SCIENTIST PROFILE

1. Name & Designation : Dr. Sangita Mohanty, Scientist
2. Date of Birth : 6th September, 1975
3. Date of joining ICAR : 21st April, 2009
4. Date of joining the present post : 21st April, 2009
5. Qualification (highest degree) : Ph.D
6. Post Doctoral Research Experience/Training:
   - Worked at IRRI-India Office from 01.03.2007 to 31.10.2008 as consultant and major activity was monitoring green house gas emission from rice-wheat system under resource conservation technology in Indo-Gangetic Plain
7. Area of Specialization/research interest: Soil Fertility, Soil Chemistry and Soil Microbiology
8. Significant Contribution including products and patents (Five bullets):
   - Identified improved N management strategies for enhancing Nitrogen Use Efficiency and minimizing N loss in aerobic rice production system.
   - Developed Customized Leaf Colour Chart for Nitrogen Management in Rice for Different Ecologies
   - Quantified carbon and nitrogen mineralization rates in soils of rice-rice system under long term application of chemical fertilizer and farm yard manure
   - Optimized N application Schedule for medium to long duration varieties through simulation approach
9. Awards/Honours:
   - Desai and Biswas Gold Medal For Academic Excellence in MSc. Programme 2001, Division of Soil Science & Agricultural Chemistry, IARI, New Delhi
   - Dr S.P. Raychaudhuri Gold Medal 2007 for Best Presentation of Ph.D dissertation Medal. Indian Society of Soil Science, New Delhi.
   - Best worker in 67th Foundation Day 2013 CRRI, Cuttack.
10. Publications (10 best):
    i. Shahid M , Shukla AK Nayak AK, Tripathi R, Kumar A **Mohanty S,** Bhattacharyya P, Raja R and Panda BB (2013). Long-term effects of fertilizer and manure applications on soil quality and yields in a sub-humid tropical rice-rice system. **Soil Use and Management** (DOI: 10.1111/sum.12050).
    ii. Bhattacharyya P, Nayak AK**, Mohanty S**, Tripathi R, Shahid M, Kumar A , Raja R, Panda BB, Roy KS, Neogi S, Dash PK, Shukla AK and Rao KS (2013). Greenhouse gas emission in relation to labile soil C, N pools and functional microbial diversity as influenced by 39 years long-term fertilizer management in tropical rice. **Soil & Tillage Research** 129: 93–105.
    iii. Pathak H, **Mohanty S**, Jain N and Bhatia A (2010). Nitrogen, phosphorus, and potassium budgets in Indian agriculture. **Nutrient Cycling in Agro ecosystem** 86: 287–299
    iv. Pathak H, Jain N. Bhatia A, **Mohanty S** and Gupta N (2009). Global warming mitigation potential of biogas plants in India. **Environmental Monitoring and Assessment** 157: 407–418.
    v. **Mohanty S**, Patra AK and Chhonkar PK (2008). Neem (*Azadirachta indica*) seed kernel powder retards urease and nitrification activities in different soils at contrasting moisture and temperature regimes. **Bioresource Technology** 99: 894–899.