CURRICULUM VITAE



Prof. Mahuya Sengupta

Professor and Head Department of Biotechnology, Assam University, Silchar, 788011 M: 7099001430/9330344325

Email: senguptamahuya35@gmail.com

General Information

Name (In Capital Letters)	MAHUYA SENGUPTA					
Date of Birth (Day/Month/Year)	24/12/1974					
Father's Name	Late Benu Sengupta					
Mother's Name	Dipti Sengupta					
Correspondence Address	165-3C, Kuntila Apartment, Adharchand High School Road, P.O. Ambikapatty, Dist. Cachar, Assam, India					
Permanent address	127, Bandel Station Road, P.O. & Dist. Hooghly, WB, India					
Place of Birth	Mirzapur, UP, India					
Category (SC/ST/OBC/PWD)	General					
Marital Status	Married					
Phone No.	+91-7099001430/+91-9330344325					
Email	senguptamahuya35@gmail.com; mahuya.sengupta@aus.ac.in					
Field of specialisation	Biochemistry and Animal Cell Sciences, Immunotoxicology, Nanobiology and Cancer Immunology, Phytotherapy and Immunomodulation, Inflammation and Oxidative Stress, Nanobiotechnology.					

Present Position

a	Designation	Professor,	Department	of	Biotechnology,	Assam	
		University, Silchar (Central University)					
b	Organization	ASSAM UNIVERSITY, SILCHAR					
С	Pay Scale	Basic Pay=	INR1,62,300/-				

d	Date of appointment	July 05, 2004
e	Total Experience	20 years 3 months

Educational Qualification (In chronological order from latest to Graduation level)

<u>Sl.</u>	Qualification	University/	Institution	Year	Subject(s)/Topic(s)	%	Division
No.		Board					
1	PhD	University of Calcutta	UCST	2007	Physiology	-	-
2	National Eligibility Test	(WBCSC) (UGC- Accredited SLET	-	2001	Life Sciences		,
3	MSc	University of Calcutta	UCST	1999	Physiology (Specialization- Biochemistry)	67.5	1
4	BSc (Hons)	University of Calcutta	Presidency College, Kolkata	1997	Physiology (Hons), Physics (Minor), Chemistry (Minor), English (Compulsory Addl.)	60.25	1
5	Higher Secondary (Sc)	WBCHSE	Hooghly Mohsin College, WB	1994	English, Bengali, Physics, Chemistry, Mathematics & Biology	72.1	1
6	Secondary	CISCE	Auxilium Convent, Bandel	1992	English, Bengali, History, Civics & Geography, Science, Mathematics, Home Science	86.83	1

PhD Title: Immunobiological studies in mice after exposure to arsenic and lead and its relation to immuno-suppression (University of Calcutta, 2007)

Details of employment (Academic/Teaching Experience & responsibilities (In chronological order from latest to oldest)

Sl No.	Post	Organization/University	Duration	Responsibilities
1	Professor	Assam University, Silchar	2021-Till date	Teaching and Research
2	Associate Professor	Assam University, Silchar	2018-2021	Teaching and Research
3	Assistant Professor	Assam University, Silchar	2012-2018	Teaching and Research
4	Senior Lecturer	Assam University, Silchar	2009-2012	Teaching and Research
5	Lecturer	Assam University, Silchar	2004-2009	Teaching and Research
6	2000-2003- JRF- UGC-University Fellowship- University of Calcutta	University Colleges of Science and Technology, University of Calcutta	2000-2003	Doctoral Research/ Teaching Assistant
7	2003-2004- SRF- UGC-University	University Colleges of Science and Technology, University of	2003-2004	Doctoral Research/ Teaching Assistant

Fellowship-	Calcutta	
University of		
Calcutta		

${\bf Membership\ in\ remarkable\ academic/administrative/professional\ organizations:}$

Indian Immunological Society	Life Member
Indian Andrological Society	Life Member
Physiological Society of India	Life Member
Board of Undergraduate Studies, Biotechnology	Chairperson
Board of Postgraduate Studies, Biotechnology	Chairperson
School Board, H.G. Khorana School of Life Sciences	Member
Assam University Teachers' Association	Ex- Vice-President
Women's Indian Chamber of Commerce and Industry (WICCI), West Bengal Corporate Workplace and Council	Member

Participation and contribution in relevant areas in higher education

#	Role	Event	Title	From	То	Institution	Place
1	Resource person	Awareness and Sensitization Program	Gender Sensitization	2022	2025	Assam University	Silchar, Assam
2	Resource person	Workshop	The Reach & Socio- Economic Impacts of the PM Ujjwala Yojana in Southern Assam	12-3- 2024		Department of Economics, Assam University	Silchar, Assam
3	Resource Person	Kashmir Science Vision Summit	Pioneering Sustainable Development	23-8- 2024	24-8- 2024	SKUAST	Kashmir
3	Resource person	Workshop	Some Modern Techniques in Microbiology and Immunology	10-12- 2015	14-12- 2015	Institutional Biotech Hub, Karimganj College	Karimganj, Assam
4	Resource person	Lecture	Basic Immunology	01-03- 2016	01-03- 2016	Institutional Biotech Hub, Guru Charan College	Silchar, Assam
5	Resource person	Workshop	Some modern techniques in Microbiology and immunology	10-12- 2011	14-12- 2011	Institutional Biotech Hub, Karimganj College	Karimganj, Assam
6	Supervisor	Summer Training	Oxidative stress induced effect of silver nanoparticle on inflammation	26-06- 2015	01-08- 2015	Immunobiology Laboratory, Department of Biotechnology, AUS	Silchar, Assam

