

Gangadhar Meher University, Amruta Vihar, Sambalpur (Faculty Profile)

Dr. Santosh Kumar Sethi

Assistant Profes Biotechnology, G.M Uni Gopalmal, Fatak +91-7008846665 & sksethi2k@g sksethi@gmuniv	ology iversity, Amruta Viha s, Sambalpur & 9853432559 mail.com	r, Sambalpur			
epartment of Biotechnology, G.M Uni Gopalmal, Fatak +91-7008846665 & sksethi2k@g sksethi@gmuni	iversity, Amruta Viha k, Sambalpur & 9853432559 mail.com	r, Sambalpur			
Gopalmal, Fatak +91-7008846665 & sksethi2k@g sksethi@gmuni	k, Sambalpur & 9853432559 mail.com	r, Sambalpur			
+91-7008846665 & sksethi2k@g sksethi@gmuniv	& 9853432559 mail.com				
sksethi2k@g sksethi@gmuniv	mail.com				
sksethi@gmuni					
	versity.ac.in				
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AAX-9021-2020					
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Institution	Year	Subject Details			
Berhampur University	2002	Zoology (Hons.), Chemistry, Botany, Environmental Science, English, Oriya			
Utkal University	2004	Biotechnology			
Utkal University	2011	Biotechnology			
National Rice Research Institute	01-03-2011 to 30- 06-2014	Microbiology	y, Climate Change		
National Dica Descarch Institute	01-07-2014 to 31- 10-2019	Biotechnology			
	Berhampur University Utkal University Utkal University	Berhampur University 2002 Utkal University 2004 Utkal University 2011 National Rice Research Institute 01-03-2011 to 30-06-2014	Berhampur University 2002 Zoology (H. Botany, Environmental Utkal University 2004 Biotal Utkal University 2011 Biotal National Rice Research Institute 01-03-2011 to 30- 06-2014 National Rice Research Institute 01-07-2014 to 31- Biotal Rice Research Institute		

Areas of Interest/ Specialization:

Name

Bioprospecting of diazotrophs and cyanobacteria

Genomics and Proteomics of PGPRs under stressed environments

Biofertilizers & Biopesticides formulations for sustainable agriculture

Mitigation potential of GHGs (CH4, N2O, CO2) from rice ecosystem (Climate Resilience)

Teaching/Research Experience						
Organization/Institution	Designation	Duration	Role			
Department of	Assistant Professor	02-03-2020 to	Teaching & Research			
Biotechnology,		contd.				
Gangadhar Meher						
University						
Department of	Associate Professor	02-11-2019 to 29-	Teaching			
Biotechnology, Kalinga		02-2020				
University, Raipur						
Institute of Management	Lecturer	01-11-2004-31-07-	Teaching			
and Advanced Global		2006				
Exellence (IMAGE)						
P.G. Dept. of	Guest Faculty	2007-2010	Teaching & Research			
Biotechnology, Utkal						
University						
Awards and Honors						

Photograph

- Awarded with UGC-National Post Doctoral Fellowship in Microbial Biotechnology (2013-14) funded by UGC, Govt. of India
- Awarded with UGC-National JRF&SRF in Biotechnology, (2006-07) funded by UGC, Govt. of India
- Awarded with CSIR-Research Associateship (2013-14) Funded by CSIR, Govt. of India, for Post Doctoral Research
- Awarded with ICAR-Research Associateship (2010-11) Funded by ICAR, Govt. of India for Post Doctoral Research at National Rice Research Institute (ICAR), India

International Collaboration/Consultancy

- 1. Dr. Anna Mårtensson, Professor, Biological Nitrogen Fixation Laboratory, Department of Soil and Environment, Swedish University of Agricultural Sciences, Uppsala, Sweden
- 2. Dr. Augustine Okpani Oko, Senior Assistant Professor, Department of Biotechnology, Ebonyi State University, Abakaliki, Nigeria

