

Research Papers **on** **Artificial (Injected) Tracer Studies**

Ali, Y. J., Bhishm Kumar and B.P. Singh (1980), Study of soil moisture movement using tritium, Workshop on Nuclear Techniques in Hydrology, N.G.R.I.,Hyderabad, March 19-21,pp. 138-144.

Athavale, R.N. (1977). Tracer techniques in groundwater hydrology, Proc. of a workshop on 'Exploration Techniques for groundwater organised by Committee on Science and Technology in Developing Countries (COSTED), Bangalore, India, pp. 316-358.

Athavale, R.N. , Murti, C.S. and Chand, R. (1978). Estimation of recharge to the phreatic aquifers of lower maner basin by using the tritium injection method. National Geophysical Research Institute, Technical Reprot NO.GH-9-NH1, pp.1-59.

Athavale, R.N.,Murti, C.S. and Chand, R., (1980). Estimation of recharge to the phreatic aqifers of the lowr maner basin , India by using the tritium injection method, J. of Hydrology, Vol.45, No.3/4, pp.185-202.

Bahadur, J., Arora, R.P., Mukherjee, P., Bhakta, R.N. (1974). Tritium tracer technique for study of water movement in alluvial soils, Proc. symp. Use of radiations and radioisotopes in studies of Plant productivity, Pantnagar.

Bhishm Kumar and R.C. Saxena (1987), A remedial use of Radio-Isotope Techniques for the study of water logging in Sharda Sahayak Canal Command Area in U.P.,Published in the Proceedings of National Seminar on Impact of Environmental protection on Future Development of India, held on 6-8, April 1987 at Nainital, U.P.

Bhishm Kumar (1990) 'A critical analysis of tritium tagging technique for the study of recharge to groundwater due to rainfall and irrigation' presented in all India Seminar on Groundwater investigation, management and geophysical techniques, 12-12, December, UPGWD & UPTRON, Lucknow.

Bhishm Kumar, S. V. Navada & Rajan Vatsa (1992), Discharge measurement of river Teesta in Sikkim using tracer dilution method, Intl. Conf. Hyd. of Mountainous areas, 28-30 May, 1992, Shimla, India.

Bhishm Kumar & Rm.P. Nachiappan (1995), Correction of length of water column in the measurement of seepage loss from water bodies by single well dilution techniques using radio-tracer, IAHS/IAMAS Symposium and Workshop H4 "Comparison of Tracer Technologies for Hydrological Systems, IUGG Assembly, July 3-14.

Bhishm Kumar and Rm.P. Nachiappan (1995), A mathematical approach based on tritium tagging technique to evaluate recharge to groundwater due to monsoon rains, Tracer Technologies for Hydrological Systems (Proc. of a Boulder Symposium, July, 1995) IAHS Publ. No. 229:237-248.

Bhishm Kumar, S. K. Verma and U. K. Singh (1996) 'Comparative study of soil moisture movement and recharge to groundwater using neutron moisture gauge and tritium tagging technique' presented in National Symp. on Nuclear Techniques in Increasing Crop and Animal Productivity', 7-9 October, BARC, Mumbai.

Bhishm Kumar, Rm. P. Nachiappan (1999) 'Estimation of alluvial aquifer parameter by single-well dilution technique using isotopic and chemical tracers - A comparison'. Accepted for oral presentation in the International Conference on Tracers and Modelling in Hydrogeology (TraM '2000), University of Leige, 23-26 May, 2000, Liege, Belgium.

Datta, P.S., Goel, P.S. Rama and Sangal, S.P. (1973) Groundwater recharge in Western Uttar Pradesh. proc. Ind. Acad. Sci., Vol. LXXV, No.1, pp.1-12.

Datta, P.S. , Desai, B.I.. and Gupta, S.K., (1977) Hydrological investigation in Sabarmati basin. 2, Comparison of ground water recharge rates in parts of Indo-gangetic Sabarmati alluvial, PRL, Ahmedabad, Report No.HYD-77-06.