7	Resource Person	Awareness Program	Male infertility and reproductive health	15-8- 2013	-	Rotary Club,	Silchar, Assam

Awards:

- ➤ Prof. B.B. Sarkar Research Award; Physiological Society of India; University of Calcutta, 2003.
- ➤ Shakuntala Dasgupta Oration Award; Annual Conference of the Physiological Society of India; University of Calcutta, 2015.

Publications:

Total Publications: 73; H-Index: 21; Total cumulative Impact Factor: 185.5; Referred Journals: 60 (approx); i-10 index: 34; Research Gate index: 28.03, Total Citation: 1893; Abstract/Full Papers in Seminar/Conferences/Invited Lectures: more than 60 (approx)

a. Few Publications (recent) with Year, Title, Name of the Referred Journal and Citation as follows:

SI. NO.	DATE (YEAR)	TITLE	NAME OF JOURNAL	ISSN NO:	NO. OF CITATION S
1.	2025	Polyethylene glycol functionalization modulates the toxicity of zinc oxide quantum dots: A multilevel characterization and toxicological study in Channa punctatus Bloch Hillol Das, Chohelee Choudhury, Deejan debnath, Saurav Paul, Sujit kumar Ghosh, Mahuya sengupta*	Naunyn- Schmiedeberg's Archives of Pharmacology DOI10.1007/s0021 0-025-04862-w	Print ISSN 002 8-1298; electronic (e- ISSN) 143 2-1912	IF-3.1
2.	2025	Gold nanorod-immune crosstalk: Upregulation of inflammatory signaling in macrophages through ROS/RNS pathway activation Nabanita Maity, Santu Ghosh, Malaya Ghosh, Nikhil R. Jana, Sarbani Giri, Mahuya Sengupta*	BioNanoScience (in press)	ISSN: 2191-1630	IF-3.2
3.	2024	Rural-Urban Divide of COVID- 19 Fatalities in India—Investigating the Role of Lifestyle Disorder Diseases Parantap Basu, Susmita Das, Arnab Dutta Choudhury, Ritwik Mazumder	Journal of Quantitative Economics DOI10.1007/s4095 3-024-00422-w	ISSN: 2364-1045	IF- 0.7

		& Mahuya Sengupta			
4.	2024	Photothermal manipulation of the fringing field in gold nanorod dimers towards the apoptosis of cancerous cells Dorothy Bardhan, Nabanita Maity, Debarun Sen, Mahuya Sengupta & Sujit Kumar Ghosh	Nature Scientific Reports 14:21292 DOI10.1038/s4159 8-024-62898-z	ISSN: 2045-2322	IF- 3.8 H-Index- 315
5.	2023	Chohelee Choudhury, Sarbani Giri, Ritwik Mazumder, Raj kamal Das, Dharmeswar Barhoi, Mahuya Sengupta* Heavy metal bioaccumulation triggers oxystress, genotoxicity and immunomodulation in head kidney macrophages of Channa punctatus Bloch.	Ecotoxicology 32: 553–568 DOI10.1007/s1064 6-023- 02659-2	ISSN: 1573-3017	IF- 2.7 H-Index- 101
6.	2022	Biswajit Das, Anjali Pal, Ramkrishna Pal, Rajeev Kumar, Rakesh Das, Debjani Dey, Juri Devi, Mahuya Sengupta* Alteration in inflammasome cytokine profile and functional plasticity of macrophage phenotype in arsenic(0) nanoparticle treated murine fibrosarcoma	BioNanoScience 13: 625–637	ISSN: 21911630	IF- 3.1 H-Index-24
7.	2022	Biswajit Das, Anjali Pal, Ramkrishna Pal, Vidisha Bodo, Disuang Newme, Sayani Chakraborty, Mahuya Sengupta* Arsenic nanoparticles are effective in reducing 3-methylcholanthrene induced carcinogenesis in murine fibrosarcoma by promoting antitumorigenic inflammation	BioNanoScience DOI- 10.1007/s12668- 021-00920-8	ISSN: 21911630	IF- 3.1 H-Index-24
8.	2022	Devashish Sengupta, Subhojit Das, Debdulal Sharma, Saran Chattopadhyaya, Avinaba Mukherjee, Zeaul Hoque Mazumdar, Biswajit Das, Samita Basu, <u>Mahuya</u>	ChemMedChem 17(2): 1-14 DOI- 10.1002/cmdc.2021	ISSN: 1860 7179	IF- 3.20 H-Index-100

