Dr. ASHA SAHU

Designation: Scientist (Sr. Scale)
Division of Soil Biology

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Research specialization:

Soil Chemistry/Fertility/Microbiology

(Organic matter recycling, Waste management, Rapid Composting & Bioremediation)

Professional Experience:

Position held	Institution	Period of appointment
Scientist	ICAR-Indian Institute of Soil Science, Bhopal	03/05/2010-01/09/2010
Scientist	NAARM, Hyderabad	01/09/2010-31/12/2011
Scientist	ICAR-Indian Institute of Soil Science, Bhopal	01/01/2011-03/05/2014
Scientist (Senior Scale)	ICAR-Indian Institute of Soil Science, Bhopal	03/05/2014-contd.

Awards and Honours:

- Junior Research Fellowship of ICAR 2005
- UGC-BHU fellowship for Ph.D. Program 2007
- BHU Gold Medal 2008
- Binani Gold Medal 2008
- Senior Research Fellowship of ICAR 2008
- Best Doctoral Research Presentation Award by Indian Society of Soil Science (ISSS) 2012
- Bharat Jyoti Award and Certificate of Excellence by IIFS, New Delhi 2013
- Young Scientist Award by MPCST 2017
- Bharat Ratna Indira Gandhi Gold Medal Award 2019

List Ten publications:

1. **Sahu Asha**, Manna MC, Bhattacharjya S, Rahman MM, Mandal A, Thakur JK, Sahu K, Bhargav VK, Singh UB, Sahu KP, Patra AK (2020) Dynamics of maturity and stability indices during decomposition of biodegradable city waste using rapo-compost technology. Applied Soil Ecology.155:103670.
2. Manna MC, **Sahu Asha**, De N, Thakur JK, Mandal A, Bhattacharjya S, Ghosh A, Rahman MM, Naidu R, Singh UB, Dakhli R, Sharma MP, Misra S (2020) Novel bio-filtration method for the removal of heavy metals from municipal solid waste. Environmental Technology & Innovation 17:100619.
3. **Sahu Asha**, Manna, MC, Bhattacharjya S, 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.
4. Bhattacharjya S, **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.
5. Manna MC, Rahman MM, Naidu R, **Sahu Asha**, Bhattacharjya S, 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.
6. **Sahu Asha**, Bhattacharjya S, Atoliya N, Manna MC, Patra AK (2018) Rapid and effective method for exploring cellulase-producing potential of bacterial strains. Environment and Ecology. 36(3): 828-834.
7. **Sahu Asha**, Singh SK, Sahu N, Manna MC (2016) Suitability of extractants for predicting availability of cadmium in Inceptisol, Alfisol and Vertisol. Ecology, Environment and Conservation. 22(1): 155-162.
8. **Sahu Asha,** Bhattacharjya S, Manna MC, Patra AK (2015) Crop residue management: a potential source for plant nutrients. JNKVV Research Journal. 49(3): 301-311.
9. **Sahu Asha**, Singh SK, Sahu N, Ram Bali, Manna MC (2014) Adsorption-desorption studies of cadmium in three different soil orders. Nature Environment and Pollution Technology. 13(3): 559-564.
10. **Sahu Asha**, Mandal A, Thakur JK, Manna MC, Rao AS (2012) Exploring bioaccumulation efficacy of Trichoderma viride: an alternative bioremediation of cadmium and lead. Natl. Acad. Sci. Lett. 35 (4): 299-302.

Technology generated:

- Rapo-compost technology
- In-situ decomposition technology (https://www.youtube.com/watch?v=ikzLT7ByYU8)
- Family net vessel compost technology (https://www.youtube.com/watch?v=q-TI3xk_90A)
- Biofilter technology