Datta, P.S., Gupta, S.K., Jayasurya, A. Desai, B.I. and Sharma, S.C. (1978). Soil moisture movement through Vadosezone in alluvial Plains of Sabarmati basin, PRL, Ahmedabad, Report No.Hyd. 78-03.

Datta, P.S. and Goel. P.S. Ground Water recharge in Panjab State (India) using tritium tracer, Nordic Hydrology, 8., 225-236.

Krishnamurthy, K. and Rao, S.M. (1976). Experience with radiotracer methods for hydroelectric projects., Proc. National Symp. on Hydrological problems related to the Development of Power and Industries, IIT, Kanpur, sept. pp. B61-10.

Mookerjee P. (1986). Isotope technique to monitor seasonal groundwater recharge in a raianfed alluvial sandy loam agricultural field Proc. of a seminar on Water Management in arid and semi-arid zone, H.A.U. Hissar 27-29 Nov.

Mookerjee P., and H. Chandrasekharan (1987). Radio tracer investigations of vertical recharge characteristics at an IARI Proc. of Seminar Hydrology, Assoc. of Hydrologists of India, Madra, Aug. 28-30.

Nair, A.R., Pendharkar, A.S. Rao, S.M. and Joshi, N.R. (1977). Investigations of the beneficial effect of the Badji percolation tank using tritium tracer. National Symp. on Isotope applications in Industries, Feb. 2-5, BARC, Bombay.

Nigam, D.D. and Bhishm Kumar (1980), A method of calculating recharge to ground water and flow of ground water from/to rivers using tritium, Workshop on Nuclear Techniques in Hydrology, N.G.R.I., Hyderabad, March 19-21, pp. 92-102.

Rao, S.M. and Jain, S .R. (1985) Tracer transport modeling for unsaturated zone effect of anion exclusion and immobile water. Isotope npraxis 21(2). S-433 bis-438.

Saravanakumar,U., V.N. Yelgaonkar and S.V. Navada (1986) Study of the dispersion of simulated sewage in Marine environment by radiotracer technique - A case study. Proc. IAEA symp. on harmonisation of health related enviornmental measurements using nuclear and isotope techniques, Hyderabad.

Saravanakumar, U., V.N. Yelgaonkar, and S.V. Navada (1995) Radiotracer study of dispersion of effluent off Bombay coast. Indian J. Env. protection 15(9): 602-609.

Saxena, R. C. and Bhishm Kumar (1983), Effect of water column length in the measurement of canal seepage loss by Single Well Dilution Technique using Tritium, Proceedings of the National Seminar on Assessment, Development and Management of Ground Water Resources, April 29-30, 1983, New Delhi.

Saxena,R.S., R.C. Saxena and Bhishm Kumar (1988), Water logging and canal seepage study in Sharda Sahayak Canal Command Area in U.P. Using Radio-Isotope Technique, proceedings of National Seminar on Ground Water Development, pp. T-11/22-31, 7-8, April, 1988, Lucknow.

Singh, B. P., M. Seshadri, Satish Chandra & Bhishm Kumar (1992), Canal seepage: studies by nuclear techniques, Hydrol. J of IAH, 15:

Singh, B. P. & Bhishm Kumar (1995), Is it correct to assume that movement of water in unsaturated soil strata is a piston flow, Proc. Intl. Conf. Hydrol. Water Resour., Dec.20-22, 1993, New Delhi, Sub-surface Water Hydrol. Vol 2., Kluwer Academic, Dordrecht, The Netherlands.

Yelgoankar,V.N., A.S.Pendharkar, S.M.Agashe, U.S.Kumar, S.V.Navada, U.P.Kulkarni, G.N. Mendhekar (1968) Radiotracer study to investigate the dilution and dispersion of sewage off Worli coast. Proc. Int. Conf. on Application of radioisotopes and radiation in Industrial Development Mumbai. pp 350-354.