		<u>Sengupta</u>	00550		
		An Anti-inflammatory Fe3O4- Porphyrin Nanohybrid Capable of Apoptosis through Upregulation of p21 Kinase Inhibitor Having Immunoprotective Properties under Anticancer PDT Conditions			
9.	2022	Dorothy Bardhan, Hirak Chatterjee, Debarun Sen, Mahuya Sengupta, and Sujit Kumar Ghosh Photothermal Reshaping of One- Dimensional Plasmonic Polymers: From Colloidal Dispersion to Living Cells	ACS Omega 7(13):11501–11509 DOI- 10.1021/acsomega. 2c01094	ISSN: 2470-1343	IF- 3.33 H-Index-40
10	2021	Chohelee Choudhury, Ritwik Mazumder, Rajib Biswas, Mahuya Sengupta* Cadmium exposure induces inflammation through the canonical NF-κB pathway in monocytes/macrophages of Channapunctatus Bloch.	Fish & Shellfish Immunology 110: 116-126 DOI- 10.1016/j.fsi.2021. 01.002	ISSN: 10959947	IF- 7.5 H-Index-122 Citations-14
11	2021	Debdulal Sharma, Zeaul H. Mazumder, Devashish Sengupta, Avinaba Mukherjee, Mahuya Sengupta, Ranjan Kumar Das, Monjur Hassan Barbhuiya, Partha Palit and Tarun Jha Cancer photocytotoxicity and anti- inflammatory response of cis-A2B2 type meso-p-nitrophenyl and p- hydroxyphenylporphyrin and its zinc(ii) complex: a synthetic alternative to the THPP synthon	New Journal of Chemistry 45(4):2060-2068 DOI- 10.1039/D0NJ0510 6C	ISSN: 1144-0546	IF- 3.44 H-Index-122 Citations-2
12	2021	Chohelee Choudhury, Ritwik Mazumder, Rajeev Kumar, Bishal Dhar, Mahuya Sengupta* Cadmium induced oxystress alters Nrf2-Keap1 signaling and triggers apoptosis in piscine head kidney macrophages	Aquatic Toxicology 231 :105739 DOI- 10.1016/j.aquatox.2 020.105739.	ISSN: 0166-445X	IF- 4.96 H-Index-140 Citations-14

13	2020	Biswajit Das, Hasimur Rahaman, Sujit Kumar Ghosh & Mahuya Sengupta* Synthesis and Characterization of Arsenic(III) Oxide Nanoparticles as Potent Inhibitors of MCF 7 Cell Proliferation through ProapoptoticMechanism	BioNanoScience 10(2):420-429 DOI- 10.1007/s12668- 020-00726-0	ISSN: 21911630	IF- 3.1 H-Index-24 Citations-7
14	2020	Angom Ranjana Devi, Mahuya Sengupta, Dipu Mani Barman, Yashmin Choudhury Oral Nicotine Induces Oxidative Stress and Inflammation but Does Not Subvert Tumor Suppressor and DNA Repair Responses in Mice	Indian Journal of Clinical Biochemistry 36(3):296-303 DOI- 10.1007/s12291- 020-00903-8	ISSN: 09740422	IF- 1.38 H-Index-42
15	2019	J Laskar, Yashmin Choudhury, Mahuya Sengupta Treatment with the anti-diabetic drug metformin ameliorates betelnut induced carcinogenesis in a murine model	Pharmacological Reports 71(6):1115-1124 DOI- 10.1016/j.pharep.20 19.06.011	ISSN: 1734-1140	IF- 2.71 H-Index-83 Citations-3
16	2019	P Phukan, S Namasudra, M Bawari, M Sengupta Neuroprotective effects of aqueous extract of Hydrocotyle javanica in ameliorating neurobehavioral alteration induced by mercury	Asian J. Pharm. Clin. Res 12 (1):374-379 DOI- 10.22159/ajpcr.201 9.v12i1.30230	ISSN: 2455-3891	IF- 6.59 H-Index-39 Citations-2
17	2018	Mahuya Sengupta*, Ramkrishna Pal, Anupam Nath, Biswajit Chakraborty, Leichombam Mohindro Singh, Biswajit Das, Sujit Kumar Ghosh Anticancer efficacy of noble metal nanoparticles relies on reprogramming tumor-associated macrophages through redox pathways and pro-inflammatory cytokine cascades	Cellular and Molecular Immunology 15(12): 1088-1090 DOI- 10.1038/s41423- 018-0046-7	ISSN: 1672-7681	IF- 22.1 H-Index-81 Citations-16

