Resume

MRITUNJAY KUMAR SINGH M. ASCE, F. AGGS, DEIC (JGWR)

Address for Correspondence:

Professor (HAG)

Department of Mathematics & Computing Indian Institute of Technology (ISM)

Dhanbad-826004 (JHARKHAND)

Email: drmks29@iitism.ac.in; drmks29@rediffmail.com

Area of Specializations: Applied Mathematics

(Fluid Dynamics/Hydrodynamics/PDE with Computational

Techniques)

Area of Research Interest: Solute Transport Modelling/Groundwater Contamination

Problems/Mathematical Modelling & Computation

Academic Qualification: M. Sc, Ph.D. (B.H.U) with IV First Class

Examination	Branch/	College/University	Year	Percentage	Class/
	Specialization	/Institute		/Grade	Division
Matriculation	Mathematics,	B.S.E.B., PATNA	1985	76%	I
	Science				
I. Sc.	Mathematics,	B.I.E.C, PATNA	1987	63.4%	I
	Science				
B.Sc. (Spl. Hons.)	Mathematics	MAGADH	1991	82.8%	I
		UNIVERSITY,			
		BODH GAYA			
M.Sc.	Mathematics	BHU, VARANASI	1994	92.3%	I
Ph.D.	Mathematics	BHU, VARANASI	1999	Awarded	
B.Ed.	Mathematics	PATNA	2001	71.2%	I
		UNIVERSITY,			
		PATNA			

Certificate of Merit: (i) Chancellor Medal

(ii) Dr. S C De Medal (iii)B.H.U. Medal

For securing highest % of marks (92.3%) in M.A. / M. Sc.

Exam., 1994 at B.H.U., Varanasi.

Ph.D. (1999): "Concentration Distribution of Pollutants along Unsteady

Groundwater Flow in Aquifers" Guide: Prof. Naveen Kumar (Retd.)

Department of Mathematics

Faculty of Science, BHU, Varanasi-221005

Email: navkumar50s@gmail.com

Date of Birth: 6th June, 1969

Employment:

Employer	Position held	Date of Joining	Date of Leaving	Pay with Scale of pay
Bengal College of Engineering & Technology, Durgapur	Lecturer	11 th July,2002	30 th June, 2005 (FN)	8000-200-13500 (Old pay Scale)
Indian Institute of Technology (Indian School of Mines), Dhanbad	Sr. Lecturer	30 th June,20 05 (AN)	26 th Oct.,2006	10000-320-15300 (Old pay Scale)
	Assistant Professor	27 th Oct.,2006	26 th Oct.2009	30000+8000AGP in PB-3(15600-39100) (New pay Scale)
	Associate Professor	27 th Oct.,2009	6 th Nov.,2017	49950+9500AGP in PB-4(37400-67000) (New pay Scale)
	Professor	7 th Nov., 2017	25 th Dec.,2023	(1,59,100-2,20,200) in Academic Pay Level 14A
	Professor (HAG)	26 th Dec.,2023		(1,82,200 -2,24,100) in Academic Pay Level 15

Ph.D. Awarded/Ongoing:

