

List of Publications

SCI/Scopus/ISI Web of Knowledge Indexed Publications

1. Kumar N and **Singh M K.**, Concentration distribution along unsteady groundwater flow, *Indian J. of Engg. & Material Sciences*, Vol. 3, pp 258-261, **1996. Impact factor: 0.36 (SCI Index)**
2. Kumar N, **Singh M K** & Yadav R. R., Two-dimensional pollutant dispersion along unsteady horizontal flow in shallow aquifer, Modeling, *Measurement & Control A.M.S.E.*, Vol. 63, No. 1,2, pp. 49-56, **1997. (Scopus)**
3. Kumar N & **Singh M K.**, Solute dispersion along unsteady groundwater flow in a semi-infinite aquifer, *Hydrology & Earth System Sciences (HESS)*, Vol. 2(1), pp. 93-100, **1998. Impact factor: 3.587 (SCI Index)**
4. Kumar N and **Singh M K.**, Horizontal solute dispersion in unsteady flow through homogeneous finite aquifer, *Indian J. of Engg. & Material Sciences*, Vol. 9, pp. 339-343, Oct. **2002. Impact factor: 0.36 (SCI Index)**
5. **Singh M K**, Mahato N K & Singh P, Longitudinal dispersion with time dependent source concentration in semi-infinite aquifer, *J. Earth System Science (JESS)*, Springer, Vol.117, no.6, pp945-949, **2008. Impact factor: 1.04 (SCI Index)**
6. **Singh M K**, Singh V P, Singh P & Shukla D, Analytical solution for conservative solute transport in one dimensional homogeneous porous formations with time dependent velocity, *J. Engineering Mechanics, ASCE*, Vol.135, No.9, pp.1015-1021, Sept., **2009**, DOI: 10.1061/(ASCE)EM.1943-7889.0000018. **Impact factor: 1.116 (SCI Index)**
7. **Singh M K**, Singh P & Singh V P, Two-dimensional solute dispersion with time dependent source concentration in finite aquifer, *J. Engineering Mechanics, (ASCE)*, Vol.136, No.10, pp.1309-1315, Oct., **2010**, DOI: 10.1061/(ASCE)EM.1943-7889.0000177. **Impact factor: 1.116 (SCI Index)**
8. Jaiswal D K, Kumar A, Kumar N & **Singh M K**, Solute transport along temporally and spatially dependent flows through horizontal semi-infinite media: Dispersion being proportional to square of velocity, *Journal of Hydrologic Engineering (ASCE)*, Vol.16 No.3, pp228-238, March **1, 2011**, DOI: 10.1061/(ASCE)HE.1943-5584.0000312, **Impact factor: 0.8 (SCI Index)**
9. **Singh M K**, Mahato N K & Singh, P, Longitudinal dispersion with constant source concentration along unsteady groundwater flow in finite aquifer: analytical solution with Pulse Type Boundary Condition, *Natural Science*, Vol. 3, No.3 **March, 2011**, pp186-192, DOI: 10.4236/ns.2011.33024. **Impact factor: 0.61 (ISI Web of Knowledge)**
10. **Singh M K**, Mahato N K & Kumari, P, Comparative study of analytical solutions for time-dependent solute transport along unsteady groundwater flow in semi-infinite aquifer, *Int. J. Geosciences, (Scientific Research)*, Vol. 2, No.4, pp 457-467, Nov., **2011**, DOI:10.4236/ijg.2011.24048. **Impact factor: 0.36 (ISI Web of Knowledge)**
11. **Singh M K**, Mahato N K and Singh V P, Analytical approach to solute dispersion along and against transient groundwater flow in a homogeneous finite aquifer: pulse type boundary conditions, *Earth and Space*, **2012**, pp796-808, *ASCE* DOI:10.1061/9780784412190.086 **(SCI Index)**
12. **Singh M K**, Ahamad S & Singh V P, Analytical solution for one-dimensional solute dispersion with time-dependent source concentration along uniform groundwater

flow in a homogeneous porous formations, *J. Engineering Mechanics (ASCE)*, Vol. 138 (8), pp.1045-1056, **Aug., 2012**, DOI: 10.1061/(ASCE)EM.1943-7889.0000384. **Impact factor: 1.116 (SCI Index)**

13. **Singh M K**, Ahamad S & Singh V P, One-dimensional uniform and time varying solute dispersion along transient groundwater flow in a semi-infinite aquifer, *Acta Geophysica*, (**Springer**), Vol.62(4), pp872-892, Aug. **2014**, DOI:10.2478/s11600-014-0208-7. **Impact factor: 1.365 (SCI Index)**
14. Singh M K, Mahato N K & Kumar N, Pollutant's horizontal dispersion along and against sinusoidally varying velocity from a pulse type point source, *Acta Geophysica*, (**Springer**), Vol.63(1), DOI: 10.2478/s11600-014-0244-3, pp214-231, **2015**. **Impact factor: 1.365 (SCI Index)**
15. **Singh M K** and Das Pintu, Scale dependent solute dispersion with linear isotherm in heterogeneous medium. *Journal of Hydrology (Elsevier)*, Vol. 520, pp289-299, Jan.,**2015**, DOI: 10.1016/j.jhydrol.2014.11.061, **Impact Factor-3.05 (SCI Index)**
16. **Singh M K**, Das Pintu and Singh V P, Solute transport in a semi-infinite geological formation with variable porosity, *J. Engineering Mechanics (ASCE)*, Vol.141(11), pp1-13, **2015**, DOI:10.1061/(ASCE)EM.1943-7889.0000948, **Impact factor: 1.17 (SCI Index)**
17. **Singh M K** and Das Pintu, Analytical solution for solute transport modeling along the unsteady groundwater flow in porous medium, *Journal of Geological Society of India*, Spl. Vol. No. 4, pp.130-135, **2016**. **Impact factor: 0.51 (SCI Index)**
18. **Singh M K**, Singh V P and Das Pintu, Mathematical modeling for solute transport in aquifer, *Journal of Hydroinformatics, (IWA)*, Vol. 18(3), pp481-499, **2016**. DOI:10.2166/hydro.2015.034 **Impact factor: 1.39 (SCI Index)**
19. **Singh M K** and Chatterjee, Ayan, Solute dispersion in a semi-infinite aquifer with specified concentration along an arbitrary plane source, *Journal of Hydrology (Elsevier)*, 541(Part B), pp928-934, Oct., **2016**, DOI: 10.1016/j.jhydrol.2016.08.003, **Impact Factor-3.05 (SCI Index)**
20. Das Pintu, Begam, S and **Singh, M K**, Mathematical modeling of groundwater contamination with varying velocity field, *Journal of Hydrology and Hydromechanics*, Vol. 65, No.2, pp192-204, March **2017**. **Impact Factor-1.47 (SCI Index)**
21. **Singh M K** and Chatterjee, Ayan, Solution of one-dimensional space and time fractional advection-dispersion equation by homotopy perturbation method, *Acta Geophysica*, (**Springer**), Vol. 65(2), 353-361, April, **2017**, DOI:10.1007/s11600-017-0035-8, **Impact factor: 1.365 (SCI Index)**
22. **Singh M K**, Chatterjee, Ayan and Singh V P, Solution of one-dimensional time fractional advection-dispersion equation by homotopy analysis method, *Journal of Engineering Mechanics (ASCE)*, Vol.143(9), Sept.,**2017**, pp1-16, DOI:10.1061/(ASCE)EM.1943-7889.0001318 **Impact factor: 1.17 (SCI Index)**
23. **Singh M K**, Singh R K and Singh V P (2017) Three-dimensional solute transport problems in an aquifer: Numerical approaches, Series: *Lecture Notes in Mechanical Engineering*, (**Springer**), 525-534, DOI:10.1007/978-981-10-5329-0 (**Scopus Index**)
24. Pandey A K, Kumar R and **Singh MK**, Solution to advection–dispersion equation for the heterogeneous medium using Duhamel's principle, **2017**, 559-572, Series: *Lecture Notes in Mechanical Engineering*, (**Springer**), 525-534, DOI:10.1007/978-981-10-5329-0 (**Scopus Index**)