18	2018	H Chatterjee, DS Rahman, M Sengupta, SK Ghosh Gold Nanostars in PlasmonicPhotothermal Therapy: The Role of Tip Heads in the Thermoplasmonic Landscape	The Journal of Physical Chemistry 122 (24), 13082- 13094 DOI- 10.1021/acs.jpcc.8b 00388	ISSN: 1089-5639	IF- 3.7 H-Index-235 Citations-37
19	2018	Anupam Nath, Ramkrishna Pal, Leichombam Mohindro Singh, Himadri Saikia, Hasimur Rahaman, Sujit Kumar Ghosh, Ritwik Mazumder, Mahuya Sengupta* Gold- manganese oxide nanocomposite suppresses hypoxia and augments pro-inflammatory cytokines in tumor associated macrophages	International Immunopharmaco logy 122(24): 13082-13094 DOI: 10.1016/j.intimp.20 18.02.021	ISSN: 1878 1705	IF- 5.6 H-Index-112 Citations-7
20	2018	Jeny Laskar, Kasturi Bhattacharjee, Mahuya Sengupta, Yashmin Choudhury Anti-Diabetic Drugs: Cure or Risk Factors for Cancer	Pathology and Oncology Research 24(4):745-755 DOI-10.1007/s12253-018-0402-z.	ISSN: 15322807,	IF- 2.75 H-Index-51 Citations-11
21	2017	Anupam Nath, Ramkrishna Pal, Leichombam Mohindro Singh, Himadri Saikia, Hasimur Rahaman, Sujit Kumar Ghosh, Ritwik Mazumder, Mahuya Sengupta* Dose Response Study of a Novel Gold-Manganese Oxide Nano- Composite in an In Vivo Murine Model	Journal of Applied Pharmacological Science 7 (12): 028-037 DOI- 10.7324/JAPS.2017 .71204	ISSN: 22313354	IF- 1.37 H-Index-38
222	2017	Leichombam Mohindro Singh, Biswajit Chakraborty, Ramkrishna Pal, Anupam Nath, Sudip Pal, Dewan Shahidur Rahman, Sujit Kumar Ghosh, Mahuya Sengupta* A comparative study on the antioxidant and immunomodulatory properties of curcumin conjugated gold nanospheres and free curcumin	Journal of Applied Pharmacological Science 7:56-63 DOI- 10.7324/JAPS.2017 .71108	ISSN: 22313354	IF- 1.37 H-Index-38 Citations-7

23	2016	Biswajit Chakraborty, Ramkrishna Pal, Mohammed Ali, Leichombam Mohindro Singh, Dewan Shahidur Rahman, Sujit Kumar Ghosh, Mahuya Sengupta* Immunomodulatory properties of silver nanoparticles contribute to	Cellular and Molecular Immunology 13 (2): 191-205 DOI- 10.1038/cmi.2015.0 5	ISSN: 1672-7681	IF- 22.1 H-Index-81 Citations-51
		anticancer strategy for murine fibrosarcoma			
24	2016	Ramkrishna Pal, Biswajit Chakraborty, Anupam Nath, Leichombam Mohindro Singh, Mohammed Ali, Dewan Shahidur Rahman, Sujit Kumar Ghosh, Abhishek Basu, Sudin Bhattacharya, Rathindranath Baral, Mahuya Sengupta*	International Immunopharmaco logy 38:332-341 DOI- 10.1016/j.intimp.20 16.06.006.	ISSN: 18781705	IF- 5.6 H-Index-112 Citations-62
		Noble metal nanoparticle-induced oxidative stress modulates tumor associated macrophages (TAMs) from an M2 to M1 phenotype: An in vitro approach			
25	2015	Pankaj Phukan, Meenakshi Bawari & Mahuya Sengupta Promising neuroprotective plants from North-East India	International Journal of Pharmacy and Pharmaceutical Sciences 7(3):28-39	ISSN: 22313354	IF- 1.84 H-Index-78 Citations-22
26	2015	M Begam, M Sengupta* Immunomodulation of intestinal macrophages by mercury involves oxidative damage and rise of proinflammatory cytokine release in the fresh water fish Channapunctatus Bloch.	Fish and Shellfish Immunology 45 (2):378-385 DOI-10.1016/j.fsi.2015.04.017	ISSN: 10959947	IF- 7.5 H-Index-122 Citations-36
27	2015	S Deb, J Rout, M Sengupta, B Chakraborty Biochemical profile and antimicrobial activity of a	International Journal of Life Science and Pharma Research 5 (2): L21-L31	ISSN: 2250 0480	IF- 1.0 IPI Value- 2.73 Citations-4

		cyanobacterium, Scytonematolypothrichoides isolated from acidic rice field soil of Cachar District (Assam), India			
28	2015	Biswajit Chakraborty Ramkrishna Pal Mohammed Ali LeichombamMohindro Singh Dewan Shahidur Rahman Sujit Kumar Ghosh and Mahuya Sengupta* Antitumor Potential of Gold Nanoparticles in Chemically Induced Murine Fibrosarcoma	Cellular and Molecular Immunology (NPG) 13: 191–205 DOI- 1672-7681/16	ISSN: 1672-7681	IF- 22.1 H-Index-81
29	2015	SASK Barbhuiya, M Sengupta* The toxic effects of lead on testicular macrophage immunomodulation and sperm cell parameters in mice	British Journal of Medicine and Medical Research 9, 1-10 DOI- 10.9734/BJMMR/2 015/17937	ISSN: 2231 0614	Citation-1
30	2015	C Datta, D Das, P Mondal, B Chakraborty, M Sengupta, CR Bhattacharjee Novel water soluble neutral vanadium (IV)—antibiotic complex: Antioxidant, immunomodulatory and molecular docking studies	European Journal of Medicinal Chemistry 97:214-224 DOI- 10.1016/j.ejmech.2 015.05.005	ISSN: 0009-4374	IF- 6.18 H-Index-162 Citations-20
31	2015	CB Singh, MC Devi, DS Thokchom, M Sengupta, AK Singh Phytochemical screening, estimation of total phenols, total flavonoids and determination of antioxidant activity in the methanol extract of Dendrobiumdenudans D. Don stems	Journal of Pharmacognosy and Phytochemistry 4 (4):6	ISSN: 2349-8234	IF- 5.52 H-Index-5 Citations-8
32	2014	B Chakraborty, A Nath, H Saikia, M Sengupta* Bactericidal activity of selected medicinal plants against multidrug resistant bacterial strains from clinical isolates	Asian Pac J Trop Med. 7;S435-S441 DOI- 10.1016/S1995- 7645(14)60271-6	ISSN: 1995-7645	IF- 1.22 H-Index-52 Citations-44