Sl.	Name	Topic of Research	Joined/	Remarks
No		_	Awarded	
1	Premlata Singh	Transport Analysis of Contaminants	2007/2010	Sole Guided
	1809/2007	through Unsteady Groundwater Flow		
		in Aquifer		
2	Nav Kumar Mahato	Study of Solute Transport Modeling	2009/2013	Sole Guided
	2009DR0109	along Unsteady Groundwater Flow in		
		Aquifer		
		http://hdl.handle.net/10603/7911		
3	Shafique Ahamad	Study of Some Problems on	2010/2013	Sole Guided
	2010DR0008	Analytical Approach of Unsteady		
		Groundwater Flow in Aquifer		
4	D.:1 I/	http://hdl.handle.net/10603/33029	2010/2012	C-1- C-: 1- 1
4	Priyanka Kumari 2010 DR0026	Study of Analytical and Numerical	2010/2013	Sole Guided
	2010 DR0026	Approach of Solute Transport Modeling		
		http://hdl.handle.net/10603/33030		
5	Pintu Das	Solute Dispersion with Unsteady	2012/2016	Sole Guided
3	2012DR0101	Groundwater flow in Porous	2012/2010	Sole Guidea
	20122110101	Formation		
6	Sultana Begam	Study of Contaminant Concentration	2013/2017	Sole Guided
	2013DR0003	Distribution through Unsteady		
		Groundwater Flow in Porous		
		Formation		
7	Ayan Chatterjee	Mathematical Modeling of Solute	2013/2018	Sole Guided
	2013DR0182	Transport in Porous Media		
8	Affreen Akhter	Study of Hydrodynamic Dispersion	2014/2020	Sole Guided
	2014DR0278	through Porous Media		
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9	Rajan Kumar 2015DR0119	Mathematical Modelling of Flow Formation in Magnetohydrodynamics	2015/2020	Guide
10	Bhuvaneshvar Kumar 16DR000251	Mathematical Modelling and Analysis of Newtonian and Non- Newtonian Fluid Flow with Heat and Mass Transfer	2016/2021	Guide
11	Rakesh Kumar Singh 2015DR0005	Modeling and Analysis of Solute Transport Problems in Porous Medium	2015/2021	Sole Guided
12	Arnab Bhattacharyya 2015DR0208	Mathematical Modelling and Analysis of Hydrodymagnetic Flow with Heat and Mass Transfer	2015/2021	Guide
13	Chandan Kumar Thakur 2014DR0008	Study of Contaminant Concentration Prediction in Aquifer	2014/2021	Sole Guided
14	Amit Kumar Pandey 2015DR1039	Mathematical Study of Solute Transport through Porous Media	2015/2022	Sole Guided
15	Manish Chaudhary 16DR000174	Mathematical Study of Pollutant Transport Behaviour in Geological Formations	2016/2022	Sole Guided
16	Rohit Kumar 2015DR0094	Modelling of Solute Dispersion through Porous Media: An Analytical Study	2015/2022	Sole Guided
17	Vivek Kumar Sinha 16DR000265	Mathematical Modelling of Non- Newtonian Fluid Flows in Magnetohydrodynamics Regime	2016/2022	Guide
18	Sohini Rajput 17DR000438	Mathematical Study of Groundwater Contamination Problem in Aquifer	2017/2022	Sole Guided
19	Rashmi Radha 19DR0180	Study of Advection Dispersion Transport Modelling in Porous Media	2019/2024	Sole Guided
20	Animesh Samanta 2015DR0223	Mathematical Study of Contaminant Concentration Distribution in Porous Formation	2015/ 2024	Sole Guided
21	Tapan Chatterjee	Study of Non-linear Advection Dispersion Equation and their Applications	2017/Ongoing	Sole Guided
22	Pallawi Bharti	Mathematical Modelling of Solute Dispersion in Fracture Porous Media	2021/Ongoing	Sole Guided
23	Manish Kumar	Solute Transport Modelling	2022/Ongoing	Sole Guided
24	Chinmoyy Roy Laskar	Contaminant Transport Modelling	2023/Ongoing	Sole Guided

M. Phil. Awarded:

Sl.	Name	Topic of Dissertation	Awarded
No			
1	Nav Kumar Mahato	One-dimensional Dispersion along Unsteady	2007
		Groundwater Flow in Semi-infinite Aquifer	
2	Divya Shukla	Longitudinal Dispersion along Unsteady	2008
		Groundwater Flow in Finite Aquifer	
3	Asim Kumar Garai	Concentration Distribution Behaviour	2009
		through the Wall of Cylinder	
4	Shafique Ahamad	One-dimensional Solute Dispersion along	2010
		Transient Groundwater Flow in Aquifer	
5	Pintu Das	Review on Solute Transport Modeling in	2011
		Semi-infinite Aquifer	
6	Rakesh Kumar Singh	Study of Advection-dispersion Equation and	2013
		its Applications	
7	Jay Kishan Kumar	Study of Advection-Dispersion Equation	2014
		with Numerical Method	
8	Animesh Samanta	Study of Advection Dispersion Equation by	2015
		Finite Element Method	

