

## Publications in Journals

S. No.	Name of the Faculty	Title	Name of the Journal	Authors
1	<b>Shivam Shreevastava</b>	A novel indiscernibility assisted intuitionistic fuzzy rough set model and its application to dimensionality reduction.	Optimization	Shivam Shreevastava, P. Maratha, T. Som, A. K. Tiwari
2	<b>Ram Naresh Tripathi</b>	Modeling the effect of sanitation efforts on the spread of carrier-dependent infectious Diseases due to environmental degradation	Applications and Applied Mathematics: An International Journal	Ram Naresh, Sandhya Rani Verma, J.B.Shukla, Manju Agarwal
3	<b>Ram Naresh Tripathi</b>	Influence of media campaigns efforts to control spread of COVID-19 pandemic with vaccination: A Modelling study	Computational and Mathematical Biophysics	Sandhya Rani Verma, Vinay Verma, Rachana Pathak, Manju Agarwal, Ram Naresh
4	<b>Rekha Bali</b>	Mathematical study of nanoparticle loaded in red blood cells for drug delivery in an artery with stenosis	Physics of Fluids	Bhawini Prasad, Rekha Bali
5	<b>Rekha Bali</b>	Study of varying concentration and size of nanoparticles in a catheterized artery with clot and stenosis	Jnanabha	Rekha Bali, Bhawini Prasad
6	<b>Rekha Bali</b>	Estimation and concealment deep fake detection in image using hybrid LSTM	IJISAE	Sunil Kumar Sharma, Waseem Ahmad Khan, Manoj Kumar, Rekha Bali
7	<b>Abhinava Srivastav</b>	Study of Solitons using Efficient Technique Involving Lie Group Theory	International Journal of Applied and Computational Mathematics	Vishakha Jadaun, Abhinava Srivastav
8	<b>UP Singh</b>	Optimal control results for second-order semilinear integro-differential systems via resolvent operators.	Optim Control Appl Meth.	AP Singh, UP Singh, A Shukla
9	<b>Ram Naresh Tripathi</b>	Modeling the effect of Coronavirus with self-protection and quarantine effect	Applications and Applied Mathematics: An International Journal	Dileep Sharma, Agraj Tripathi, Ram Naresh Tripathi

### Papers Presented in Conferences

S. No.	Name of the Faculty	Title	Name of the Conference	Held at	Duration
1	<b>Dr. Shivam Shreevastava</b>	Gain ratio induced fuzzy similarity-based attribute reduction	RAAM 2024	IIT BHU	3-5 July 2024
2	<b>Prof. Rekha Bali</b>	Mathematical modelling of blood flow in small vessels with deformation of Red Blood Cells: Implications and Hemodynamics	FIAM 2023	Bits Pilani (Dubai Campus)	21-22 Dec, 2023
3	<b>Prof. Rekha Bali</b>	Flow of nanofluid in a stenotic artery with effect of thermal radiation: A Caputo Fabrizio Fractional Order Model	MMCITRE 2024	Manipal University, Jaipur	29-31 May, 2024

### Books/ Book chapters Published

S. No.	Name of the Faculty	Title	Name of the Book/Publisher	Authors
1	<b>Ram Naresh Tripathi</b>	Modeling the removal by rain of two interacting gases forming distinct particulate matters in the atmosphere	Advances in Mathematical Modelling, Applied Analysis and Computation, Springer	Monika Trivedi, Ram Naresh Tripathi, Shyam Sundar
2	<b>Prof. Rekha Bali</b>	A numerical study of a three-layered model for the flow of Jeffrey fluid in the small blood vessels	Advances in Mathematical Modelling, Applied Analysis and Computation, Springer	Rekha Bali, Ragini Tripathi, Swati Mishra
3	<b>Ram Naresh Tripathi</b>	Modeling the spread of HIV infection via long distance truck drivers	Advances in Science and Technology, Weser Books, Germany	Agraj Tripathi, Dileep Sharma, Ram Naresh