33	2014	S Chakraborty, S Gang, M Sengupta* Functional status of testicular macrophages in an immunopriviledged niche in cadmium intoxicated murine testes	Am J Reprod Immunol 72 (1), 14-21 DOI- 10.1111/aji.12224	ISSN: 1600-0897	IF- 3.53 H-Index-97 Citations-8
34	2014	N Paul, S Chakraborty, M Sengupta* Lead toxicity on non-specific immune mechanisms of freshwater fish Channa punctatus	AquatToxicol 152, 105-112 DOI- 10.1016/j.aquatox. 2014.03.017	ISSN: 0166-445X	IF- 4.96 H-Index-140 Citations-76
35	2014	Shamim Ahmed Barbhuiya, Sumana Chakraborty and Mahuya Sengupta* An in vitro study on immune modulation of murine testicular macrophages and loss of immunoprivilege due to lead toxicity	International Journal of Recent Scientific Research 5(6): 1082-1086	ISSN: 0976-3031	IF- 7.383 H-Index-
36	2013	M Sengupta*, I Deb, GD Sharma, KK Kar A study on human sperm and other seminal constituents in male infertile patients from arsenic and cadmium rich areas of Southern Assam	Systems Biology in Reproductive Medicine 59 (4):199-209 DOI- 10.3109/19396368. 2013.783143	ISSN: 1939 -6376	H-Index-48 Citations-28
37	2013	SASK Barbhuiya, S Chakraborty, M Sengupta* Studies of lead toxicity on inflammatory damage and innate immune functions in testicular macrophages of male Swiss albino mice	Modern Research in Inflammation, 2(4):75-81 DOI- 10.4236/mri.2013. 24010	ISSN Online: 21 69-9690	H-Index-8 Citations-14
38	2013	N Paul, M Sengupta* Lead induced overactivation of phagocytes and variation in enzymatic and non-enzymatic antioxidant defences in intestinal	Modern Research in Inflammation, 2(2):28-35 DOI- 10.4236/mri.2013.	ISSN Online: 21 69-9690	H-Index-8 Citations-15

		macrophages of Channapunctatus	22004		
39	2013	Jayashree Rout and Mahuya Sengupta, Shoubhonik Deb, Bhaswati Sarma Algal diversity in soil crusts of Assam University, Silchar Campus (North East India)	Phykos 43 (1): 56-67	ISSN: 0554-1182	
40	2012	Chakraborty B. And Sengupta M* Boosting of nonspecific host response by aromatic spices turmeric and ginger in immunocompromised mice	Cellular Immunology 20(1):92-100 DOI: 10.1016/j.cell imm.2012.11.014	ISSN: 0008-8749	IF- 4.3 H-Index-92 Citations-17
41	2012	B Chakraborty, M Sengupta* Supporting the immune system through functional modulation of carbon tetrachloride intoxicated splenic macrophages by administering Tinosporacordifolia	Journal of Applied Pharmaceutical Science 2 (7): 117 DOI- 10.7324/JAPS.2012 .2715	ISSN: 22313354	IF- 1.37 H-Index-38 Citations-10
42	2012	Sumana Chakraborty, Ishita Deb, Gauri Dutta Sharma and Mahuya Sengupta* Effect of cadmium exposure on testicular macrophages in adult male albino mice	Assam University Journal of Science and Technology- Biological and Environmental Sciences 9(1): 58-61	ISSN: 09745645	H-Index-3
43	2012	Ishita Deb, Sumana Chakraborty, Gauri Dutta Sharma and Mahuya Sengupta* A study on semen quality and its correlation with mercury exposure in infertile men compared with a normal population	Assam University Journal of Science and Technology- Biological and Environmental Sciences 9(1): 75-80	ISSN 09745645	H-Index-3
44	2012	Begam M., Paul N. and Sengupta M* Effects of mercuric chloride on the activities of antioxidant enzymes in the fresh water fish	Assam University Journal of Science & Technology 10(1): 1-7	ISSN 0975-2773	H-Index-3