25. Akhter A, Thakur CK and **Singh MK**, Two-dimensional solute transports with periodic input source in semi-infinite aquifer, Series: *Lecture Notes in Mechanical Engineering*, (**Springer**), **2017**, 573-584, DOI:10.1007/978-981-10-5329-0 (**Scopus Index**)
26. **Singh MK**, Chatterjee, A and Kumari, P, 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, DOI:10.1007/978-981-10-5329-0 (**Scopus Index**)
27. Debnath A, Prasad U and **Singh MK**, Solute dispersion along unsteady groundwater flow in a semi-infinite homogeneous aquifer using Linguistic Hedge by Mamdani Model, Series: *Lecture Notes in Mechanical Engineering*, (**Springer**), **2017**, 593-604, DOI:10.1007/978-981-10-5329-0 (**Scopus Index**)
28. **Singh MK**, Applications of Fluid Dynamics: An Introduction, Series: *Lecture Notes in Mechanical Engineering*, (**Springer**), **2017**, DOI:10.1007/978-981-10-5329-0 (**Scopus Index**)
29. Chatterjee, Ayan and **Singh M K**, Two-dimensional advection-dispersion equation with depth-dependent variable source concentration, *Pollution*, Vol. 4(1), Jan. **2018**, pp1-8. DOI: [10.22059/poll.2017.230145.265](https://doi.org/10.22059/poll.2017.230145.265). (**Scopus Index**)
30. Banerjee A, Pasupuleti S, **Singh M K** and Pradeep Kumar, G N, A study on the Wilkins and Forchheimer equations used in coarse granular media flow, *Acta Geophysica*, (**Springer**), Vol. 66 (1), 81–91, Feb., **2018**, DOI: 10.1007/s11600-017-0102-1, **Impact factor: 0.968 (SCI Index)**
31. Das P, Akhter A and **Singh M K**, Solute transport modeling along with the variable temporally dependent boundary, *Sadhana* (**Springer**), Vol 43(1), Feb. **2018**, pp1-12, DOI: 10.1007/s12046-017-0778-6, **Impact factor: 0.349 (SCI Index)**
32. Banerjee A, Pasupuleti S, **Singh M K** and Pradeep Kumar G N, An investigation of parallel post-laminar flow through coarse granular porous media with the Wilkins equation, *Energies*, (**MDPI**), Vol. 11 (2), 320, Feb., **2018**, DOI: 10.3390/en11020320, **Impact factor: 2.26 (SCIE Index)**
33. **Singh M K** and Das P, Response to "Comment on the paper Scale dependent solute dispersion with linear isotherm in heterogeneous medium (Journal of Hydrology 520 (2015) 289-299)". *Journal of Hydrology (Elsevier)*, Vol.581, DOI: [10.1016/j.jhydrol.2018.06.071](https://doi.org/10.1016/j.jhydrol.2018.06.071) **2020**, **Impact Factor-3.48 (SCI Index)**
34. **Singh M K**, Begam S, Thakur C K and Singh V P, Solute transport in a semi-infinite homogeneous aquifer with a fixed-point source concentration, *Environmental Fluid Mechanics* (**Springer**), Vol.18 (5), 1121-1142, Oct. **2018**, <https://doi.org/10.1007/s10652-018-9588-6> **Impact factor: 1.603 (SCI Index)**
35. Singh R K, Mahato N K, Das P and **Singh M K**, Solute dispersion along and against the groundwater flow in two-dimensional finite aquifer, *AIP Conference Proceeding*, 2072(1), Feb. **2019**, DOI: 10.1063/1.5090250 (**Scopus Index**)
36. Thakur C K, Chaudhary M, van der Zee S.E.A.T.M., and **Singh M K**, Two-dimensional solute transport with exponential initial concentration distribution and varying flow velocity, *Pollution*, Vol. 5(4), **July 2019**, pp721-737. DOI: 10.22059/poll.2019.275005.574 (**Scopus Index**)
37. Banerjee A, Pasupuleti S, **Singh M K**, Dutta S C and Pradeep Kumar G N, Modelling of flow through porous media over the complete flow regime, *Transport in Porous Media*, (**Springer**), Vol 129(1), 1-23, Aug., **2019**. DOI: 10.1007/s11242-019-01274-2 **Impact Factor-1.99 (SCI Index)**
38. Das P and **Singh MK** One-dimensional solute transport in porous formations with time varying dispersion, *Journal of Porous Media*, Vol. 22(10), **Oct. 2019**, 1207-