Extra-mural Projects (Give Detail	ils)
Completed: (1)	
Projects in hand:	
Projects submitted: (1)	
Ph. D. Guidance	
Guided (), Guiding ()	
Publications	
Number of Publications:	
Books/Monographs:	Total (1), Last Five Years (1), Last Three Years (), Last One Year ()
Book Chapters:	Total (5), Last Five Years (), Last Three Years (), Last One Year ()
Research papers:	Total (19), Last Five Years (9), Last Three Years (6), Last One Year (3)
Reviews:	Total (1), Last Five Years (), Last Three Years (), Last One Year ()

Best Peer/Review Publications (Selected)

- 1. Lakshmi Singh, **Santosh Kumar Sethi*** (2020). Stress Tolerance Effect of Three Different Sub-Aerial Cyanobacteria sp. Isolated from Exteriors of Buildings under Adverse Environmental Conditions. Journal of Pure and Applied Microbiology 14(4): 2729-2743.
- 2. **Santosh Kumar Sethi*** (2020). Characterization and efficacy of indigenous Azotobacter sp. isolated from different habitats for their nitrogen fixing ability and growth of rice. Research Journal of Biotechnology 15 (12): 113-119.
- 3. **Santosh Kumar Sethi*** and Arup Kumar Mukherjee (2018). Screening of Biocontrol Potential of Indigenous *Bacillus* spp. Isolated from Rice Rhizosphere against R. solani, S. oryzae, S. rolfsii and Response towards Growth of Rice. Journal of Pure and Applied Microbiology 12(1), 41-53
- 4. S. Mohanty, C.K. Swain, R. Tripathi, S.K. Sethi, P.C. Dalai, P. Bhattacharya, A. Kumar, R. Tripathi, M. Sahid, B.B. Panda, U. Kumar, B. Lal, P. Gautam, S. Munda, A. K. Nayak (2018). Nitrate leaching, nitrous oxide emission and N use efficiency of aerobic rice under different N application strategy. Archives of Agronomy and Soil Science, 64 (4): 465-479
- 5. S. Mohanty, C.K. Swain, S.K. Sethi, P.C. Dalai, P. Bhattacharya, A. Kumar, R. Tripathi, M. Sahid, B.B. Panda, U. Kumar, B. Lal, P. Gautam, S. Munda, A. K. Nayak (2017). Crop establishment and nitrogen management affect greenhouse gas emission and biological activity in tropical rice production. Ecological Engineering, 104: 80-98.
- 6. Sandhya Rani Kuanar, Anuprita Ray, **Santosh Kumar Sethi**, Krishnendu Chattopadhyay, Ramani Kumar Sarkar (2017). Physiological basis of stagnant flooding tolerance in rice. Rice Science, 24(2):73-84.
- 7. A. K. Nayak, R. Raja, K. S. Rao, A. K. Shukla, S. Mohanty, P. Bhattacharyya, B. Lal, S. K. Sethi, C. Puri, D. Nayak, C. Swain (2015). Effect of fly ash application on soil microbial response and heavy metal accumulation in soil and rice plant. Ecotoxicology and Environmental Safety 114: 257-262
- 8. **Santosh K. Sethi** and Siba P. Adhikary (2012). Cost effective pilot scale production of biofertilizer using *Rhizobium* and *Azotobacter*. African Journal of Biotechnology, 11(70): 13490-13493.
- 9. **S.K. Sethi** and S. P. Adhikary (2014). Growth response of region-specific Rhizobium strains isolated from Arachis hypogea and Vigna radiata to different environmental variables. African Journal of Biotechnology 13(34): 3496-3504.

Paper Presentation in Major Conferences (Upto 5)

- 1. International conference on ARRW Golden Jubilee International Symposium 2013 held from 02nd to 5th March, 2013 at Central Rice Research Institute, Cuttack and presented the paper "N management strategy to improve N recovery efficiency and reduce N2O emission from aerobic rice production system".
- 2. National Seminar on Plant Genomics and Biotechnology: Challenges and Oppurtunities in 21st Century held from 23-24 January 2016 Organized by Department of Agricultural Biotechnology, Orissa University of Agriculture and Technology, Bhubanswar and presented the Paper "Efficacy of Bacillus strains isolated from rice rhizosphere on plant growth promoting and biocontrol activity against phytopathogens
- 3. 51st AMI (Association of microbiologist of India) International Symposium and Workshop held from 14th to 17th December 2010 at BIT, Mesra, Ranchi and presented paper "Growth response of region-specific Rhizobium strains from