		Channapunctatus.			
45	2011	M Sengupta*, GD Sharma, B Chakraborty Effect of aqueous extract of Tinosporacordifolia on functions of peritoneal macrophages isolated from CCl ₄ intoxicated male albino mice.	BMC Complement Altern Med 11 (1), 1-9 DOI- 10.1186/1472- 6882-11-102	ISSN 26627671	IF- 3.47 H-Index-86 Citations-59
46	2011	M Sengupta*, GD Sharma, B Chakraborty Hepatoprotective and immunomodulatory properties of aqueous extract of Curcuma longain carbon tetra chloride intoxicated Swiss albino mice.	Asian Pacific Journal of Tropical Biomedicine 1 (3), 193-199 DOI- 10.1016/S2221- 1691(11)60026-9	ISSN 22211691	IF- 1.72 H-Index-61 Citations-113
47	2010	CR Bhattacharjee, P Goswami, M Sengupta Synthesis, electrochemical and antimicrobial studies of mono and binuclear iron (III) and oxovanadium (IV) complexes of [ONO] donor tridentate Schiffbase ligands	Journal of Coordination Chemistry 63 (22), 3969-3980 DOI- 10.1080/00958972. 2010.525703	ISSN 10290389	IF- 2.20 H-Index-50 Citations-16
48	2010	S Gang, GD Sharma, M Sengupta* Intracellular survival of Staphylococcus aureus and associated immunological dysfunctions in cadmium intoxicated mice.	Journal of Immunology and Immunopathology 4 (1), 61-65 DOI- 10.1016/s0300- 483x(02)00549-8	ISSN: 0972- 0561	Citation-1
49	2009	B Chakraborty, GD Sharma, M Sengupta* Immunomodulatory properties of Tinosporacordifolia in carbon tetrachloride intoxicated Swiss albino mice.	Assam University Journal of Science & Technology 4 (1): 35-39	ISSN 0975-2773	H-Index-3
50	2009	S. Gang, M Sengupta* Intracellular survival of	Assam University Journal of Science & Technology	ISSN 0975-2773	H-Index-3

		Staphylococcus aureus due to alteration of cellular activity in cadmium intoxicated Swiss albino mice	184 (1):31-39		
51	2008	Mahuya Sengupta*, Biswajit Chakraborty, Sneha Gang and Gauri Dutta Sharma. Protective effect of Tinospora cordifolia on lipid peroxidation and antioxidant enzymes in Streptozotocin-induced diabetic rats.	Assam University Journal of Science & Technology 3(1): 60-64	ISSN 0975-2773	H-Index-3
52	2006	B Bishayi, M Sengupta Synergism in immunotoxicological effects due to repeated combined administration of arsenic and lead in mice	International Immunopharmaco logy 6 (3), 454-464 DOI- 10.1016/j.intimp.20 05.09.011	ISSN 1878 -1705	IF- 5.6 H-Index-112 Citations-40
53	2004	B Bishayi, M Sengupta, S Ghosh Lead induced modulation of splenic macrophage responses on humoral and cell mediated immunity	Acta Microbiologica et Immunologica Hungarica, 51 (1-2):31-45 DOI- 10.1556/AMicr.51. 2004.1-2.2	ISSN: 12178950	IF- 1.30 H-Index-28 Citations-7
54	2003	B Bishayi, M Sengupta Intracellular survival of Staphylococcus aureus due to alteration of cellular activity in arsenic and lead intoxicated mature Swiss albino mice	Toxicology 184 (1), 31-39 DOI- 10.1016/s0300- 483x(02)00549-8	ISSN: 1091-5818	IF- 4.22 H-Index-145
55	2002	Mahuya Sengupta and B. Bishayi Effect of lead and arsenic on murine macrophage response	Drug and Chemical Toxicology 25(4): 459-472. DOI- 10.1081/dct- 120014796	ISSN: 0148-0545	IF- 3.36 H-Index-44 Citations-75

56	2002	B Bishayi, S Roychowdhury, S Ghosh, M Sengupta Hepatoprotective and immunomodulatory properties of Tinospora cordifolia in CCl4 intoxicated mature albino rats	The Journal of Toxicological Sciences 27 (3), 139-146 DOI- 10.2131/jts.27.139	ISSN: 0388-1350	IF- 2.196 H-Index-50 Citations- 234
577	2000	B Bishayi, AA Sarkar, M Sengupta Cold stress induced functional alteration in splenic macrophages including antibody production	Biomedicine 20 (2), 149-157	ISSN: 0970 2067	IF- 0.06 H-Index-9

b. Chapters in Edited Books Published:

- 1. Targeting Metabolic Pathways for Disease Therapy. In Trends in Experimental Biology Ed.Kma L. Excel India Publishers, New Delhi, 2015.
- 2. Trends in Experimental Biology. Excel India publishers, 2015.
- 3. Cadmium Toxicity in Fish: An Overview. Emerging Trends in Scientific Research (International Book of Scientific Research), AikNik Publications, 2020.

Research Projects-1 UGC-MRP as P.I.; 3 DBT projects (as Co-P.I.)

- 1. Dr. M. Sengupta, Principal Investigator, "Potential anti-cancer property of arsenic nanoparticles: a study of its anti-cancer efficacy and the underlying mechanism using cancer cell lines" [UGC Sanction Order No. F.43/91/2014(SR) Dt. 22/08/2015].
- Dr. M. Sengupta, Co-Investigator, "Multifunctional Janus Nanoparticles for Cancer Imaging and Therapy" [DBT-Twinning Sanction Order No.: BT/277/NE/TBP/2012 Dt. January 16, 2013].
- Dr. M. Sengupta, Co-Investigator, "DBT sponsored Departmental Project for the teaching, training and Research in Biotechnology" worth Rs 128 lakhs [BT/HRD/01/002/2007 Dt.] (completed in 2012).
- 4. Dr. M. Sengupta, Co-Investigator, "Characterization and utilization of Cyanobacterial Bioresource in Southern Assam, North-East India" Worth Rs 35.43 lakhs in collaboration

with Department of Ecology & Environmental Science, Assam University, Silchar [BT/PR7479/AGR/21/214/2006 Dt.30.7.2008] (completed in 2011).