Research Project

Completed/Ongoing/Applied:

1. Minor Research Project [ISM/Acad/MRP/2006 dated 26th June, 2006] -PI

Funding Agency: Indian School of Mines, Dhanbad

Title of the Project: "Mathematical Modelling of Concentration Distribution

Behaviour of Pollutants in Aquifer"

Duration of the project: 03 years (June, 2006-

2009) Status: Completed Project value: 0.5 Lakhs

2. Major Research Project [F. No.37-205/2009(SR) dated 12th January, 2010] -PI

Funding Agency: University Grant Commission, New Delhi

Title of the Project: "Study of Analytical Approach of Unsteady Groundwater

Flow Modelling"

Duration of the project: 03 years (Feb., 2010 - 2013)

Status: Completed Project value: 8.67 Lakhs

3. **Major Research Project** [25(0251)/16/EMR-II dated 20th May, 2016] -**PI**

Funding Agency: **Council of Scientific and Industrial Research, New Delhi** Title of the Project: "Mathematical Study of Solute Transport in

Porous Formations"

Duration of the project: 03 years (June, 2016 -2019)

Status: Completed

Project value: 16.79 Lakhs

4. Major Research Project [Ref No. EMR/2016/001628 dated 30th January, 2017]-PI

Funding Agency: Science and Engineering Research Board, DST, New Delhi

Title of the Project: "Study of Non-Linear Advection Dispersion Equation and

Their Applications"

Duration of the project: 03 years (February, 2017 - 2020)

Status: Completed

Project value: 23.45 Lakhs

5. Major Research Project [Ref No. CIL(4)/2015-2016/461/Mining Engg]-Co-PI

Funding Agency: Coal India limited

Title of the Project: "Development of guideline for prevention and mitigation of explosion hazard by risk assessment and determination of explosibility of Indian Coal incorporating risk-based mine emergency evacuation and re-entry protocol"

Duration of the project: 03 years

Project value: 31.00 Lakhs (Total Project Value: 833.57 Lakhs)

6. UBA Project [Ref. No. UBA/2018-2019/567/AM] -PI

Funding Agency: MHRD, New Delhi

Title of the Project: "Unnat Bharat Abhiyan Programme at IIT(ISM) Dhanbad"

Duration of the project: one year from Sept. 2017 onwards

Status: Completed

Project value: 1.75 Lakhs

7. TEQIP Collaborative Research Project

[Ref. No.: 1-3643335191 1-5748515018 Dated 18th June, 2019] - Co-PI

Funding Agency: National Project Implementation Unit, MHRD, New Delhi

Title of the Project: "Mathematical Study of Non-reactive Solute Transport in

Multilayer Porous Media"

Duration of the project: 01 year

Status: Completed

Project value: 8.06 Lakhs

8. Teachers Associateship for Research Excellence (TARE) (Host Institute)

[Reference No.: TAR/2022/000472]

Funding Agency: SERB(DST), New Delhi

Title of the Project: "Investigation of the impact of pore geometry on the non

linear filtration characteristics in porous media"

Duration of the project: 03 years (Nov.2022-2025)

Status: Sanctioned/Ongoing

Project value:15 Lakhs (50% of sanctioned grant will be received at IIT(ISM) as a

Host Institute)

Courses Taught:

- 1. Mathematics-I &II
- 2. Complex Analysis
- 3. Integral Transform and Integral Equation
- 4. Differential Equation
- 5. Partial Differential Equation
- 6. Computational Fluid Dynamics
- 7. Hydrodynamics and Application to Groundwater

