Prof. Mukesh Kumar
List of Publications

	All	Since 2018
Citations	**829**	**588**
h-index	20	16
i10-index	30	26

- 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.

- **Mukesh Kumar**, Raj Kumar and Anshu Kumar, "Some more invariant solutions of (2+ 1)-water waves", International Journal of Applied and Computational Mathematics, Springer, 7(1):18, 1-17 (2021).

- **Mukesh Kumar** and Dig Vijay Tanwar, "Lie symmetries and invariant solutions of (2+1)-dimensional breaking soliton equation", Pramana, Springer, 94(1):23, 1-10 (2020), Impact factor: 2.699**.**

- 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**.**

- **Mukesh Kumar** and Dig Vijay Tanwar, "Lie symmetry reductions and dynamics of solitary wave solutions of breaking soliton equation", International Journal of Geometric Methods in Modern Physics, World Scientific Publishing Company, 16(7), 1950110 (2019), Impact factor: 1.873.

- **Mukesh Kumar** and Dig Vijay Tanwar, "On Lie symmetries and invariant solutions of (2+1)–dimensional Gardner equation", Communications in Nonlinear Science and Numerical Simulation, Elsevier, 69, 45-57 (2019), Impact factor: 4.186.

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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**.**

- **Mukesh Kumar** and Atul Kumar Tiwari "On group-invariant solutions of Konopelchenko-Dubrovsky equation by using Lie symmetry approach", Nonlinear Dynamics, Springer, 94(1), 475-487 (2018), Impact factor: 5.741.

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- **Mukesh Kumar** and Atul Kumar Tiwari, "Some group invariant solutions of potential Kadomtsev-Petviashvili equation by using Lie symmetry approach", Nonlinear Dynamics, Springer, 92(2), 781-792 (2018), Impact factor: 5.741.

- **Mukesh Kumar** and Atul Kumar Tiwari "Soliton solutions of BLMP equation by Lie symmetry approach", Computers & Mathematics with Applications, Elsevier, 75(4), 1434-1442 (2018), Impact factor: 3.218.

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- Amit Mishra and **Mukesh Kumar**, "A weakly non linear stability analysis of heat transport in anisotropic porous cavity under time periodic temperature modulation", Journal of Applied Fluid Mechanics (JAFM), 8(4), 815-824, (2015), Impact factor: 1.405.

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