

Curriculum Vitae

Name: Anasuya Ganguly
Date of Birth: 30th May 1972
Nationality: Indian
Sex: Female
Marital Status: Married

Contact Details

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Address: Anasuya Ganguly
Assistant Professor, Biological Sciences
Birla Institute of Technology & Science-Pilani
K K Birla Goa Campus
Goa- 403726, India

Research Interest:

Exploring the potential of stem cells, to create a part or whole tissue engineered organs, with the help of various scaffolds. Environmental biotechnology to make the world a cleaner and healthier place.

Teaching Interest:

Stem Cell Biology, Regenerative Biology, Cancer Biology and Environmental Biology

Educational Record:

PhD - Bose Institute & University of Jadavpur, Kolkata (2003). PhD Supervisor: Prof. Anuradha Lohia.
Thesis title "Regulation of Cell Division in *Entamoeba*"
MSc - (Zoology) from University of Kolkata, (1996), Special paper: Advanced cytology and genetics
BSc - (Zoology Hons.) from Ram Mohan College, University of Kolkata, (1994)

Employment Record:

2006-till date Assistant Professor, Biological Sciences, BITS Pilani, K K Birla Goa Campus
2005-2006, Lecturer, Biological Sciences, BITS Pilani, K K Birla Goa Campus
2002-2005, Post doctoral fellow at The University of Texas Health Science Center at San Antonio, USA. Worked on cell biology of aging in different mammalian cells.

Administrative Experience

Non-Resident Warden of Girls Hostel CH-4
Till 2011 was a nucleus member of General Administration

Research in details:

Goal: to set up a Tissue Engineering Center at BITS
Principal Investigator for the following projects:

Role of environmental toxins in kidney related diseases of Canacona Taluka, Goa	CSIR	3 years	(ongoing) 2013-2016
Tissue engineering of human placental stem cells into a functional pancreas	DST	3 years	(ongoing) 2012-2015
Testing novel and existing materials for manufacturing Tissue Engineered Heart Valves (TEHVs)	Aditya Birla Group	3 years	(ongoing) 2011-2014

Co-Investigator for the following two projects:

Expression of cyclodextrin glucosyl transferase (CGTase) gene in hydrocarbon degrading bacteria and their role in bioremediation	DBT	3years	3 years (completed) Sep 2007 – 2010 Amount: Rs.24,02,625
Anaerobic digestion of food waste in a horizontal plug flow reactor	UGC	3 years	3 years (completed) April 2008 – 2011 Amount Rs 10,09,800

Current PhD students:

1. **Shruti Balaji** (joined in 2010) – Currently in the US on a Nehru-Fulbright Fellowship, working on tissue engineering of pancreas
2. **Nupur Kumar** (joined in 2012)- working on tissue engineering of pancreas
3. **Subhadra Dalwani** (joined in 2013)– working on tissue engineering of heart valves

ME Biotechnology thesis:

1. **Savitha Dhandapani** (2011) Anti-Cancer Studies - The effects of copolymers of tri-O-acetyl-D-glucal and itaconic anhydride and MicroRNA-145 and MicroRNA-182 on A549-human lung adenocarcinoma cells
2. **Ganeshkumar Arumugam** (2012) Analysis of *p53* mutation and DNA methylation status of *hsa-miR-145* gene in A549 and HaCaT cell lines and Mechanism of anticancer activity of ethanolic extract from *Vitex negundo* in A549 cell line
3. **Sibani Prasad Dash** (2012) Study of Anticancer Activity of *Vitex nigundo*
4. **Subhadra Dalwani** (2013) Methods of cell culture and histological studies of heart valve

ME research students:

1. Rakesh Chatrki
2. Ganeshkumar Arumugam
3. Savitha Dhandapani
4. Sibani Prasad Dash
5. Subhadra Dalwani
6. Nikita Hoskote
7. Pabla Iraz
8. Shreya S Katiyar

Journal Publications

Cloning and expression of catechol 2, 3 dioxygenase and cyclodextrin glucanotransferase gene in E.Coli and its role in biodegradation“ C.Sivaraman, Anasuya Ganguly and Srikanth Mutnuri “International Journal of life Science and Pharma Research” Vol 2/Issue 3/Jul-Sept 2012 pp L10 – L19.

Role of Cyclodextrin Glucanotransferase Enzyme in Biodegradation C.Sivaraman, Anasuya Ganguly and Srikanth Mutnuri : Advances in Environmental Research (2012), Vol. 1, No. 2 pp97-108.

Isolation of Hydrocarbonoclastic bacteria from Bilge oil contaminated water - Sivaraman C, Anasuya Ganguly, Marcell Nikolausz and Srikanth Mutnuri. International Journal of Environmental Science and Technology Vol 8, No.3, Summer 2011.

Biodegradation of hydrocarbons in the presence of cyclodextrins - Sivaraman C, Anasuya Ganguly and Srikanth Mutnuri "World Journal of Microbiology and Biotechnology" Vol 26, Is 2 (2010), pp 227 – 232.

Biocatalytic production of a commercial textile dye (Indigo) from a xenobiont – Srikanth Mutnuri, Chanakya Bandi and Anasuya Ganguly, Research Journal of Microbiology, Vol 4, Is 3 (2009), pp 82 – 88.

Effect of caffeine and saponin on anaerobic digestion of food waste – Vidhya Prabhudesai, Anasuya Ganguly and Srikanth Mutnuri submitted to "Annals in Microbiology volume 59, issue 4 December, 2009.

The Cell Cycle of *Entamoeba invadens* during Vegetative Growth and Differentiation. Ganguly A, Lohia A. Molecular and Biochemical Parasitology. (2001) Feb; 112(2): 277-285.

The Diaphanous Protein from *Entamoeba histolytica* Controls Cell Motility and Cytokinesis. Ganguly A and Lohia A. Archives of Medical Research 31 (2000) S137-S139.

Teaching in details:

Courses taught/teaching recently:

Semester I (2013-2014)

Cancer Biology (BIO G526)
Stem Cell and Regenerative Biology (BIOG515)

Semester II (2012-2013)

Animal Cell Technology (BIO G524)
Biology Laboratory (BIO F110)
ME Biotechnology Dissertation (BITSG629T)
Research Practice (BITS G540)
Study Oriented Projects (BITSC323)

Courses taught few years back:

Study of Advanced Topics
Computer Projects (BITSC335)
Laboratory Oriented Projects (BITSC313)
Cell and Tissue Culture Technology (BIOG641 & BIOC352)
General Physiology (BIO GC 342)
General Biology (BIO GC111)
Professional Practice – I (BITS G620)
Professional Practice – II (BITS G621)
Experimental Techniques (BIO G642)
Genetic Engineering Techniques (BIOC418)
Laboratory (BIOC411)
Measurement Techniques-1 (TA GC 211)
Biology Project Lab (BIO GC 231)
Introduction to Environmental Studies (BITSC213)
Matrix Reading Course
Practice School-1 (BITSC221 & BITS C231)