- 8. Computer Programming (Fortran, C & C++)
- 9. Operating Systems
- 10. Numerical Methods

Training Programme/Workshop/Courses Conducted:

Under Graduate Training Programme on "Linear Algebra and Real Analysis" funded by DST was organized as a **Co-coordinator** during 28th May, 2012 - 6thJune, 2012 at Indian School of Mines, Dhanbad

Science Academy's Lecture Workshop conducted as Coordinator on "Concept of Fluid Dynamics and its Applications" during October8-10, 2014 at ISM Dhanbad

Workshop conducted jointly with C-DAC Pune, **as Convener** on "High Performance Computing", July29-31, 2015 at ISM Dhanbad.

Science Academy's Lecture Workshop conducted as Coordinator on "Fluid Flow through Porous Media and its Applications" during December 25-27, 2015 at ISM Dhanbad

Science Academy's Refresher Course conducted as Coordinator on "Differential Equations and their Applications in Science and Engineering" during July4-16, 2016 at ISM Dhanbad

Short Term Training Programme conducted as Coordinator on "Groundwater Contamination and Modelling Approaches" during December 18-20, 2016 at IIT(ISM) Dhanbad.

Science Academy's Refresher Course conducted as Coordinator on "Crustal strength Rheology and Seismicity" during May15-26, 2017 at IIT(ISM) Dhanbad.

Science Academy's Refresher Course conducted as Coordinator on "Concept of Fluid Dynamics and Applications" during June25-July6, 2018 at IIT(ISM) Dhanbad.

Online Workshop conducted as Coordinator (DSW) on "Student Excellence Learning Program (SELP)" under TEQIP-III during Jan4-9, 2021 at IIT(ISM) Dhanbad.

AICTE Training and Learning (ATAL) Academy Faculty Development Programme (FDP) conducted as Coordinator on the topic "Leadership Excellence through Yoga and Meditation" during Jan10-21,2023 at IIT(ISM) Dhanbad.

Workshop conducted as a Coordinator on the topic "Vedic Mathematics" on July 10, 2023 at IIT(ISM) Dhanbad.

National Conference Organized:

Convener, Recent Advances in Mathematics and its Applications (RAMA), Feb. 14-16, 2013 at ISM, Dhanbad.

Joint Organizing Secretary, Indian Mathematical Society-2014, Dec.27-30, 2014 at ISM Dhanbad.

Convener, Industry Institute Interaction (III), Adaptive Technologies for Sustainable Growth, Feb. 3, 2018 at IIT(ISM), Dhanbad.

Co-convener, Industry Institute Interaction: Make an India Initiative

International Conference Organized:

Member, Organizing Committee and Programme Committee, International Conference on Modelling and Simulation of Diffusive Processes and Applications (ICMSDPA), October 09-12, 2012, BHU, Varanasi.

Regional Coordinator, International Groundwater Congress (IGWC) - Dec.17-21, 2012

Member, Organizing Committee and Programme Committee, International Conference on Modelling and Simulation of Diffusive Processes and Applications (ICMSDPA), October 29-31, 2014, BHU, Varanasi.

Regional Coordinator, International Groundwater Congress (IGWC) – Feb.17-21, 2015

Organizing Secretary, 3rd International Conference on Applications of Fluid Dynamics (ICAFD), Dec.19-21, 2016 in association with Fluid Mechanics Group, University of Botswana, Botswana.

Coordinator, Symposium on Solute Transport in Surface/Subsurface Water Bodies: A Modelling Approach, (Parallel Event of ICAFD-2016).

Coordinator, Webinar on Groundwater Contamination and Modelling Approaches (GCMA-2021), 23rd Dec.,2021 in association with AGGS, India at IIT(ISM) Dhanbad

Visited Abroad:

- 1. International Conference on Erath and Space-2012 at Pasadena, California, USA during 15-18, April, 2012. Visited NASA JPL at California Institute of Technology, California.
- 2. International Conference EMI-2015-HK at the PolyTech University Hong Kong, China during January7-9, 2015.

