5.741.

- Raj Kumar, **Mukesh Kumar and** Atul Kumar Tiwari, "Dynamics of some more invariant solutions of (3+1)-Burgers system", International Journal for Computational Methods in Engineering Science and Mechanics, Taylor & Francis, 22(3), 225-234 (2021).

- **Mukesh Kumar** and Kumari Manju, "Solitary wave solutions of mKdV–Calogero–Bogoyavlenskii–Schiff equation by using Lie symmetry analysis", International Journal of Geometric Methods in Modern Physics, World Scientific Publishing Company, 18(2), 21500028 (2021), Impact factor: 1.873.

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- Sachin Kumar, **Mukesh Kumar** and Dharmendra Kumar, "Computational soliton solutions to (2+1)-dimensional Pavlov equation using Lie symmetry approach", Pramana, Springer, 94(1):28, 1-11 (2020), Impact factor: 2.699**.**

- **Mukesh Kumar** and Kumari Manju, "Closed form invariant solutions of (2+1)-dimensional extended shallow water wave equation via Lie approach", The European Physical Journal Plus, Springer, 135(10): 803, 1-14 (2020), Impact factor: 3.758**.**

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- **Mukesh Kumar**, Dig Vijay Tanwar and Raj Kumar, "On Lie symmetries and soliton solutions of (2+1)-dimensional Bogoyavlenskii equations", Nonlinear Dynamics, Springer, 94 (4), 2547-2561 (2018), Impact factor: 5.741**.**

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