

Dr. Ajay Kumar Bhardwaj (<https://cssri.res.in/staff-members/dr-ajay-k-bhardwaj/>)

is a Principal Soil Scientist at the Central Soil Salinity Research Institute, Karnal, India. He is also an Adjunct Professor/ PG Teacher at the University of Horticultural Sciences, Bagalkot, India, since 2013, CCS Haryana Agricultural University, Hisar, India, since 2018, and DAV University, Jalandhar, Punjab, India, since 2019. He holds a Ph.D. in Soil Science from the CSK Himachal Pradesh Agricultural University, Palampur, India (2003). Broadly his work involves discovering interactions of chemical, physical and hydrological processes in agroecosystems to develop environmentally and socio-economically sustainable solutions. His team uses interdisciplinary and stakeholder-participatory approaches to study the impacts and to address the issues. His current areas of



interest include exploring climate change mitigation and adaptation strategies for salt-affected land areas, explore impacts of diverse management on carbon and nitrogen cycling in agroecosystems, and developing enhanced efficiency nano-materials for environmental remediation and crop productivity enhancement.

He has authored over 60 peer reviewed research articles (<https://scholar.google.co.in/citations?user=aZz97QsAAAAJ&hl=en>), including a book on ecological implications of 2nd and 3rd generation cellulosic and conventional bioenergy feedstocks: “Sustainable Biofuels: An Ecological Assessment of the Future Energy” (jointly published by DeGruyter, Germany and Higher Education Press, China, 2014). He has served as a reviewer for scientific assessments/ project grants by the National Research Foundation (NRF) of South Africa, US Department of Energy (DOE), Hungarian Scientific Research Fund (OTKA), Netherlands Organization for Scientific Research (NWO), and Department of Science and Technology (DST), India. He is also serves as an editor with the Ecological Processes, Springer-Nature (<https://ecologicalprocesses.springeropen.com/about/editorial-board/ajay-bhardwaj>), and Consulting Editor with Journal of Soil Salinity and Water Quality (ISSSWQ; <http://issswq.in/editorial-board/>).

Dr. Bhardwaj has been Lal Bahadur Shastri Outstanding Young Scientist Awardee [2015, Indian Council of Agricultural Research (ICAR)-Department of Agricultural Research and Education (DARE), Government of India] and UNESCO-TWAS Associate Scientist Awardee (2014, The World Academy of Sciences, Italy). He has bagged several national and international fellowships including those from Indian National Science Academy, India, The World Academy of Sciences, Italy, and MASHAV, Israel for collaborative research with the Indian Institute of Technology (IIT), Kanpur, the National Institute of Theoretical and Applied Physical Chemistry (INIFTA), Argentina, and the Agricultural Research Organization (ARO) of Israel. In the past, he worked with the North Carolina State University (NCSU), USA, the Volcani Center, Israel, and the Great Lakes Bioenergy Research Center (GLBRC) at Michigan State University and Kellogg Biological Station, USA, and his work involved wastewater remediation and use for crop production in arid climates, soil erosion and water quality improvement, bioenergy/ biofuel sustainability, and exploring hydrological and water use related implications of diverse agro-ecological management conditions.

Research areas: Sustainability, agroecosystems, climate change mitigation & adaptation, biogeoscience.