Invited Talk:

- 1. **Delivered on the topic** "Analytical approach of unsteady groundwater flow modelling" during the 2nd National Conference on Recent Advances on Solid State Materials and Devices organized by Sanjay Institute of Engineering & Management Sept. **6-7**, **2008**, Mathura (U.P.).
- 2. **Delivered on the topic** "Analytical approach of solute transport modelling in homogeneous porous formation" during the 2nd National Symposium on Differential Geometry and Mathematical Modelling on Bio-Sciences organized by Department of Mathematics and Astronomy, Lucknow University, Lucknow under UGC-SAP Programme, **Jan. 9-10, 2010**, Lucknow (U.P.).
- 3. **Delivered on the topic** "One-dimensional homogeneous semi-infinite aquifer along unsteady groundwater flow with variable porosity" during International Conference on Mathematical Modelling and Numerical Simulation organized by Department of Applied Mathematics, BBAU (A Central University), Lucknow, **July 1-3, 2013**, Lucknow (U.P.).
- 4. **Delivered on the topic** "Geo-mathematical modelling of groundwater contamination" Brain Storming Workshop on Geostatistics for Natural Resources Modelling (BSWG), February, 28, 2014, ISM Dhanbad
- 5. **Delivered on the topic** "Advective-dispersive equation and application to hydrological sciences" in Short Term Training Programme (STTP), March10, 2014, NIT Raipur.
- 6. **Delivered on the topic** "One-dimensional analytical model with variable coefficients in semi-infinite aquifer", in 2nd International Conference on Applications of Fluid Dynamics (ICAFD2014), July 21-23, 2014 at SVU in TIRUPATI, INDIA
- 7. **Delivered on the topic** "Solute transport model in homogeneous and anisotropic porous media", in 2nd International Conference on Modelling and Simulation of Diffusive Processes and Applications (ICMSDPA), October29-31, 2014. BHU Varanasi.
- 8. **Delivered on the topic "Scale** dependent solute dispersion in aquifer systems",