1227. DOI: 10.1615/JPorMedia.2019025964 **Impact Factor-1.49 (SCI Index)**
39. Kumar R, Chatterjee A, **Singh M K** and Singh V P, Study of solute dispersion with source/sink impact in semi-infinite porous medium, *Pollution*, Vol.6(1),87-98, **Winter 2020**, DOI: 10.22059/poll.2019.286098.656 (**Scopus Index**)
 40. Chaudhary, M., Thakur, C K and **Singh M K**, Analysis of 1-D pollutant transport in semi-infinite groundwater reservoir, *Environmental Earth Sciences (Springer)* Vol.79(1):24, 1-23, **Jan2020** DOI: 10.1007/s12665-019-8748-4 **Impact Factor-1.871 (SCI Index)**
 41. Chatterjee A, **Singh M K** and Singh V P, Groundwater contamination in mega cities with finite sources, *Journal of Earth System Sciences (Springer)*, Vol. **129** (1), 1-10, **Jan 2020**. DOI:10.1007/s12040-019-1281-8 **Impact Factor-1.104 (SCI Index)**
 42. **Singh M K**, Singh R K and Pasupuleti S, Study of forward-backward solute dispersion profiles in semi-infinite groundwater system, *Hydrological Sciences Journal (Taylor & Francis)*, Vol. 65(8), 1416-1429, **April 2020**, <https://doi.org/10.1080/02626667.2020.1740706>, **Impact Factor-2.18 (SCI Index)**
 43. Kumar R, Chatterjee A, **Singh M K** and Singh V P, Mathematical modelling to establish the influence of pesticides on groundwater contamination, *Arabian Journal of Geosciences (Springer)*, 13(14),603:1-10 **July2020**, DOI: 10.1007/s12517-020-05618-x, **Impact Factor-1.327 (SCI Index)**
 44. Kumar B, Seth G S, **Singh MK** and Chamkha A J, Carbon nanotubes (CNTs)-based flow between two spinning discs with porous medium, Cattaneo–Christov (non-Fourier) model and convective thermal condition, *Journal of Thermal Analysis and Calorimetry*, **July2020**, DOI: 10.1007/s10973-020-09952-w, **Impact Factor-2.731 (SCI Index)**
 45. Thakur C K, Kumari P, **Singh M K** and Singh V P, Solute transport model equation for mobile phase in semi-infinite porous media, *Groundwater for Sustainable Development (Elsevier)*, Vol. 11, 1-8, **Aug. 2020**, DOI: 10.1016/j.gsd.2020.100411 **Impact Factor-1.07 (SCOPUS Index)**
 46. Pandey A K, **Singh, MK** and Pasupuleti S, Solution of a 1-D space fractional advection-dispersion equation with non-linear source in a heterogeneous medium, *Journal of Engineering Mechanics (ASCE)*, **Vol.146 (12), 1-13, Sept. 2020**, DOI:10.1061/(ASCE)EM.1943-7889.0001870, **Impact factor: 2.03 (SCI Index)**
 47. Chaudhary M and **Singh, M K**, Study of multispecies convection-dispersion transport equation with variable parameters. *Journal of Hydrology (Elsevier)*, **Vol. 591, 1-14, Sept. 2020**, DOI:[10.1016/j.jhydrol.2020.125562](https://doi.org/10.1016/j.jhydrol.2020.125562) **Impact Factor-4.5 (SCI Index)**
 48. Chaudhary M, Kumar R and **Singh M K**, Fractional convection-dispersion equation with conformable derivative approach. *Chaos Solitons & Fractals (Elsevier)*, Vol.141, 1-15 **Dec. 2020**) DOI:[10.1016/j.chaos.2020.110426](https://doi.org/10.1016/j.chaos.2020.110426), **Impact Factor-3.764 (SCI Index)**
 49. **Singh M K** , Rajput, S and Singh R K, Study of 2D contaminant transport with depth varying input source in a groundwater reservoir, *Water Supply*, **Jan2021**, <https://doi.org/10.2166/ws.2021.010>, **Impact Factor-0.9 (SCI Index)**
 50. Das P, Akhter A and **Singh M K**, One-dimensional solute transport with sink/source term and varying density. *Special Topics and Reviews in Porous Media*, Vol 12(5), Jan 2021, 10.1615/SpecialTopicsRevPorousMedia.202103135 (**Scopus Index**)
 51. **Singh M K** and Rajput S, Study of pollutant dispersion in finite layers of semi-infinite geological formation, *Pollution*, Vol. 7(2), **March2021**, pp257-274. DOI: 10.22059/poll.2020.307324.861 (**Scopus Index**)
 52. Banerjee A, Pasupuleti S, **Singh M K** and Mohan D J, The influence of fluid viscosity and flow transition over non-linear filtration through porous media, *Journal of Earth System Sciences (Springer)*, Vol. 130:201, **Oct. 2021**. DOI:

- <https://doi.org/10.1007/s12040-021-01686-z> , **Impact Factor-1.104 (SCI Index)**
53. Rajput S and **Singh M K**, Study of off-diagonal dispersion effect along with pollutant migration in the groundwater system, *Journal of Engineering Mechanics (ASCE)*, Vol.147(12):04021114, 1-14, **Oct. 2021**, DOI:10.1061/(ASCE)EM.1943-7889.0002009, **Impact factor: 2.03 (SCI Index)**
 54. Singh R K, Paul T, Mahato NK and **Singh M K**, Contaminant dispersion with axial input sources in soil media under non-linear sorption, *Environmental Technology (Taylor & Francis)*, **Dec.2021**, DOI: [10.1080/09593330.2021.2016992](https://doi.org/10.1080/09593330.2021.2016992) **Impact Factor- 3.427(SCI Index)**
 55. Kumar R, Chatterjee A, **Singh M K** and Tsai F T-C, Advances in analytical solutions for time-dependent solute transport model, *Journal of Earth System Sciences (Springer)*, Vol.131, 131 **May 2022**, DOI: <https://doi.org/10.1007/s12040-022-01858-5> **Impact Factor-1.104 (SCI Index)**
 56. Rajput S and **Singh M K**, Fractal dispersion pollutant transport modeling with spatially varying sorption and degradation effect, *Journal of Environmental Engineering (ASCE)*, Vol.148(8): 04022040, **June 2022**, DOI: [https://doi.org/10.1061/\(ASCE\)EE.1943-7870.0002031](https://doi.org/10.1061/(ASCE)EE.1943-7870.0002031), **Impact Factor- 1.860 (SCI Index)**
 57. Das P, Akhter A and **Singh M K**, Multispecies solute dispersion with variable porosity in Semi-infinite saturated porous media, *Arabian Journal of Geosciences (Springer)*, 15:1134, **June 2022**, DOI: <https://doi.org/10.1007/s12517-022-10128-z>, **Impact Factor-1.827 (SCI Index)**
 58. Chaudhary M and **Singh M K**, Anomalous transport for multispecies reactive system with first order decay: time-fractional model, *Physica Scripta (IoP)*, Vol.97, No.7 **July 2022**, DOI: <https://doi.org/10.1088/1402-4896/ac71e0> **Impact Factor-2.487 (SCI Index)**
 59. Radha R, Singh R K and **Singh M K**, Contaminant transport analysis under non linear sorption in a heterogeneous groundwater system, *Applied Mathematics in Science and Engineering*, Vol 30, No.1, 736-761, **Oct. 2022**, DOI: <https://doi.org/10.1080/27690911.2022.2138867> **Impact Factor-2.487 (SCI Index)**
 60. Sinha, V K, Nandkeolyar, Singh, M K, Numerical simulation and regression analysis of MHD dissipative and radiative flow of a casson nanofluid with Hall effects, *Waves in Random and Complex Media*, **Jan 2023**, DOI: <https://doi.org/10.1080/17455030.2023.2168788>, **Impact Factor-4.051 (SCI Index)**
 61. Samanta, A, Chatterjee, A and Singh, M K, Impact of air pollution on groundwater contamination through water reservoir, *Geosystem Engineering*, **March 2023**, DOI: <https://doi.org/10.1080/12269328.2023.2187888> **(SCIE Index)**
 62. Radha R, Singh R K and **Singh M K**, Pollutant dispersion with an intermediate source in a semi-infinite aquifer, *Modeling Earth Systems and Environment*, **June2023**, DOI: <https://doi.org/10.1007/s40808-023-01827-x> **Impact Factor-3.0 (ESCI)**
 63. Radha R, and **Singh M K**, Axial groundwater contaminant dispersion modelling for a finite heterogeneous porous medium, *Water*, Vol. 15(14), 2676; **July 2023**, DoI:<https://doi.org/10.3390/w15142676> **Impact Factor-3.4 (SCIE)**
 64. Samanta, A, Chatterjee, A, and **Singh M K**, A study on the coexistence of anthropogenic and natural sources in a three-dimensional aquifer, *Water* Jan. **2024**, 16(1), 177; DoI: <https://doi.org/10.3390/w16010177> **Impact Factor-3.4 (SCIE)**
 65. Chatterjee T, Gogoi, U R, Samanta, A, Chatterjee, A, **Singh M K**, and Pasupuleti, S, Finding the most discriminative parameter for water quality prediction using machine learning algorithms, *Water* Jan. 2024, 16(3), 481; DoI: <https://doi.org/10.3390/w16030481> **Impact Factor-3.4 (SCIE)**

