Dr. Gopal Krishan is currently Scientist-C, at National Institute of Hydrology, Roorkee and Ex-Researcher-Indo Gangetic Basin, Groundwater Resilience Project, British Geological Survey, United Kingdom. Dr. Gopal has over sixteen years of research experience in many facets of hydrological evaluations, surface water and groundwater hydrology project management, and field investigations. Before joining NIH, he worked at IIRS-ISRO, Dehradun for 3 years in National Land Degradation, National Landuse/landcover and National Carbon Projects sponsored by Department of Space. Dr. Gopal received his PhD in Soil Science and Water Management from Dr. Y.S. Parmar University of Horticulture and Forestry, Solan, Himachal Pradesh in 2001. He focused his doctoral research on development of biofertilizer technology. Dr. Gopal is a fellow member of Society of Earth Scientists (F/486), Life member of "Indian Association of Hydrologists (IAH-1878) and member of Indian Society of Remote Sensing and American Water Resources Association.

Dr. Gopal has developed skills in Isotope Hydro-meteorology and the work was presented in several International and national forums in India as well as abroad, hydro-geochemistry and water quality studies. He has also imparted training on instrumentation at IIRS-ISRO and on Isotope Hydrology and groundwater investigations in various training programmes. Presently, he is guiding 2 PhD students and has guided 1 MTech and 1 MSc student. Dr. Gopal has research expertise in applying isotope in air moisture studies for resolving sources of air moisture, monitoring south-west monsoon, identifying recharge sources, developed natural baseline for water quality, identifying zones for sub-marine groundwater discharge in coastal areas. He has published more than 160 research papers in international/national journals and conferences, 1 book, 11 book chapters, news letter and 7 reports.

His key publications are:

- MacDonald, Alan, Bonsor, Helen, Ahmed, Kazi, Burgess, William, Basharat, Muhammad, Calow, Roger, Dixit, Ajaya, Foster, Stephen, Krishan, Gopal, Lapworth, Daniel, Lark, Murray, Moench, Marcus, Mukherjee, Abhijit, Rao, M.S., Shamsudduha, Mohammad, Smith, Linda, Taylor, Richard, Tucker, Josephine, Steenbergen Frank van, Yadav, Shobha. 2016. Groundwater quality and depletion in the Indo-Gangetic basin from ground observations. Nature Geosciences (Impact Factor-12.508) SPRINGER-NATURE.
- 2. Krishan, Gopal, Rao, M.S., Kumar, Bhishm, Kumar, C.P.2014. Possibility of using isotopic composition of ground level vapour (Glv) for monitoring arrival and withdrawal of southwest monsoon. *Current Science* 108(5): 784-786 (Impact Factor-0.91) Indian Academy of Sciences, Bangalore
- 3. Lapworth DJ, MacDonald AM, Krishan G, Rao MS, Gooddy DC, Darling WG. 2015. Groundwater recharge and agedepth profiles of intensively exploited groundwater resources in northwest India. Geophys. Res. Lett., 42, doi:10.1002/2015GL065798(Impact Factor-4.50)
- 4. Krishan, Gopal, Rao, M.S. and Kumar, Bhishm. 2011. Instrumentation for measurement of isotopic composition of air moisture. *Journal of Instrument Society of India*, 41:217-220. Instrument Society of India, IISc, Bang.
- Krishan Gopal. Rao, M.S. and Kumar C.P. 2014. Radon Concentration in Groundwater of East Coast of West Bengal, India. *Journal of Radioanalytical and Nuclear Chemistry*. DOI: 10.1007/s10967-014-3808-4. (Impact Factor-1.41) Springer
- Krishan Gopal. Rao, M.S. and Kumar C.P. 2014. Estimation of Radon concentration in groundwater of coastal area in Baleshwar district of Odisha, India. *Indoor and Built Environment*. DOI: 10.1177/1420326X14549979 (Impact Factor-1.72) <u>Sage</u>
- 7. Krishan, Gopal, Rao, M.S., Kumar, C.P., Kumar, Sudhir, Rao, M. Ravi, Anand. 2015. A study on identification of submarine groundwater discharge in northern east coast of India. International Conference on Water Resources, Coastal and Environmental Engineering. March 12-14, 2015 NIT Surathkal. *Aquatic Procedia*. 4:3-10 Elsevier
- 8. Krishan, Gopal, Srivastav, S.K.; Kumar, Suresh,; Saha, S.K. and Dadhwal, V.K. 2009. Quantifying the underestimation of soil organic carbon by Walkley and Black technique- an example from Himalayan landscape and Central Indian soils. *Current Science*. 96: 1133-1136. (Impact Factor-0.91) Indian Academy of Sciences, Bangalore

He has received following awards and honours:

BEST PRACTICE RESEARCH AWARD in International conference and Exhibition on Innovative Technologies and field applications for Sustainable water, wastewater & energy management-SWWEM-16, during 17-19 August, 2016 IISC, Bangalore; ITS, DST. New Delhi-Travel support to USA; Certificate of appreciation: AWRA-2012, USA; Certificate of best presentation in a session-Peas-2012, Faculty of engineering, GKVV, Haridwar; Merit Scholarship in 10th, 10+1, 10+2, BSc (1st), MSc, PhD

He has research interest in isotope applications in surface-water groundwater interaction, SW monsoon monitoring, tracking recharge source, studying emerging organic contaminant in groundwater in urban areas.

Dr. Gopal has been full members of the SCOR Working Group on Global Groundwater Fluxes to the Ocean for year 2015. He is member International Advisory Board of many journals and has been the reviewer of many peer reviewed reputed journals like Plos One, Journal of Hydrology, Applied Radiation and Isotopes, Hydrological Sciences, Quaternary International, Arabian Journal of Geosciences (Springer), Journal of Earth System & Science (Springer), Sustainable Water Resource Management (Springer), Applied Water Science (Springer), Environ Sciences group, Journal of Agricultural Sciences (International), African Journal of Environmental Science & Technology, International Journal of Agricultural Policy & Research, International Research Journal of Public and Environmental Health, Journal of Indian Association of Hydrologists, Journal of Agricultural Science and Food Technology