- 32nd and 33rd AHI Annual Convention and National Seminar on Water Resources with a Colloquium on Interlinking Rivers, July10-11, 2015, Andhra University, Vishakhapatnam.
- 9. **Delivered on the topic** "Groundwater contamination and its mathematical approaches", during 3 days Training Programme on Design and Implementation of Rainwater Harvesting System for Augmentation of Rural Water Supply, January21-23, 2016, ISM Dhanbad.
- 10. **Delivered on the topics** i) "Strum Liouville Problems" and ii) "Classification and reduction of second order equations to canonical form" in Science Academy's Refresher Course on Differential Equations and their Applications in Science and Engineering (DEASE-2016), July4-16, 2016 at ISM Dhanbad.
- 11. **Delivered on the topic** "Basics of FORTRAN Programming Language and Applications" in Training Programme on Dynamical Systems: Theory and Applications (DSTA-2017) during May8-12, 2017 at IIT(ISM) Dhanbad.
- 12. **Delivered on the topics** i) "Geological formations and their characteristics" and ii) "Mathematical Modelling Approaches" in Science Academy's Refresher Course on Crustal Strength Rheology and Seismicity (CSRS-2017) during May15-26, 2017 at IIT(ISM) Dhanbad.
- 13. **Delivered on the topics** i) "Academy Activities-SEP: How Science is Progressing in India?", ii) "Fluid Flow through Porous Media iii) Mathematical Modelling Approaches" iv) Groundwater Contamination through Point / Non-point Source in Aquifer v) "Basics of FORTRAN Programming Language and Applications" in Science Academy's Refresher Course on Concept of Fluid dynamics and Application (CFDA-2018) during June25-July6, 2018 at IIT(ISM) Dhanbad.
- 14. **Delivered on the topic** "Mathematical modelling of Groundwater contamination" in a Short Program entitled "Groundwater Resource Management in Industrial Areas in Mines" during August8-10, 2018 at IIT (ISM), Dhanbad.
- 15. **Delivered on the topic** "FORTRAN Programming Language and Applications" Training Programme on Dynamical Systems: Theory and Applications (DSTA2018) during September4-8, 2018 at IIT(ISM) Dhanbad.
- 16. **Delivered on the topic** "Mathematical Modelling of Solute Transport in Groundwater with Point and Non-point Sources of Contamination" in the National Conference "Recent Advances in Mathematics and Scientific Computing" during September 18-19, 2018 at Magadh University, Bodh Gaya.
- 17. **Delivered on the topic** "Solute Transport Modelling in Porous Formation" in a workshop on "Numerical and Computational Methods for Fluid Solid Interaction Problems" during Sept 27 -28, 2018 at IIT (ISM), Dhanbad.
- 18. **Delivered on the topic** "Mathematical Modelling of Contaminant Transport" in a Lecture Series on "Modelling natural processes and resources" during Nov.2, 2018 at School of Science, Adamas University, Kolkata, West Bengal.
- 19. **Delivered on the topic** "Generalized dispersion theory in solute transport model by homotopy analysis method" in 8th International Groundwater Conference (IGWC-2019), Oct21-24,2019, Department of Hydrology, IIT Roorkee (Key Note Speaker)
- 20. **Delivered on the topic** "Career Scope in Mathematics, Statistics and Data Science" in a Webinar Series on May17, 2020 at School of Science, Adamas University, Kolkata, West Bengal.
- 21. **Delivered on the topic** "Mathematical Modelling and Applications with Special emphasis to How Mathematics is Progressing in India" in a National Webinar Series on May26, 2020 at T.N.B. College, Tilka Manjhi Bhagalpur University, Bhagalpur, Bihar.

- 22. **Delivered on the topic** "Mathematical Approach of Solute Transport Modelling" in an International Webinar Series on June 27, 2020 at KIET, Ghaziabad, U.P.
- 23. **Delivered on the topic** "Mathematics-III (Laplace Transformation and its Applications)" in Webinar TEQIP-III Special Classes during September28-October3, 2020 at Chaibasa Engineering College, Chaibasa, Jharkhand.
- 24. **Delivered on the topic** "Mathematical Sciences: Challenges, Applications & Future Directions in India" in a National Webinar Series on Nov.27, 2020 at Atma Ram Sanatan Dharma College (ARSD College), University of Delhi, New Delhi.
- 25. **Delivered on the topic** "Mathematical Modelling and Applications with Specific Reference to Groundwater Contamination" in an Online Workshop on Differential Equations: Theory, Analysis and Applications with MATLAB (DEETAAM-2021) during July12-16,2021 at School of Physical Sciences, DIT University Dehradun.
- 26. **Delivered on the topic** "Mathematical Modelling and Applications" in a webinar on Frontier in Mathematics on February 12, 2022 at School of Sciences, SR University, Telangana.
- 27. **Delivered on the topic** "Trigonometric Identities, Graphs and Trigonometrical Equations" in an Instructional School for Mathematical Foundation (ISMF)-2022 during Oct8-23,2022 at IIT Patna.
- 28. **Delivered on the topic** "Multispecies Convection-Dispersion Transport (CDT) Modelling" in an International Groundwater Conference (IGWC)-2022 during Nov.2-4,2022 at IIT Roorkee and also Chaired one of the Technical Sessions along with Prof Vijay P. Singh, Texas A & M University, USA.
- 29. **Delivered on the topic "**Convection-Dispersion Transport (CDT) Modelling" in Online Refresher Course on Nov.9, 2022 at Department of Mathematics, University of Allahabad, U.P.
- 30. **Delivered on the topic** "Fundamental Concept of PDE and Its Application to Solute Transport Modelling" in STUTI Programme of DST during March14-20, 2023 organized by Department of Mathematics and Computing, IIT(ISM) Dhanbad exclusively for Women from Jharkhand.
- 31. **Delivered on the topic** "Concept of Functions" in an Instructional School for Mathematical Foundation (ISMF)-2022 during June19-20,2023 at IIT Patna.
- 32. **Delivered on the topic** "Convection-Dispersion Transport Modelling" on June 28, 2023 at Department of Mathematics, Mizoram University, Aizawl.
- 33. **Delivered on the Topic** "Role of Jharkhand in Glorifying India in Special Reference to Agriculture and Allied Sector" on Aug.28,2023 at Birsa Agricultural University, Ranchi
- 34. **Delivered on the topic** "Fundamental of PDE and Application to Solute Transport Modelling" on Oct.9, 2023 organized by Department of Mathematics, IIT Ropar.
- 35. **Delivered on the topic** "Mathematical Modelling of Solute Transport: A Semi-analytical Approach" in a Workshop on Advances in Fluid Solid Interactions using AI/ML with special reference to numerical weather prediction and smart farming using IoT during February 12-16, 2024 organized by Department of Mathematics and Computing, IIT(ISM) Dhanbad.
- 36. **Delivered on the topic** "Personal Leadership Style and Traits with Special Reference to Academia" in Nurturing Future Leadership Programme during March18-22, 2024 organized under aegis of Malviya Mission Teacher Training Programme (MMTTP) IIT (ISM) Dhanbad.
- 37. **Delivered on the topic** "Contaminant Transport Modelling for Aquifer" in Two Week Refresher Course on 'Recent Advancements in Mathematics, Statistics and Computer Science during Oct14-26, 2024 organized under aegis of Malviya Mission Teacher Training Programme (MMTTP) Central University of South Bihar

