

Dr. Nav Kumar Mahato, M.Sc., M.Phil, Ph.D.

Assistant Professor,
School of Science,
Adamas University,
Adamas Knowledge City,
Barasat-Barrackpore Road,
Post-Jagannathpur,
24-Paragana (N)
Email id: navkumar.mahato@adamasuniversity.ac.in
Mobile No.: +91-9556873672



Dr. Nav Kumar Mahato has graduated from Vinobha Bhave University, Hazaribag, Jharkhand, M.Sc. and M.Phil. from IIT(ISM), Dhanbad, Jharkhand and also completed Ph.D. from the same institute in Applied Mathematics in the year 2013.

Area of Research

Hydrodynamics, Analytical/ Numerical Solute Transport Modeling.

Past Employment

- **Assistant Professor (August, 2013 – April, 2015)** in **C. V. Raman College of Engineering**, Bhubaneswar, Orissa.
- **Assistant Professor (August, 2011 – August, 2013)** in **NSHM Knowledge Campus**, Durgapur, West Bengal.
- **Assistant Professor (January, 2011 – August, 2011)** in **Bengal College of Engineering and Technology**, Durgapur, West Bengal.
- **Lecturer (July, 2008 – December, 2010)** in **Bengal College of Engineering and Technology**, Durgapur, West Bengal.

List of Research Publications in International Journals:

1. Singh M K, **Mahato N K** and Singh P (2008), Longitudinal dispersion with time dependent source concentration in semi-infinite aquifer, *J. Earth System Science (JESS)*, Springer, Vol.117, no.6, pp945-949. **Impact factor: 0.695, ISSN: 0253-4126.**
2. Singh M K, **Mahato N K** and Singh P (2011), 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, pp 186-192, **2011**. DOI: 10.4236/ns.2011.33024. **Impact factor: 0.61, ISSN Online: 2150-4105.**

3. Singh M K, **Mahato N K**, Ahamad S , Singh, V P and Dragoni, W (2011), Longitudinal Dispersion along Transient Groundwater Flow in a Finite Aquifer, *Groundwater Research Series*, IGWC, Vol. 4 no.1, pp 400-417.
4. Singh M K, **Mahato N K** and Kumari, P (2011), Comparative study of analytical solutions for time-dependent solute transport along unsteady groundwater flow in semi-infinite aquifer, *Int. J. Geosciences*, Vol. 2, no.4, pp 457- 467, DOI:10.4236/ijg.2011.24048. **Impact factor: 0.36, ISSN Online: 2156-8367**
5. **Mahato, N K** and Singh, M K (2013), 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
6. Singh M K, **Mahato N K**, and Singh V P (2013) An analytical approach to one-dimensional solute dispersion along and against transient groundwater flow in aquifers., *J. Groundwater Research (AGGS)*, Vol.2 no.1, pp65-78. **ISSN: 2321-4783.**
7. Singh M K, Kumari, P and **Mahato N K** (2013), Two dimensional solute transport in finite homogeneous porous formation, *Int. Jr. Geo. Earth Environ. Sci.*, Vol. 3 no.2, pp35-48, (CiBTech). **ISSN: 2277-2081**
8. Singh M K, **Mahato N K**, and Kumar N (2015), Pollutant's horizontal dispersion along and against sinusoidally varying velocity from a pulse type point source, *Acta Geophysica, Versita (Springer)*, Impact factor: 1.365, DOI: 10.2478/s11600-014-0244-3.
9. **Mahato, N K** , Begam, S, Pintu Das and Singh, M K(2015), Two-dimensional Solute Dispersion Along and Against the Unsteady Groundwater Flow in Aquifer, *J. Groundwater Research*, vol.3, 4/1, pp-44-67.

List of Research Publications in National/International Conferences:

1. Singh M K and **Mahato N K** (2006), Analytical solution for horizontal dispersion along unsteady groundwater flow in semi-infinite aquifer, *Proceedings of The Mathematical Society*, B. H.U., Varanasi, Vo122, pp 25-31.

2. Singh M K, Singh P and **Mahato N K** (2007), 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.
3. Singh M K, **Mahato N K** and Ahamad S (2011), Solute transport Model with transient Groundwater Flow in Homogeneous Semi-infinite Aquifer: Analytical Solution, *Proceeding of international Seminar on Recent Advances in Geosciences*, ISM, Dhanbad, 11-13 Jan., 2011.
4. Singh M K and **Mahato N K** (2012), Analytical modeling of solute transport in homogeneous porous media with Cauchy type boundary condition, *Proceeding of International Conference on Recent Advances in Information Technology (RAIT-12)*, **IEEE Explore**, pp903-908. DOI:10.1109/RAIT.2012.6194587.
5. Singh M K, **Mahato N K** and Singh V P(2012), Analytical Approach to Solute Dispersion along and against Transient Groundwater flow in a Homogeneous Finite Aquifer: Pulse Type Boundary Conditions, *Earth and Space,(ASCE)*, pp796-808, **ISBN: 978-0-7844-1219-0**
DOI: <http://dx.doi.org/10.1061/9780784412190.086>,
6. Singh M K and **Mahato N K** (2012), Two Dimensional Solute Transports for Temporally Dependent Source Concentration in Semi-Infinite Aquifer, *Proceeding of International Conference on Modeling and simulation Diffusive Processes and Application (ICMSDPA -12)*, pp39-43.
7. **Mahato, N K** and Singh, M K Begam, S (2014), Temporally Dependent Solute Dispersion with Cauchy-type Boundary Condition in homogeneous semi-infinite Aquifer, *Proceeding of International Conference on Modeling and Simulation Diffusive Processes and Application (ICMSDPA -14)*, pp33-39.