66. Samanta, A, Chatterjee T, Mondal, P, Chatterjee, A, Jha, M K, and **Singh M K** Modeling Saltwater Intrusion into Groundwater using Prey and Predator Mode, *Journal of Hydrologic Engineering (ASCE)*, May,2024, Vol.29(4). DoI: <https://doi.org/10.1061/JHYEFF.HEENG-6071> **Impact factor: 2.4 (SCI Index)**
67. **Singh M K** and Bharti, P, Linear and Nonlinear Stability Analysis of Double-Diffusion Convection in an Inclined Brinkman Porous Media with a Concentration-Based Internal Heat Source, *Physics of Fluids (AIP)*, Dec.,2024, Vol. 36 (12), DoI: [10.1063/5.0241397](https://doi.org/10.1063/5.0241397) **Impact factor: 4.1 (SCI Index)**
68. Shrivastava, S, Banerjee, A, Singh, A, **Singh, M K**, and Pasupuleti, S, Copula-based dependency modelling of hydraulic properties for non-linear filtration through porous media, *Powder Technology (Elsevier)*, 121069, April 2025, <https://doi.org/10.1016/j.powtec.2025.121069> **Impact factor: 4.5 (SCIE)**
69. Bharti, P, Kumar, M, Singh, M K and Chaudhary, M, Analytical study of multi-layer one-dimensional spatially dependent solute transport modelling, *Environmental Fluid Mechanics* **25**, 45 (2025). <https://doi.org/10.1007/s10652-025-10058-w>-2025. **Impact factor: 2.1 (SCIE)**

Other Journal Publications:

1. Kumar N., **Singh M K** & Yadav R. R., Unsteady horizontal dispersion through semi-infinite shallow aquifer, *Hydrological Science & Technology*, Vol. 13, No. 1-4, pp. 25-32, **1997 (AIH, USA)**
2. **Singh M K**, Singh P & Singh V P, Solute Transport Model for One-dimensional Homogeneous Porous formations with Time Dependent Point-Source Concentration, *Advances of Theoretical & Applied Mechanics (ATAM)*, Vol.2, no.3, pp.143-157, **2009**
3. **Singh M K**, Singh P & Singh V P, Analytical solution for solute transport along and against time dependent source concentration in homogeneous finite aquifer, *Advances of Theoretical & Applied Mechanics (ATAM)*, Vol.3, no.3, pp.99-119, Jan. **2010**
4. **Singh M K**, Ahamad S & Singh V P, Non-reactive solute dispersion in aquifer subjected to temporally dependent source concentration, *International Journal of Geology, Earth and Environmental Sciences (IJGEES)*, Vol.2(2), Aug., **2012**, pp235-244.
5. **Singh M K**, Singh V P, Kumari & P Das, Analytical and numerical approaches to horizontal non-reactive solute dispersion in a semi-infinite aquifer., *J. Groundwater Research, AGGS alias IGWC*, Vol.1(1), Dec.**2012**, pp42-51.
6. Thangrajan, M. & **Singh, M. K.**, Ed. International groundwater congress in India and Abroad. *J. Groundwater Research, AGGS alias IGWC*, Vol. 1(1), Dec.**2012**, pp2-5.
7. **Singh M K**, Mahato N K, & Singh V P, An analytical approach to one-dimensional solute dispersion along and against transient groundwater flow in aquifers., *J. Groundwater Research*, Vol. 2(1), June, **2013**, pp65-78.
8. **Singh M K**, Kumari P and Mahato, N K, Two-dimensional solute transport in finite homogeneous porous formations. *International Journal of Geology, Earth and Environmental Sciences*, Vol. 3(2), Aug., **2013**, pp35-48.
9. Mahato N K, Begam, Sultana, Das Pintu & **Singh, M K** Two-dimensional solute dispersion along and against the unsteady groundwater flow in aquifer, *J. Groundwater Research*, Vol. 3,4(1), June, **2015**, pp44-67.
10. Begam S, Singh P and **Singh MK**, Solute transport with time-dependent periodic source concentration in Aquifer, *J. Groundwater Research*, Vol. 6,7(1), December, **2018**, pp28-46.

