

Publications in International Journals

1. Renu Valsala, and Suresh Kumar Govindarajan. "Numerical Modeling of Colloid-assisted Btex Transport In a Saturated Fractured Aquifer." *Environmental earth sciences*, 2022; 81(2) 37. doi: [10.1007/s12665-021-10161-3](https://doi.org/10.1007/s12665-021-10161-3)
2. Wagh P, Sojan J M, Babu S J, Valsala R, Bhatia S, Srivastav R. Indicative Lake Water Quality Assessment Using Remote Sensing Images-Effect of COVID-19 Lockdown. *Water* 2021; 13:73.
3. Renu V, Suresh Kumar G. Co-colloidal BTEX and Microbial transport in a Saturated Porous System: Numerical Modeling and Sensitivity Analysis. *Transport in Porous Media*. 2019; 127 (2): 269-294. DOI: 10.1007/s11242-018-1191-2.
4. Renu V, Suresh Kumar G. Mathematical modeling on mobility and spreading of BTEX in a discretely fractured aquifer system under the coupled effect of dissolution, sorption, and biodegradation. *Transport in Porous Media*. 2018; 123 (2): 421-452. DOI: 10.1007/s11242-018-1049-7.
5. Renu V, Suresh Kumar G. Multispecies transport modeling on biodegradation of Benzene, Toluene and Xylene in a saturated fracture-matrix system with multiple electron acceptors. *Environmental Engineering Science*. 2018; DOI:10.1089/ees.2017.316. (Impact Factor:1.907)
6. Renu V, Suresh Kumar G. Interaction of dissolution, sorption and biodegradation on transport of BTEX in a saturated groundwater system: numerical modeling and spatial moment analysis. *Journal of Earth System Science*. 2018; 127:53.
7. Renu V, Suresh Kumar G. Multi-component transport of BTX in a discretely fractured aquifer with fracture-skin: numerical investigation and sensitivity analysis. *Environmental Earth Sciences*. 2017; 76(17): 1-15. DOI:10.1007/s12665-017-6956-3.
8. Renu V, Suresh Kumar G. Benzene Dissolution and Transport in a Saturated Sinusoidal Fracture with non-uniform Flow: Numerical Investigation and Sensitivity Analysis. *Environmental Processes*. 2017; 4(3):587-601. DOI: 10.1007/s40710-017-0252-9.
9. Renu V, Suresh Kumar G. Numerical modeling on benzene dissolution into groundwater and transport of dissolved benzene in a saturated fracture-matrix system. *Environmental Processes*. 2016; 3(4):781-802. DOI: 10.1007/s40710-016-0166-y.
10. Renu V, Suresh Kumar G. Temporal moment analysis of multi-species radionuclide transport in a coupled fracture-skin-matrix system with a variable fracture aperture. *Environmental Modeling & Assessment*. 2016; 21(4): 547-562. DOI: 10.1007/s10666- 016-9515-5.
11. Renu V, Suresh Kumar G. Temporal Moment Analysis of Solute Transport in a Coupled Fracture-Skin-Matrix System. *Sadhana - Academy proceedings in Engineering Sciences*. 2014; 39(2): 487-509.
12. Renu V, Suresh Kumar G. Numerical modeling and spatial moment analysis of solute mobility and spreading in a coupled fracture-skin-matrix system. *Geotechnical and Geological Engineering*. 2012; 30(6): 1289-1302. DOI: 10.1007/s10706-012-9540-3.

International Conferences

1. Renu V, Suresh Kumar G. Sensitivity analysis of higher order spatial moments for a coupled

fracture-skin-matrix system. Third International Perspective on Current and Future State of Water Resources and the Environment. Jan 5-7, 2010, held at IIT-Madras.

2. Renu V, Suresh Kumar G. Numerical Modeling on Two-Phase Fluid Flow in a Coupled Fracture-Skin-Matrix System. AGU Fall Meeting held at San Francisco between 14th and 18th Dec 2015. Abstract ID: 69054, Paper Number: H54F-05.
3. Renu V, Suresh Kumar G. Numerical Modeling on Fate and Migration of BTEX dissolving from a Residual Source Zone within a Saturated Groundwater System. 7th International Groundwater Conference (IGWC-2017) on Groundwater Vision 2030 – “Water Security, Challenges & Climate Change Adaption” (Theme: 6 & Technical Session: 10) held at New Delhi-India during 11-13 Dec 2017.
4. Renu V, Suresh Kumar G. Modeling Investigations on Sorption of Petroleum Hydrocarbons to Clay Minerals in a Saturated Porous Aquifer. Proceedings of the Fourth International Conference in Ocean Engineering (ICOE2018) Part of the Lecture Notes in Civil Engineering book series (LNCE, volume 22), 2019.