(CUSB), Gaya (Online).

38. **Delivered on the topic** "Personal Leadership Style and Traits with Stress or without Stress" in Nurturing Future Leadership Programme during Oct21-26, 2024 organized under aegis of Malviya Mission Teacher Training Programme (MMTTP) IIT (ISM) Dhanbad.

Professional Membership:

Life Member: Mathematical Society, B.H.U., Varanasi

Bhaskaracharya Educational Society, Patna

Bharat Ganit Parisad, Lucknow

Indian Mathematical Society, New Delhi

Indian Association of Hydrologists (IAH), NIH Roorkee

BHU Alumni Association, Dhanbad Chapter

Association of Hydrologists of India (AHI), Andhra University, Waltair

Society of Applied Mathematics (SAM), IIT(ISM), Dhanbad

Indian Red Cross Society, Dhanbad

Association of Global Groundwater Scientists (AGGS), Coimbatore

Indian Geological Congress (IGC), Roorkee

Member: American Society of Civil Engineers (ASCE)-EWRI-EMI, USA.

International Association of Hydrological Sciences (IAHS), U.K.

Fellow: Association of Groundwater Scientists (AGGS)

Board of Studies:

- 1. External Expert member of Board of Studies 2020 Meeting for Applied Sciences, at Centurion University of Technology & Management (CUTM) on July 11, 2020 (Online Mode).
- **2.** External Expert member of Board of Studies 2021 Meeting for M.Sc. programme in Applied Mathematics and Computing, at The Neotia University, School of Science and Technology, Kolkata on April2,2021 (Online Mode).
- **3.** External member of the curriculum and structure scrutiny and vetting committee for Computer Science Concentration Online UG and PG Programs at IIT Patna, July-2022 (Online/Hybrid Mode)

National Advisory Board:

Member, 3rd International Conference on Frontiers of Science and Technology-2021 (ICFST-2021) scheduled on August 13-14, 2021 in virtual mode, Department of Applied Sciences, KIET Group of Institutions, Delhi-NCR, Ghaziabad, India

National Recognition:

- 1. Prof. M K Singh, Dean (Students' Welfare) was nominated as State Chief Education Advisor, Jharkhand by Yog Social Society (YSS), Lucknow on 30th July,2020.
- 2. Prof. M K Singh, Dean (Students' Welfare) conferred as Best Mathematics Professor of the Year by Asian Education Award-2021 on 10th April,2021.
- 3. Inder Mohan Thapar Research (IMTR) Award-2021 conferred on 9th Dec.,2022, IIT(ISM) Dhanbad.