Research Guidance

#	Name	Title	Thesis/Dissertation Submitted/Awarded	
			Year	Status
		Ph.D (as Supervisor)		
1	Biswajit Chakrabarty	Antimicrobial, hepatoprotective and immunomodulatory role of <i>Tinosporacordifolia</i> , <i>Curcuma longa</i> and <i>Zingiberofficinale</i> on peritoneal and splenic macrophages in CCl4 intoxicated male albino mice	2012	Awarded
2	Sumana Chakraborty	Effect of cadmium exposure on testicular macrophages of adult albino mice and its relation to reproductive functions	2015	Awarded
3	Ishita Deb	Effect of selected heavy metals (arsenic, cadmium, lead and mercury) on reproductive functions in human male volunteers from southern Assam	2013	Awarded
4	Sneha Gang	Effect of cadmium exposure on immunomodulatory and proinflammatory role of murine splenic and peritoneal macrophages	2013	Awarded
5	Shamim Ahmed Shamim Khan Barbhuiya	Effect of lead exposure on testicular macrophages and its relation to reproductive functions in adult male albino mice	2015	Awarded
6	Nilantika Paul	Antioxidant and immunomodulatory effects of lead acetate and sodium arsenite exposure on macrophage response in freshwater fish Channapunctatus	2014	Awarded
7	Moriom Begam	Antioxidant and immunomodulatory analysis of mercury and cadmium induced modulation of non-specific host defense in fresh water fish <i>Channapunctatus</i>	2016	Awarded
8	Ramkrishna Pal	Theranostic effect of noble metal nanoparticles on 3-methylcholanthrene-induced tumor and allied oxidative stress in the tumor associated macrophages	2016	Awarded
9	Anupam Nath	Anti-tumorigenic properties of a novel metal- nanoparticle as a therapeutic approach in murine fibrosarcoma	2019	Awarded
10	Leichombam Mohindro Singh	A comparative study of curcumin and curcumingold nanoparticles in modulation of tumor associated macrophages and cancer therapeutics	2020	Awarded
11	Biswajit Das	Potential anti-cancer property of arsenic nanoparticles: an immunotherapeutic study of its anti-cancer efficacy and the underlying	2021	Awarded

		mechanism		
12	Himadri Saikia	Immunomodulatory and anti-tumor properties of selected medicinal plants used by Sonowal	2022	Awarded
13	Chohelee Choudhury	Kachari community of Assam Oxidative stress and immunomodulation in piscine pathogenesis- a study of proinflammatory cytokine signaling in select fish exposed to heavy metal	2023	Awarded
14	Nabanita Maity	Anti- tumor and immunomodulatory activity of gold nanorods in murine fibrosarcoma	-	Ongoing
15	Hillol Das	An immuno-toxicological study of engineered nanoparticle quantum dots in piscine macrophages	-	Ongoing
16	Anindita Chanda	Nano-enhanced immunotherapy in murine models of cancer and related comorbidities	-	Ongoing
17	Poulami Das	Role of green synthesized silver nanoparticles in cancer immunotherapy in murine model	-	Ongoing
18	Shova Shrestha	Understanding the molecular mechanism of selected polyphenols on anti-inflammatory activities	-	Ongoing
19	Ananya Purkayastha	Course Work		Ongoing
20	Himadri S. Bharali	Course Work		Ongoing
		Ph.D (as Co-Supervisor)		
1	Shoubhonik Deb	Distribution and diversity of algae in rice-field ecosystems of Cachar district in Assam and molecular characterization of isolated cyanobacteria	2016	Awarded
2	Bhaswati Sarma	Distribution, identification and molecular characterization of cyanobacterial communities in Hailakandi district of southern Assam, Northeast India	2015	Awarded
3	Angom Ranjana Devi	Study of alterations in tumor suppressor response, DNA repair and immune responses in mice exposed to tobacco	2019	Awarded
4	Jeny Laskar	Study of the role of AMPK signaling pathways in betel nut induced carcinogenesis in mice	2021	Awarded
5	Ranjan Das	Water-Soluble Pyrimidine Derivatives: Synthesis, Characterization and Biological Activity	2024	Awarded
		M.Phil (as Supervisor)		
1	Himadri Saikia	Hepatic and immunomodulatory activity of a coumarin compound 'Excavarin A' from <i>Clausena excavata</i> Burm. f. (Rutaceae) on Swiss albino mice	2015	Awarded

2	Sonia Sougrakpam	Role of phenolic fraction of Clausena excavata	2015	Awarded
		Burm. f. (Rutaceae) on mice liver and immune		
		cells		
3	Shova Shrestha	Hepatoprotective and immunomodulatory	2015	Awarded
		activities of a coumarin compound 'Dentatin'		
		from Clausena excavata Burm. f. (Rutaceae)		
4	Sudip Kumar Ghosh	Studies on human leukocyte antigen (HLA) gene	2019	Awarded
	•	family in nasopharyngeal cancer		