National Journal

1. **Singh M K** and Yadav R R, Solute dispersion along and against sinusoidally varying unsteady velocity through finite aquifers-Analytical/Numerical solutions, *J. of Scientific Research*, Vol. 50, pp. 95-114, **2000**
2. Choudhary S K and **Singh M K**, Analysis of Fourier series in contact phenomenon of metal semi-conductor devices, *Proceedings of The Mathematical Society*, B.H.U., Varanasi, Vol.21, pp37-49, **2005**
3. **Singh M K** and Mahato N K, Analytical solution for horizontal dispersion along unsteady groundwater flow in semi-infinite aquifer, *Proceedings of The Mathematical Society*, B. H.U., Varanasi, Vol.22, pp 25-31, **2006**
4. **Singh M K** and Singh P, Solute transport model with constant source concentration against unsteady groundwater flow in finite aquifer, *Proceedings of the Mathematical Society*, B. H.U., Varanasi, Vol.23, pp45-52, **2007**
5. Singh P and **Singh M K**, Analytical solution for conservative solute transport in two dimensional porous formations with constant source input concentration, *Proceedings of the Mathematical Society*, B. H.U., Varanasi, Vol.24, pp 129-138, **2008**

International Conference

1. **Singh M K** & Singh Gurdeep, Trace elements concentration levels from ash pond in semi-infinite aquifer, *Proceedings of International conference on Water, Environment, Energy and Society (WEES)*, NASC Complex, New Delhi, Vol. III, pp 1105-1109, 12-16 Jan., **2009**
2. **Singh M K**, Mahato N K & Ahamad S Solute transport model with transient groundwater flow in homogeneous semi-infinite aquifer: Analytical solution, *Proceedings of International Seminar on Recent Advances in Geosciences*, ISM, Dhanbad, 11-13 Jan., **2011**, pp285-289.
3. **Singh M K**, Mahato N K, Ahamad S, Singh, V P & Dragoni, W, Longitudinal dispersion along transient groundwater flow in a finite aquifer, *Proceedings of IGWC-2011*, Groundwater Research Series 4, Vol. 1, pp400-417. Sept., 25-29, Madurai.
4. **Singh M K** and Mahato N K, Analytical modeling of solute transport in homogeneous porous media with Cauchy type boundary condition, *International Conference of RAIT-March15-17, 2012, IEEE Explore, pp903-908*. DOI:10.1109/RAIT.2012.6194587 (**Scopus Index**)
5. **Singh M K**, Mahato N K and Singh V P, Analytical approach to solute dispersion along and against transient groundwater flow in a homogeneous finite aquifer: pulse type boundary conditions, *Proceeding of International Conference Earth Space-April, 15-18, 2012, ASCE*, Pasadena, California, **pp796-808** DOI:10.1061/9780784412190.086 (**SCI Index**)
6. **Singh M K** and Mahato N K, Two-dimensional solute transports for temporally dependent source concentration in semi-infinite Aquifer *International Conference of ICMSDPA –Oct. 08-12, 2012, IEEE Explore, pp39-41*.
7. **Singh M K** and Kumari P, A comparative study of advection-dispersion equation in one-dimensional semi-infinite aquifer *International Conference of ICMSDPA – Oct.08-12, 2012, IEEE Explore, pp143-148*.
8. **Singh M K** and Ahamad S, One-dimensional non-reactive solute transport in a semi-infinite aquifer subject to a temporally dependent dispersion with temporally dependent input concentration *International Conference of ICMSDPA-Oct. 08-12, 2012, IEEE Explore, pp80-84*.
9. **Singh M K** and Kumari P, One-dimensional solute dispersion with time dependent

- source concentration along transient flow: An analytical/numerical approach. Groundwater Research Series 5(IV) **IGWC-2012, Dec.18-21, pp351-361.**
10. Mahato N K, **Singh M K** and Begam S, Temporally dependent solute dispersion with Cauchy type boundary condition in homogeneous semi-infinite aquifer, Proceedings of International Conference of ICMSDPA, **Oct. 29-31, 2014**, pp33-39.
 11. Begam S. and **Singh M K**, Two-dimensional solute transport modeling with transient groundwater flow, *Proceedings of International Conference of ICMSDPA*, **Oct. 29-31, 2014**, pp43-47.
 12. Das P and **Singh M K**, Two-dimensional solute dispersion with linear isotherm along unsteady groundwater flow in semi-infinite aquifer, Proceedings of International Conference of ICMSDPA, **Oct. 29-31, 2014**, pp60-67.
 13. **Singh M K**, Das P and Singh V P, Two-dimensional solute transport with varying velocity field, Jan7-9, Paper ID-25, EMI-2015, HongKong.
 14. Singh, R K, Mahato, N K, Das, P and **Singh, M K**, Solute dispersion along and against the groundwater flow in two-dimensional finite aquifer, AIP Conference Proceeding, 2072(1), Feb.,2019, DOI:10.1063/1.5090250.

National Conference/Workshop

1. **Singh M K**, Singh P & Mahato N K, Solute transport model with time dependent source concentration in aquifer, *Proceedings of National Seminar on Modern Trends in Geophysical Sciences and Techniques*, ISMU, Dhanbad, 12-14 Nov., pp 215-218, **2007**
2. **Singh M K**, Kumar R, Singh P & Singh Gurdeep, Distribution of trace elements concentration levels from ash ponds, *Proceedings of National Seminar on Recent Advances in Information Technology (RAIT-2009)*, ISMU, pp441-447, 6-7 Feb., **2009**.
3. **Singh M K** & Kumari P Analytical Solution of Contaminant Transport in Two-dimensional Homogeneous Semi-infinite Aquifer, *Proceedings of National Conference on Sustainable Development of Groundwater Resources in Industrial Regions (SDGRIR)*, ISM, Dhanbad, pp4-10, **22-23 March, 2012**.
4. Mahato N K and **Singh M K**, Comparative study of 2-D solute transport with temporally dependent source concentration in homogeneous porous media, *Proceeding of Recent Advances in Mathematics and its Applications (RAMA)*, pp122-132, 14-16Feb., **2013**.
5. Ahamad S and **Singh M K**, Solute Transport Model Subject to temporally dependent dispersion with temporally dependent input concentration in semi- infinite aquifer, *Proceeding of Recent Advances in Mathematics and its Applications (RAMA)*, pp376-382, 14-16Feb., **2013**.
6. Kumari P and **Singh M K**, Solute transport modeling in homogeneous aquifer with moving boundary condition, *Proceeding of Recent Advances in Mathematics and its Applications (RAMA)*, pp334-345, 14-16Feb., **2013**.
7. **Singh M K**, Das P and Prasad U, Solute transport modeling in adsorbing porous medium with unsteady flow velocity, *Proceeding of Recent Advances in Mathematics and its Applications (RAMA)*, pp43-50, 14-16Feb., **2013**.
8. **Singh M K**, Geo-mathematical modeling of Groundwater contamination, Book chapter of *Geostatistics for Natural Resources Modeling (BSWG)*, pp109-118,28 Feb., **2014**. ISBN: 9789351566359.

