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)**
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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)**
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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)**
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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)**
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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)**

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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)**
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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)**

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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)**
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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), **July2019**, 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)**
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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 **Impact Factor-4.5 (SCI Index**
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51. 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)**
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64. 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:Ohttps://doi.org/10.3390/w15142676 **Impact Factor-3.4 (SCIE)**
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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, Vo1.22, pp 25-31,**2006**
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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.**
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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 Chapter

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

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, l8th 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, 26thAnnual 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 33rdAHI 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 Machinary 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. 26thAnnual 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), **March22-23, 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
24. (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 **October8-10, 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, July10-11, 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 **November8-10, 2016** at IIT(ISM) Dhanbad.
34. 3rdInternational 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.