



1. Name: Dr Semanti Basu
2. Designation: Departmental In-Charge & SACT-I
3. Department: Microbiology
4. Date of Joining: 12/11/2009
5. Contact Address: Belgharia, Kolkata-700056
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7. Academic Qualifications:

Degree	Stream	College/ University	Year of Passing
Ph.D.	Microbiology	University of Kalyani	2017
M. Sc	Microbiology	University of Calcutta	2008
B. Sc	Microbiology (H)	University of Calcutta	2006

8. Professional Membership: NA
9. Total Experience: 14 years
- 8 a) Teaching Experience: 14 years
- 8b) Industry Experience: NA
- 8c) Research Experience: More than 7 years
10. Experience Details: Teaching, Handling Laboratory Instruments, Trouble shooting,
11. Area of Research: Metagenomics, Nanobiotechnology and Molecular Biology

12. Publications:

12 a) Number of Publication in International Journal: 5

12 b) Number of Publication in National Journal: NA

12c) Number of Publication in International Conference Proceedings: 4

12d) Number of Publication in National Conference Proceedings: 1

12e) Number of Books / Books chapters: NA

13) List of Publication:

13a) International Journal:

Author(s) Title of the Paper Details of	Author(s) Title of the Paper Details of	Author(s) Title of the Paper Details of	Author(s) Title of the Paper Details of
Semanti Basu, Saptarshi Chatterjee, Arghya Bandyopadhyay and Keka Sarkar	"Potential application of superparamagnetic nanoparticles for extraction of bacterial genomic DNA from contaminated food and environmental samples" 2013	Journal of Science of Food & Agriculture	Wiley
Tanima Paul, Semanti Basu, Keka Sarkar	"SPION-mediated soil DNA extraction and comparative analysis with conventional and commercial kit-based protocol" 2014	3 Biotech	Springer
Tanima Paul, Saptarshi Chatterjee, Arghya Bandyopadhyay, Dwiptirtha Chattopadhyay, Semanti Basu, Keka Sarkar	"A Simple one pot purification of Bacterial Amylase from fermented broth based on affinity towards starch functionalized magnetic nanoparticles" 2015	Preparative Biochemistry and Biotechnology	Taylor and Francis
Semanti Basu, Tanima Paul, Priya Yadav, Avijit Debnath, Keka Sarkar	"Molecular Study of Indigenous Bacterial Community Composition on Exposure to Soil Arsenic	Polish Journal of Microbiology	Polish Society of Microbiologists

	Concentration Gradient” 2017		
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b) Abstract in International Conference:

Author(s)	Title of the Paper	Details of Conference
Saptarshi Chatterjee, Semanti Basu, Tanima Paul, Arghya Bandyopadhyay, Dwiptirtha Chattopadhyay, Keka Sarkar	“A Superparamagnetic Nanoparticle Based Approach towards the Purification of Biomolecules: Nucleic Acids and Proteins”	Approach towards the Purification of Biomolecules: Nucleic Acids and Proteins” 4th International Conference on “Advanced Nano Materials” organized by Department of Physics and Department of Metallurgical & Materials Engineering, Indian Institute of Technology Madras (2012)
Dwiptirtha Chattopadhyay, Saptarshi Chatterjee, Semanti Basu, Tanima Paul, Arghya Bandyopadhyay, Keka Sarkar	“One pot synthesis of zero valent iron nanoparticles for its potential application in waste water treatment	4th International Conference on “Advanced Nano Materials” organized by Department of Physics and Department of Metallurgical & Materials Engineering, Indian Institute of Technology Madras (2012).
Semanti Basu, Tanima Paul, Saptarshi Chatterjee, Dwiptirtha Chattopadhyay, Arghya Bandyopadhyay, Keka Sarkar	“Rapid detection of coliform bacteria from water samples using magnetic nanoparticles”	53rd AMI; International Conference on “Microbial Worlds: Recent Innovations and Future Trends” organized by KIIT University, Bhubaneswar (2012).
Tanima Paul, Semanti Basu, Keka Sarkar	Potential Application of Magnetic Nanoparticles for Purification of Biomolecules (Protein and Nucleic acid): An Economic Alternative in Industrial Biotechnology”	International Symposium on Genetic Analysis: Transnational and Developmental organized by Department of Zoology, Burdwan University (2014).

c) Abstract in National Conference:

Author(s)	Title of the Paper	Details of Journal or Conference
Tanima Paul, Saptarshi Chatterjee, Semanti Basu, Dwiptirtha Chattopadhyay, Keka Sarkar	“Purification of Bacterial Amylase Using Starch Functionalised Magnetic Nanoparticle”	National Conference on Utilization of Microbial Resources organized by Department of Botany, Visva-Bharati, Santiniketan (2012)

14. Short term courses/ Workshop attended (Minimum One week): 3
15. Area of Specialization: Microbiology
16. Additional academic or co- curricular activities undertaken: Study Tour, Seminar, Faculty Exchange Program