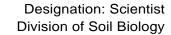
# **Profile**

# Dr. Sudeshna Bhattacharjya





⊠[sudeshna.bb@outlook.com; Sudeshna.Bhattacharjya@icar.gov.in]

### **Research specialization:**

- Soil biology and ecology,
- · Soil microbial autotrophy,
- Biogeochemistry
- Soil organic matter decomposition,
- Dynamics of soil microbes and enzymes,
- Terrestrial elemental cycling (CNPK),
- Sustainable agricultural practices,
- Bio-waste recycling

## **Professional Experience:**

- Agricultural Research Scientist (ARS) in ICAR-National Academy of Agricultural Research Management (01/01/2015 –09/01/2015)
- Agricultural Research Scientist (ARS) in Division of Soil Biology at ICAR-Indian Institute of Soil Science, Bhopal (10/04/2015 – Present)

#### **Awards and Honours:**

- ✓ Top merit listed students in West Bengal in Madhyamik (Class 10 final or Secondary)
- ✓ University Merit Scholarship by BCKV, Mohanpur, West Bengal (2004-2008).
- ✓ ICAR Junior Research Fellowship for M.Sc (Aq.) Soil Science (All India Rank: 16) (2008-2010)
- ✓ DST-INSPIRE Junior Research Fellowship for Ph.D (Soil Science) (2010-2012)
- ✓ DST-INSPIRE Senior Research Fellowship for Ph.D (Soil Science) (2012-2014)
- ✓ ICAR-NET Qaulified (2010, 2011)
- ✓ Early Career Research Award by DST-SERB, Govt. of India (2017-2020)
- ✓ Best Oral Presentation Award in National Conference on "Organic Waste Management for Environmental and Food Security", 8-10<sup>th</sup> February, 2018 at IISS, Bhopal.

- ✓ Best Oral Presentation in 44<sup>th</sup> ACISAC & National Symposium on "Balanced Fertilizer to Sustainable Soil Health, Crop Production and Food Security" held at Dept. Of Soil Science. GBPUA&T, Pantnagar, 25-26<sup>th</sup> November, 2011.
- ✓ Reviewer Recognition certificate from PLOSONE (2018, 2019); Soil Use and Management (2019); Journal of The Saudi Society of Agricultural Sciences (2018); Ecological Engineering (2017); Agriculture Ecosystem & Environment (2017).

## **Top Ten publications:**

- Padhan K, **Bhattacharjya Sudeshna**\*, Sahu A, Manna MC, Sharma MP, Singh M, Wanjari R, Sharma RP, Sharma GK, Patra AK. (2020). Soil N transformation as modulated by soil microbes in a 44 years long term fertilizer experiment in a sub-humid to humid Alfisol. *Applied Soil Ecology*. 145: 103355 (Corresponding author).
- Avijit Ghosh, Madhab Manna, Asha Sahu, Nirmal De, J Thakur, Asit mandal, Sudeshna Bhattacharjya, Mohammad Mahmudur Rahman, Ravi Naidu, Raja Dakhli, Mahaveer Sharma, Sukanya Misra (2020). Novel bio-filtration method for the removal of heavy metals from municipal solid waste. Environmental Technology & Innovation. 17: 100619
- Sahu Asha, Manna, MC, Bhattacharjya Sudeshna, Thakur JK, Mandal A, Rahman MM, Singh UB, Bhargav VK, Srivastava S, Patra AK, Chaudhari SK and Khanna SS (2019). Thermophilic Ligno-Cellulolytic Fungi: The future of Efficient and Rapid Bio-Waste Management. *Journal of Environmental Management*. 244:144-153.
- **Bhattacharjya Sudeshna**, Sahu Asha, Manna MC and Patra AK (2019). Potential of surplus crop residues, horticultural waste and animal excreta as nutrient source in the central and western regions of India. *Current Science*, 116 (8):1314-1323.
- Manna MC, Rahman MM, Naidu R, Sahu Asha, Bhattacharjya Sudeshna, Wanjari RH, Patra AK, Chaudhari SK, Majumdar K and Khanna SS (2018) Bio-waste management in subtropical soils of India: Future challenges and opportunities in Agriculture. Advances in Agronomy. 152: 87-148.
- **Bhattacharjya Sudeshna,** Bhaduri D, Chauhan S, Chandra R, Raverkar KP, Pareek N. (2017). Comparative evaluation of three contrasting land use systems for soil carbon, microbial and biochemical indicators in North-Western Himalaya. *Ecological Engineering*. 103: 21-30.
- Joshi SK, Bajpai RK, Kumar P, Tiwari A, Bachkaiya V, Manna MC, Sahu Asha, Bhattacharjya Sudeshna, Rahman MM, Wanjari RH, Singh M, Coumar V, Patra AK, Chaudhari SK (2017) Soil Organic Carbon Dynamics in a Chhattisgarh Vertisol after Use of a Rice–Wheat System for 16 Years. Agronomy Journal. 109(6):1-14.
- Bhattacharjya Sudeshna, Ramesh Chandra, Mahaveer P. Sharma, Sushil K. Sharma, and RichaAgnihotri. (2017). Biochar and Crop Residue Amendments on Soil Microbial and Biochemical Properties. *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* 87 (3): 975-983.
- Bhattacharjya Sudeshna, Chandra R, Pareek N, Raverkar KP. (2016). Biochar and crop residue application to soil: effect on soil biochemical properties, nutrient availability and yield of rice (*Oryza sativa* L.) and wheat (*Triticum aestivum* L.). Archives of Agronomy and Soil Science. 62 (8): 1095-1108.
- **Bhattacharjya, S** and Chandra R (2013). Effect of inoculation methods of *Mesorhizobium ciceri* and PGPR in chickpea (*Cicer arietinum* L.) on symbiotic traits, yields, nutrient uptake and soil properties. *Legume Research*, 36 (4): 331-337