Book Published:

1. Singh P, **Singh M K** & Singh V P (**28th Dec., 2010**) *Contaminant Transport in Unsteady Groundwater Flow: Analytical Solutions*, LAP LAMBERT Academic Publishing, Germany
2. **Singh M K** Ed. (**Dec.2012**) *Journal of Groundwater Research*, Vol .1, No.1, pp1-51, AGGS alias IGWC, Coimbatore, India

3. Seth G S, **Singh M K** and Tiwari S P, Eds. (Feb., 2013) *Proceedings of Recent Advances in Mathematics and its Applications* Allied Publishers, New Delhi.
4. Phoolan Prasad and **Singh M K**, Eds (July 2016) Science Academy Refresher Course on Differential Equation and their Applications in Science and Engineering, pp1-68, Department of Applied Mathematics, ISM Dhanbad.
5. **Singh M K**, Kushvah B S, Seth GS and Prakash J Eds. (2017) Application of Fluid Dynamics, *Lecture Notes in Mechanical Engineering*, **Springer**, XV, 735, ISBN 978-981-10-5329-0, DOI:10.1007/978-981-10-5329-0.
6. Gupta, A K, Mohanty, S and **Singh M K**, Eds (July 2017) Science Academy Refresher Course on “Crustal strength Rheology and Seismicity” during May15-26,2017 at IIT(ISM) Dhanbad.

Book Chapters

1. **Singh M K**, Geo-mathematical modelling of groundwater contamination, Book chapter of *Geostatistics for Natural Resources Modelling (BSWG)*, pp109-118, **2014**. ISBN: 9789351566359.
2. **Singh M K** and Kumari P, Contaminant concentration prediction along unsteady groundwater flow. Book Chapter of *Modelling and Simulation of Diffusive Processes*, Series: Simulation Foundations, Methods and Applications, **Springer**, XII, pp257-276, **2014**. ISBN 978-3-319-05656-2.
3. **Singh M K**, Singh VP and Ahamad S, Transform techniques for solute transport in groundwater, Book Chapter, *Groundwater Assessment, Modelling and Management*, pp231-250, July**2016** CRC Press, **Taylor and Francis**, ISBN 9781498742849.
4. Begam, S, **Singh, M K** and Singh, V P, Two-dimensional solution of advection dispersion equation for solute transport in a semi-infinite aquifer, Book chapter of *Groundwater*, pp66-76, January 2017, Excellent Publishing House, New Delhi, ISBN: 978-93-86238-15-3
5. Pandey A K and **Singh MK**, The advection-dispersion equation for various seepage velocity patterns in a heterogeneous medium. *Computational Science and its Applications* (CRC Press) 291p, Oct. 2020 (Book Chapter-19).
6. Radha, S, Paul, T, Singh, R K, Mahato, N K and **Singh, M K**, Solution of pollutant dispersion in porous medium under linear sorption using finite element method, Book chapter 5 of *Mathematical Modelling for Computer Applications*, Sept.2024, Wiley, <https://doi.org/10.1002/9781394248438.ch5>
7. Chatterjee, D, Chatterjee, T, **Singh, M K** and Mondal, S, Solute transport through porous media: A time dependent approach, Book chapter 80 of *Recent Advancement in Computational Intelligence and Design Engineering*, Feb.,2025, CRC Press, <https://doi.org/10.1201/9781003596745>

Research Paper Presented in National/International Conferences:

1. **Singh M K** & Kumar N., Solute dispersion along unsteady groundwater flow in a semi-infinite aquifer, 42nd Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM), **Dec.28-31, 1997, South Gujrat University, Surat**.
2. **Singh M K** & Kumar N., Horizontal dispersion against unsteady groundwater flow in finite shallow aquifer. International Conference on Recent Developments in Mathematical Analysis with application to Industrial Mathematics, **March 2-5, 1998, BHU Varanasi**.
3. **Singh M K**., One dimensional dispersion against unsteady groundwater flow in finite aquifer, 44th Congress of ISTAM, **Dec.1999, R.E.C. Warangal**.

4. **Singh M K & Yadav R R**, Solute dispersion along and against sinusoidally varying unsteady velocity through finite aquifers-Analytical/Numerical, 18th Annual Conference of the Mathematical Society, **Dec. 29-30, 2002, BHU Varanasi**
5. **Singh M K & Kumar N.**, Concentration distribution of pollutants against unsteady groundwater flow in aquifer, Conference on Computational Methods in Continuum Mechanics (CMCM), *Jan.11-12, 2006, College of Engg. Guindy, Chennai (INDIA).*
6. **Singh M K.**, Concentration distribution of pollutants along unsteady horizontal flow through semi-infinite aquifer with continuous injection. 21st Annual Conference of the Mathematical Society, **Jan.23-24, 2006, BHU Varanasi.**
7. Choudhary S K and **Singh M K.**, Analysis of Fourier series in contact phenomenon of metal semi-conductor devices., 21st Annual Conference of the Mathematical Society, **Jan.23-24, 2006, BHU Varanasi.**
8. **Singh M K & Mahato N K**, One-dimensional solute dispersion along unsteady groundwater flow in semi-infinite aquifer, National Seminar on Recent Advances in. Theoretical & Applied Seismology, **March 20-21, 2006, ISM Dhanbad.**
9. **Singh M K & Mahato N K**, Analytical solution for horizontal dispersion along unsteady groundwater flow in semi-infinite aquifer, 22nd Annual Conference of the Mathematical Society, **Dec.15-16, 2006, BHU Varanasi.**
10. **Singh M K**, Concentration distribution behaviour of trace elements in semi-infinite aquifer, International Conference on Mathematical Modelling and Computer Simulation (ICMMACS), **Dec.12-15,2006, LNMIIT, Jaipur.**
11. **Singh M K & Mahato N K**, Contaminant transport analysis along unsteady ground water flow in aquifer, National Seminar on Recent Advances in Theoretical & Applied Seismology, **March 21-22, 2007, ISM Dhanbad.**
12. **Singh M K, Singh P & Mahato N K**, Solute transport model with time dependent source concentration in aquifer, National Seminar on Modern Trends in Geophysical Sciences and Techniques, **12-14 Nov., 2007, ISM Dhanbad.**
13. **Singh M K & Singh P**, Solute transport model with constant source concentration against unsteady groundwater flow in finite aquifer, 23rd Annual Conference of the Mathematical Society, **Dec.29-30, 2007, BHU Varanasi.**
14. **Singh P & Singh M K**, Analytical solution for conservative solute transport in two dimensional porous formations with constant source input concentration, 24th Annual Conference of the Mathematical Society, **Dec.30-31, 2008, BHU Varanasi.**
15. **Singh M K & Singh Gurdeep**, Trace elements concentration levels from ash pond in semi-infinite aquifer, *International Conference on Water, Environment, Energy and Society (WEES), Jan.12-16, 2009, NASC Complex, New Delhi.*
16. **Singh M K, Kumar R, Singh P & Singh Gurdeep**, Distribution of trace elements concentration levels from ash ponds, *National Seminar on Recent Advances in Information Technology (RAIT-2009), Feb. 6-7, 2009 ISM Dhanbad.*
17. **Singh M K & Garai A K**, Concentration distribution behaviour of contaminants through the wall of the cylinder: Analytical Solution, National Seminar on Recent Advances in Theoretical & Applied Seismology, **March 27-28, 2009, ISM Dhanbad.**
18. **Singh M K & Singh P**, Analytical solution for conservative solute transport in two-dimensional porous formations with time dependent source input concentration, National Seminar on Recent Advances in Theoretical & Applied Seismology, **March 27-28, 2009, ISM Dhanbad.**
19. **Singh M K, Singh P & Kumar N**, Longitudinal dispersion with constant source concentration along unsteady groundwater flow in finite aquifer, *Joint IAHS &*

