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Dr. Ashok K. Patra did his early education at Bankura, West Bengal. He studied B. Sc. (Agri.) during 1979-1983 from Banaras Hindu University (Varanasi), and M. Sc. and Ph. D. in Soil Science & Agricultural Chemistry in 1985 and 1989, respectively, from IARI, New Delhi. He joined ARS (ICAR) in 1989 and started his career at IGFRI, Jhansi as a Scientist/Scientist Sr. Scale (1990-1998). Then as a Sr. Scientist he moved to CIFE, Mumbai (1998-1999), and to IARI, as Sr. Scientist (1999-2006) and Principal Scientist (2006-2014). Since May 2014 he is Director of the Indian Institute of Soil Science, Bhopal.

During his scientific career, he has also worked as a postdoctoral scientist (1991-1993) at ICRISAT, Hyderabad, and under Indo-UK Collaborative programme a Visiting Study Fellow (1996) at the Institute of Grassland and Environmental Research (IGER), Devon, UK. He was a recipient of the prestigious INRA Fellowship (2001-2003) of the French Research Ministry to work on molecular soil ecology in N cycling at the CNRS-Claude Bernard Université Lyon, France. For pursuing the frontier soil science research, DBT (GOI) awarded him the 'DBT Overseas Asssociateship'- 2008 for which he visited USA during 2008-2009.

During his research career, Dr. Patra has made outstanding contribution on different aspects of nitrogen cycling, its ecology and biodiversity. He has developed a better procedure for bromide (Br^-) extraction and estimation as a tracer for studying NO_3^--N movement/leaching in soil-water systems. Using ^{15}N and Br^- tracers, quantified the N-transformations and critical periods of N losses in major soils of India. Using lysimeters under intensive legume based forage production system, he unravelled that leaching of nutrients during large storms is a major constraint in the semiarid region of India. He demonstrated that potential-N-mineralization (PNM) rates are strongly influenced by interactive effects of management systems, soil-organic matter, depth and weather conditions. He reported that PNM under permanent grasslands released significant amounts of N from organic materials, which is largely distinct from macro-organic fraction. He has established the mechanism that C_2H_2, which slowly released from encapsulated calcium carbide and inhibits activity of ammonia mono-oxygenase, is associated with reducing population of the ammonia oxidizing bacteria in soil. He has developed/standardized methodologies/techniques for studying cell density of nitrifying organisms and genetic diversity (at molecular level) of functional communities for N-cycling in agroecosystems. Reported for the first time that intensive system enhanced the activity and abundance of functional communities driving N cycling, but reduces their genetic diversity. Using molecular probes, he has demonstrated that intensity of land management and the plant species composition are of paramount importance to shape up the community functions and diversity involved in N-cycling.

Dr Patra has contributed more than 200 publications, which has been widely cited throughout the world. He was a faculty of Post Graduate School, IARI, New Delhi and actively involved in teaching and guiding of postgraduate students at IARI for 15 years (1999-2014). He is a recipient of several awards/recognitions and fellowships, namely: British Council TCT Award 1996; DBT Overseas Associateship Award 2008; FAI Dhiru Morarji Memorial Award, 2011; Bharat Jyoti Award, 2012; Rajiv Gandhi Excellence Award, 2012; ISSS Dr. G.S. Sekhon Memorial Lecture Award, 2012 of ISSS, New Delhi; Hooker of IARI (2013), New Delhi.

Dr. Patra was Editor, Range Management and Agroforestry 1996-1998; Councillor, Indian Society of Soil Science (2005-2006); President (Delhi Chapter), Indian Society of Soil Science (2012-14); Member, Nature's Reader Panel (2009). He served as expert of several important committees and acted as reviewer for more than 25 international journals. Dr Patra is a Fellow of the National Academy of Agricultural Sciences, Indian Society of Soil Science and Range Management Society of India.