- Meditation Ambassador for "Har Ghar Dhyan" programme of Ministry of Culture in collaboration with The Art of Living Foundation for Meditation and Mental Health of the people from all walks of life at IIT(ISM) Dhanbad. (28th Nov..2022.
- 5. Nodal Officer, Monitoring and Outreach Implementation NEP-2020 Program, Dhanbad, Jharkhand for Four State Universities such as BBMKU Dhanbad, Nilamber Pitamber University, Palamu; Vinoba Bhave University, Hazaribagh; Sido Kanhu Murmu University, Dumka
- 6. Nodal Officer, STEM Teachers Training for PM Shri School in Jharkhand
- 7. Expert Committee Member, AICTE, New Delhi

International Recognition:

- 1. Certificate of Outstanding contribution in reviewing for the recognition of the contribution made to the quality of journal i.e., Journal of Hydrology, Elsevier.
- 2. Valuable contribution and outstanding performance as a Member of the Scientific Committee of the 3rd Conference of the Arabian Journal of Geosciences (CAJG), held online, on 2–5 November 2020.
- 3. Valuable contribution and outstanding performance as a Member of the Scientific Committee of the Mediterranean Geosciences Union Annual Meeting (MedGU-21), held in Istanbul, Turkey, on 25–28 November 2021.
- 4. AGGS-Fellow Award conferred on 2nd Nov.,2022 during IGWC-2022 at IIT Roorkee.

Administrative Exposure (at IIT(ISM) Dhanbad)

Warden (March1, 2006- March31, 2013); Member, Task Force (2013-2018)

Secretary, DAC (2012-2018); Secretary-cum-Treasurer, SAM (2010-2019)

Member, Improvement/Innovation Group (2012-2018)

Member, Staff Recruitment Committee (2015)

PCE-CD (2017-2018); Convener, SRIJAN (2015-2017)

Convener, Visit of Sri Sri Ravishankar Jee on 2nd March, 2017

Convener, III & BASANT-2018; Joint Secretary, IIT(ISM) AA (2018-2019)

Member-Organizing Committee, 39th Convocation & 93rd Foundation Day-2018

Member-Organizing Committee, 40th Convocation & 94th Foundation Day-2019

Member-Organizing Committee, 41st and 42nd Convocation -2022 & 97th Foundation Day-2022

Convener & Member-Organizing Committee, 43rd Convocation -2023 & 98th

Foundation Day-2023

Convener & Member-Organizing Committee, 44th Convocation -2024 & 99th

Foundation Day-2024

Member (Senate Nominee), BoG, IIT (ISM Dhanbad (Jan1,2024-Dec.31,2026)

Member (BoG Nominee), Finance Committee, IIT (ISM Dhanbad (Jan1,2024-Dec.31,2026)

Chairperson-For the award of Institute Medals and Sponsored Medals (2018-2024)

Chairperson-Modalities for PDA/PDF and DDF Rules (2019)

Chairperson-HAG Criteria & Quantification (2019 & 2021)

Head, CSM (May5, 2017-September2, 2018)

Associate Dean (Outreach Programmes) (May21, 2018 - September 2, 2018)

Dean (Students' Welfare) (Sept.3, 2018-Oct.20, 2023)

Dean (Academic) (Oct.21, 2023 continued)

Dy Director/Director (In-charge)-2018/2021/2022/2023/2024