IAH International Convention Water: A Vital Resource Under Stress-How Science Can Help, Sept. 6-12, 2009, NGRI Hyderabad.

20. **Singh M K**, Mahato, N K & Ahamad, S. Solute Transport Modeling of Time-Dependent Solute Concentration with Mixed Type Boundary Condition: Analytical Solution, 26th Annual Conference of the Mathematical Society, **Nov.28-29, 2010, BHU Varanasi.**
21. **Singh M K**, Mahato N K& Ahamad S Solute Transport Model with Transient Groundwater Flow in Homogeneous Semi-infinite Aquifer: Analytical Solution, *Proceedings of International Seminar on Recent Advances in Geosciences*, **Jan. 11-13,2011, ISM Dhanbad.**
22. **Singh M K**, Kumari P & Das P. Analytical and Numerical Approach of One-dimensional Solute dispersion along Unsteady Groundwater Flow in Semi-infinite Aquifer, *Proceedings of International Conference on CONIAPS-XIII*, **June14-16, 2011 at UPES Dehradun.**
23. **Singh M K**, Kumari P & Mahato N K Two-Dimensional Non-reactive Solute Transport Along Unsteady Groundwater Flow In Finite Aquifer, *Proceedings of International Conference on CONIAPS-XIII*, **June14-16, 2011 at UPES Dehradun.**
24. **Singh M K**, Mahato N K, Ahamad S, Singh, V P & Dragoni, W, Longitudinal Dispersion along Transient Groundwater Flow in a Finite Aquifer, **IGWC, Sept.,25-29, 2011, Madurai.**
25. **Singh M K and** Mahato N K, Analytical modeling of solute transport in homogeneous porous media with Cauchy type boundary condition, *International Conference of RAIT-March15-17, 2012 at ISM, Dhanbad*
26. **Singh M K**, Mahato N K and Singh V P, Analytical Approach to Solute Dispersion along and against Transient Groundwater flow in a Homogeneous Finite Aquifer: Pulse Type Boundary Conditions, *International Conference Earth Space-April, 15-18, 2012, ASCE, Pasadena, California.*
27. **Singh M K and** Mahato N K, Two dimensional solute transports for temporally dependent source concentration in semi-infinite Aquifer, *International Conference of ICMSDPA – Oct. 08-12, 2012, BHU Varanasi.*
28. **Singh M K and** Kumari P, A Comparative Study of Advection-dispersion Equation in One-dimensional Semi-infinite Aquifer, *International Conference of ICMSDPA – Oct. 08-12, 2012, BHU Varanasi.*
29. **Singh M K and** Ahamad S, One-dimensional Non-reactive Solute Transport in a Semi-infinite Aquifer Subject to a Temporally Dependent Dispersion with Temporally Dependent Input, *International Conference of ICMSDPA–Oct. 08-12, 2012, BHU Varanasi.*
30. **Singh M K**, Mahato N K, and Singh V P, An analytical approach to one-dimensional solute dispersion along and against transient groundwater flow in aquifers., **IGWC, Dec18-21, 2012, Aurangabad.**
31. **Singh M K and** Kumari P, One-dimensional solute dispersion with time dependent source concentration along transient flow: An analytical/numerical approach. **IGWC, Dec.18-21, 2012, Aurangabad.**
32. **Singh M K &** Kumari P Analytical Solution of Contaminant Transport in Two-dimensional Homogeneous Semi-infinite Aquifer, *National Conference on Sustainable Development of Groundwater Resources in Industrial Regions (SDGRIR)*, **March 22-23, 2012, ISM Dhanbad.**
33. Mahato N K and **Singh M K**, Comparative study of 2-D solute transport with temporally dependent source concentration in homogeneous porous media, *National Conference on Recent Advances in Mathematics and its Applications (RAMA)* **Feb.14-16, 2013, ISM, Dhanbad**

34. Ahamad S and **Singh M K**, Solute Transport Model Subject to Temporally Dependent Dispersion with Temporally Dependent Input Concentration in Semi-infinite Aquifer, *National Conference on Recent Advances in Mathematics and its Applications (RAMA) Feb.14-16, 2013, ISM, Dhanbad.*
35. Kumari P and **Singh M K**, Solute Transport Modeling in Homogeneous Aquifer with Moving Boundary Condition, *National Conference on Recent Advances in Mathematics and its Applications (RAMA) Feb.14-16, 2013, ISM, Dhanbad*
36. **Singh M K**, Das P and Prasad U, Solute Transport Modeling in Adsorbing Porous Medium with Unsteady Flow Velocity, *National Conference on Recent Advances in Mathematics and its Applications (RAMA) Feb.14-16,2013, ISM, Dhanbad.*
37. **Singh M K** and Das P, One-dimensional homogeneous semi-infinite aquifer along unsteady groundwater flow with variable porosity, *International Conference on Mathematical Modeling and Numerical Simulation, July 1-3, 2013, BBAU (A Central University), Lucknow (U.P.).*
38. **Singh M K**, Geo-mathematical modeling of Groundwater contamination, *Brain Storming Workshop on Geostatistics for Natural Resources Modeling (BSWG), February, 28, 2014, ISM Dhanbad.*
39. **Singh M K**, 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.**
40. **Singh M K and Rohit Kumar** Generalized dispersion theory in solute transport model by homotopy analysis method, 8th International Groundwater Conference (IGWC-2019), **Oct21-24,2019**, Department of Hydrology, IIT Roorkee (Key Note Paper)
41. Singh R K and **Singh M K** Pollutant Transport in finite heterogeneous porous media under non-linear sorption condition and decay, 8th International Groundwater Conference (IGWC-2019), **Oct21-24,2019**, Department of Hydrology, IIT Roorkee