- Arachis hypogea and Vigna radiata to different environmental variables" presented in poster session
- 4. International conference on Algal Biomass-Resources and Utilization held from 27-30th July 2009 at the Krishnamurthy Institute of Algology, Chennai and presented paper "Efficacy of region-specific Rhizobium and consortium of seaweed liquid fertilizer (SLF) on vegetative growth and yield of Leguminous crops" in oral session
- 5. 48th AMI (Association of microbiologist of India) International conference held from 18th-21st December 2007 at IIT Madras, Chennai and presented paper "Efficacy of region specific and crop specific Rhizobium strains on the vegetative growth and yield of *Arachis hypogea* and *Phaseolus mungo*" in poster session

Patents (if any)

Filed: (), Accepted: ()

Events (Seminar/Symposium/Webinar/Workshop/FDP/Conference etc.) organized in capacity of convener/co-convenor

National: (2), International: ()

Memberships of Professional Bodies/Societies (Up to 5)

- Life member, Association of Microbiologist of India (AMI) (No-2251-2008)
- 2 Life Member, Society of Biotechnology and Bioinformatics (SBB) (No-45, Dt. 01-11-2016)
- 3 Life Member, Seaweed Research and Utilization Association (SRUA), India
- 4 Life Members, Applied Zoologist Research Association (AZRA), India
- 5 Member in the Reviewer Board of the Indian Journal of Microbiology Research
- 6 Member in the Reviewer Board of the African Journal of Biotechnology & African Journal of Microbiology Research

Other Details (Academic/Research related)

- 1. XXXIII-UGC NRCBS Winter School on "*Differential Gene Expression in Plants and Bacteria*" held during 1st February to 14th February 2017 at UGC Networking Resource Centre in Biological Sciences, School of Biological Sciences, Madurai Kamaraj University, Madurai, Tamilnadu, India
- 2. ICAR Niche Area of Excellence sponsored 21 days Refresher and Training on "Utilization of Microbial and Plant Genomic Resources for Plant Disease Management" February 5th to February 25th, 2015. at Department of Biotechnology, University of Agricultural Sciences, Dharwad, Karnataka, India
- 3. ICAR sponsored 10 days Short course on *Advances in Gene Identification and Marker Developments* held from 01-10th October, 2012 at National Research Centre for Banana (ICAR), Trichy, Tamilnadu, India
- 4. International workshop on *rRNA sequencing* held from 14th to 17th December 2010 on 51st AMI (Association of microbiologist of India) at BIT, Mesra, Ranchi, India.
- 5. National Workshop-cum-training programme on *Electron Microscopy: "Basics and Application in Biological and Material Sciences"* held from 22nd November to 25th November 2009 at Department of Instrumentation Science Jadavpur University, Kolkata, India
- 6. Orientation training on "*Biofertilizer (BGA): production technology & quality control*" organized by the Directorate of Agriculture & Food production, Orissa, Bhubaneswar in collaboration with P.G. Deptt. Of Biotechnology, Utkal University on 7th & 8th February 2009.
- 7. Workshop-cum-training programme on *Confocal Microscopy*: Basics and Applications held from 2nd December to 4th December 2008 at Institute of Life Sciences, Bhubaneswar
- 8. Workshop-cum-training programme on *BGA* and *Azolla Biofertilizer* held from 23rd to 29th February 2008 at the Indian Agricultural Research Institute, New Delhi
- 9. Workshop-cum-training on *Bacterial Biofertilizer* held from 30-12-2007 to 31-12-2007 at village: Maniakati (Extension laboratory of DBT sponsored project, Dept. of Biotechnology, Utkal University) Block- Surada, Dist: Ganjam (Orissa) in collaboration with P.G. Deptt. Biotechnology, Utkal University.
- 10. 2020 (January April): Successfully completed NPTEL 12-week Online Certification course on "Human genetics and Biotechnology" (IIT Madras)

Research Matrix [Current]

Database	Total citations	Total publications	Open Access	h-index
WoS	86	18	4	4
Publons	76	18	4	4
Scopus	105	8	3	4
GS	246	24	4	8
RG	155	24	4	NA

(Signature)