Faculty Profile

1. Name: Dr. Priyanka Kumari

2. Department: Mathematics

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6. Qualification:

S. No	Degree(UG, PG, PhD)	Specialization	Institute
1.	B. Sc.	Mathematics(Hons)	Vinoba Bhave University, Hazaribagh, Jharkhand.
2.	M. Sc.	Mathematics and Computing	IIT-ISM, Dhanbad, Jharkhand.
3.	Ph. D.	Study of Analytical and Numerical Approach on Solute Transport Modeling	IIT-ISM, Dhanbad, Jharkhand.

- 7. Area of Specialization: Groundwater Contamination, Mathematical Analysis
- **8. Subjects Taught:** Numerical Analysis, Ordinary Differential Equation, Partial Differential Equation, Probability and Statistics, Differential Calculus, Operation Research, Linear Algebra, Laplace and Fourier Transform, Integral Calculus.

9. Professional Experience:

I) Teaching Experience:

Sl. No.	Position held	Name of	From	To
		Organization		
1.	Assistant Professor	BIT Sindri, Dhanbad	03.01.2018	Till now

10. Publications:

I) International Journal:

	Sl. No.	Title of the paper	Name of the journal in which publication	Vol/No.	Publication Year	Pages
			has been made			
Ī	1.	Comparative study of analytical	Int. J. Geosciences	2(4)	2011	457-



	solutions for time-dependent solute transport along unsteady groundwater flow in semi- infinite aquifer				467
2.	Analytical and Numerical Approaches to Horizontal Non- reactive Solute Dispersion in a Semi-infinite Aquifer	J. Groundwater Research, AGGS alias IGWC	1(1)	2012	42-51
3.	Two-dimensional solute transport in finite homogeneous porous formations	International Journal of Geology, Earth and Environmental Sciences.	3(2)	2013	35-48
4.	Contaminant concentration prediction along unsteady groundwater flow	Book Chapter of Modelling and Simulation of Diffusive Processes, Series: Simulation Foundations, Methods and Applications, Springer	XII	2014	257- 276
5.	Mathematical modeling of one dimensional advection dispersion equation in groundwater contamination using different velocity and dispersion for different zones	Series: Lecture Notes in Mechanical Engineering, (Springer)	-	2017	585- 592
6.	Solute transport model equation for mobile phase in semi-infinite porous media	Groundwater for Sustainable Development (Elsevier)	11	2020	100411

II) International Conference:

Sl.	Name of the Conference in which publication has been made			
No.				
1.	13th International Conference of the International Academy of Physical Sciences (CONIAPS XIII), 14-16 June, 2011, UPES, Dehradun, India.			
2.	International Conference on Modeling and Simulaion of Diffusive Process and Application (ICMSDPA), 9-12 October, 2012, BHU, Varanasi, India.			
3.	5th International Groundwater Conference · IGWC 2012. Aurangabad, Maharashtra, India.			
4.	27th Annual Conference of the Mathematical Society, 26-27 Nov., 2011, B. B. A. U., Lucknow,			
	India (BEST PAPER AWARD)			

11. Symposium/ Workshop/Seminar/ Attended

1.	National Workshop Cum Training Program on	01-07 July,	BHU, Varanasi, U. P.
	Computing Techniques and Applications (NWCTP-	2012,	

	CTA),		
2.	Short Term Training Program on Groundwater Contamination and Modeling Approach	18-20 Dec., 2016,	IIT-ISM Dhanbad.
3.	Faculty Induction Workshop under TEQIP III	06-10 February, 2018	IIT Kharagpur.
4.	Workshop on Numerical and Computational Methods for fluid-solid Interaction Problems	27-28 September, 2018	IIT-ISM Dhanbad.
5.	Training Program on Advanced Pedagogy & Digital Tool	10-14 June, 2019	IIT Kharagpur.
6.	One-week Faculty Development Programme on Natural Language Processing	6-10 January 2020	BIT Sindri, Remote Center
7.	TEQIP Online Certification, 2-week course on Digital Transformation in Teaching Learning Process	April 6 th to April 22 nd 2020	IIT Bombay, powered by SWAYAM, NPIU TEQIP III
8.	Online Faculty Development Program on Excellence in Communication	Online, 25th Feb. to 04th Mar. 2021	IIM Bodh Gaya

12. Project Experience:

Sl. No.	Organization	Position	Description
1.	NPIU(TEQIP-III)	Principal Investigator	 Title of the Project: "Mathematical Study of Non-reactive Solute Transport in Multilayer porous media Duration of the project: 01 year (July, 2019-September 2020) Status: Ongoing Project value: 8.06 Lakhs

13. Member of Professional Bodies:

- Society of Applied Mathematics (SAM), IIT(ISM), Dhanbad
- Association of Global Groundwater Scientists (AGGS), Coimbatore.