Seminar/Workshop Attended:

1. Review of Engineering Degree Curriculum of Mathematics, Organized by National Institute of Technical Teachers' Training and Research (NITTTR) & West Bengal University of Technology (WBUT), **July 26-30, 2004, Kolkata.**
2. Conference on Higher Technical Education, Organized by Department of Higher Education, Govt. of West Bengal, **Feb., 15-16, 2005, Kolkata.**
3. National Seminar on Condition Monitoring Overview & Advanced Techniques (COMOAT), Organized by Department of Mechanical Engineering & Mining Machinery Engineering, ISM University, **Sept. 15-16, 2006, Dhanbad.**
4. National Workshop on e-Governance Awareness and Information Technology, Ministry of Communication & Information Technology, Government of India Organized by Department of Management Studies, ISM University, **Sept. 1-2, 2007, Dhanbad.**
5. National Seminar on Modern Trends in Geophysical Sciences and Techniques (MTGST), Organized by Department of Applied Geophysics, ISM University, **Nov. 12-14, 2007, Dhanbad.**
6. 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.).**
7. International conference on Water, Environment, Energy and Society (WEES), organized by NIH Roorkee, Ministry of Water Resources, Government of India, **Jan. 12-16, 2009, NASC Complex, New Delhi.**
8. National Seminar on Recent Advances in Information Technology (RAIT-2009),

- organized by Department of Computer Science Engineering, ISM University, **Feb., 6-7, 2009**, Dhanbad.
9. National Seminar on Recent Advances in Theoretical & Applied Seismology, organized by Department of Applied Mathematics, I.S.M University, **March 27-28, 2009**, Dhanbad.
 10. Ninth International Mine Ventilation Congress-2009, organized by Department of Mining Engineering, ISM, Dhanbad at New Delhi, **Nov. 10-13, 2009**.
 11. 25th Annual Conference of the Mathematical Society, **Dec. 22-24, 2009**, B.H.U., Varanasi.
 12. 2nd National Symposium on Differential Geometry and Mathematical Modeling on Bio-Sciences organized by Department of Mathematics and Astronomy, Lucknow University, Lucknow under UGC-SAP Programme, **Jan. 9-10, 2010**, Lucknow (U.P.).
 13. 26th Annual Conference of the Mathematical Society, **Nov. 28-29, 2010**, B.H.U., Varanasi.
 14. International Seminar on Recent Advances in Geosciences, Organized by Department of Applied Geophysics, ISM, Dhanbad, **Jan. 11-13, 2011**
 15. International Conference on CONIAPS-XIII, **June 14-16, 2011** at UPES Dehradun.
 16. International Ground Water Congress, **Sept. 27-30, 2011** at Yadava College, Madurai.
 17. International Conference of RAIT-**March 15-17, 2012**, ISM, Dhanbad.
 18. National Conference on Sustainable Development of Groundwater Resources in Industrial Regions (SDGRIR), **March 22-23, 2012**, ISM, Dhanbad
 19. International Conference Earth Space, **April 15-18, 2012**, ASCE, Pasadena, California, USA.
 20. International Conference of ICMSDPA, **Oct. 08-12, 2012**, BHU, Varanasi.
 21. International Ground Water Conference, **Dec. 18-21, 2012**, Aurangabad.
 22. National Conference RAMA, **Feb. 14-16, 2013**, ISM, Dhanbad.
 23. International Conference on Mathematical Modeling and Numerical Simulation (ICMMANS), **July 1-3, 2013**, BBAU (A Central University), Lucknow.
 25. Brain Storming Workshop on Geostatistics for Natural Resources Modeling (BSWG), Department of Applied Geology, ISM Dhanbad in Association with Ministry of Earth Sciences, New Delhi, **February, 28, 2014**, ISM Dhanbad.
 26. 2nd International Conference on Applications of Fluid Dynamics (ICAFD2014), at SVU in TIRUPATI, INDIA **July 21-23, 2014**.
 27. Science Academy's Lecture Workshop on Concept of Fluid Dynamics and its Applications (CFDA)" during **October 8-10, 2014** at ISM Dhanbad.
 28. International Conference of ICMSDPA, **Oct. 29-31, 2014**, BHU, Varanasi.
 29. The 80th Annual Conference of Indian Mathematical Society during **Dec. 27-31, 2014**, at ISM Dhanbad.
 30. International Conference on EMI-2015 during **Jan. 7-9, 2015** at PolyU HongKong, China.
 31. 32nd and 33rd AHI Annual Convention and National Seminar on Water Resources with a Colloquium on Interlinking Rivers, July 10-11, 2015, Andhra University, Vishakhapatnam.
 32. 81st Annual meeting of Indian Academy of Sciences, Bangalore during **Nov. 6-8, 2015** at IISER, Pune as **Teacher Invitee**.
 33. 34th AHI Annual Convention and Symposia on "Water Resources & Water Policies" (Jointly with AEG & IGU) during **November 8-10, 2016** at IIT(ISM) Dhanbad.
 34. 3rd International Conference on Applications of Fluid Dynamics (ICAFD), in association with Fluid Mechanics Group, University of Botswana, Botswana

- during **Dec.19-21, 2016** at IIT(ISM) Dhanbad.
35. Industry Institute Interaction, Adaptive Technologies for Sustainable Growth on **3rd February, 2018** at IIT(ISM) Dhanbad.
 36. Diamond Jubilee Conference on Emerging Trends in Geophysical Research for Make-in- India (ETGRMI-2018) during **March9-11, 2018** at IIT(ISM) Dhanbad.
 37. 4th IEEE International Conference on Recent Advances in Information Technology (RAIT-2018) during **March15-17, 2018** at IIT(ISM) Dhanbad.
 38. National Conference “Recent Advances in Mathematics and Scientific Computing” during **September 18-19, 2018** at Magadh University, Bodh Gaya.

Training Programme Attended:

1. The **International Training Programme** on “Introduction to Groundwater Flow and Transport Modeling using MODFLOW, MODPATH, MT3DMS and SEAWAT with model analysis using PEST and UCODE” during **Sept.1-4, 2009** organized by International Association of Hydrological Sciences (IAHS) and International Association of Hydrogeologists (IAH) at NGRI Hyderabad.
2. **DST Training Programme** on “Ethics and Values in Science” during **Dec.12-16, 2011** organized by Humanities and Social Science Department, Indian School of Mines, Dhanbad.
3. **Short Term Training Programme (STTP)** on Glimpse of Differential Equations in Science and Engineering, **March10-14, 2014**, NIT Raipur.