Seminars, Workshops & Training Programs, Academic Programs: (Approx)

Seminars-60, Workshops & Training Programs-11, Academic Programs-4

Seminars, Symposia and Conferences (last 10 years)

Sl No.	Title of the Invited Lecture/ Paper presented	Name of the Program	Name of the Organizing Agency	Date of Presentation
1	Mercury-induced oxidative stress modulates Nrf2-Keap1 and JNK/p38 MAPK signaling pathways leading to apoptosis in piscine macrophages	HP Scientific Talk-2025 International Conference on Sustainable Health: Translational Research from Molecules to Behavioural Aspects	Vidyasagar University & The Physiological Society of India (PSI)	28/2/-01/3, 2025
2	Arsenic nanoparticles: an effective therapeutic agent in 3-methylcholanthrene-induced murine fibrosarcoma	PHYSICON	The Physiological Society of India (PSI) and Tripura University	15-17/11/2024
3	Potential anti-cancer activity of arsenic nanoparticles: an immunotherapeutic study of their anti-tumor efficacy and the underlying mechanism thereof	IMMUNOCON	The Indian Immunological Society (IIS) and Indian Institute of Science (IISc), Bangalore	17-20/ 10/2024
4	Intrinsic Anti-tumor Activity of Metal Nanoparticles: Interplay Between Oxystress and Tumor Immune System	Interdisciplinary Refresher Course in Life Sciences	UGC-MMTTC, Assam University, Silchar	19/8/2024
5	Immunology: The Study of the Good, Bad and Ugly of the Immune System	Interdisciplinary Refresher Course in Life Sciences	UGC-MMTTC, Assam University, Silchar	19/8/2024
6	Energy and Life: in the Light of Cellular Respiration and Metabolism	Interdisciplinary Refresher Course in Life Sciences	UGC-MMTTC, Assam University, Silchar	17/8/2024
7	Arsenic nanoparticles: an effective therapeutic agent in 3-methylcholanthrene-induced carcinogenesis in murine fibrosarcoma	Emerging Trends in Biological Sciences: A North East India Perspective (ETBS)	Department of Biotechnology and Bioinformatics, NEHU	28/2/23-1/3/23
8	Reprogramming of tumor- associated macrophages through redox pathways and	Current Trends in Biotechnology Research March 19-20, 2019	Department of Biotechnology Assam University,	20/3/2019

	proinflammatory cytokine cascades causes anticancer efficacy of noble metal nanoparticles	(Funded by UGC-SAP) National	Silchar.	
9	In vivo immunomodulatory and in vitro anti-cancer study of Excavarin A isolated from Clausena excavata Burm.f.	Current Trends in Biotechnology Research March 19-20, 2019 (Funded by UGC- SAP)National	Department of Biotechnology Assam University, Silchar.	20/3/2019
10	Cadmium exposure modulates pro- inflammatory response and 25 induces apoptosis rendering Channa punctatus susceptible to bacterial infections	Current Trends in Biotechnology Research March 19-20, 2019 (Funded by UGC-SAP) National	Department of Biotechnology Assam University, Silchar.	20/3/2019
11	Albumin coated arsenic trioxide nanoparticles drives 22 apoptosis in murine fibrosarcoma via JNK signaling	Current Trends in Biotechnology Research March 19-20, 2019 (Funded by UGC-SAP) National	Department of Biotechnology Assam University, Silchar.	20/3/2019
12	Mercury exposure modulates pro- inflammatory response and induces apoptosis rendering <i>Channa</i> punctatus susceptible to bacterial infections	International Conference on Chemical Research in Materials and Biological Sciences International (In India)	Department of Chemistry, Assam University, Silchar	March 15-16, 2019
13	An in-vitro assessment of anti- tumorigenic properties of methanolic leaves extract of Oroxylum indicum Vent. (Bignoniaceae) on tumor associated macrophages of murine fibrosarcoma	International Conference on Chemical Research in Materials and Biological Sciences International (In India)	Department of Chemistry, Assam University, Silchar	March 15-16, 2019
14	Mercury induced inflammation causes oxidative stress and antioxidant response in piscine macrophages"	National Conference on Bioscience and Biotechnology National	Department of Life Science Assam University, Silchar	March 22-23, 2018;
15	Antioxidant defences and oxidative stress effects of methanolextract of <i>Oroxylum indicum</i> Vent. leaves in murine macrophage of M1 and M2 Phenotype	National Conference on Bioscience and Biotechnology National	Department of Life Science Assam University, Silchar	March 22-23, 2018;
16	Anti-cancer efficacy of albumin coated arsenic trioxide nanoparticles against both breast cancer cell line MCF7 and murine fibrosarcoma	International Conference on Systems and Processes in Physics, Chemistry and Biology International (In India)	Department of Physics Assam University, Silchar	March 01-03, 2018
17	Biomonitoring of Heavy Metal Toxicity and its Relation with Microbial Pathogenesis in Fish	International Conference on Contemporary Antimicrobial Research International	_	November 14-17, 2016.

		(In India)		
18	Synthesis of curcumin conjugated gold nanoparticles and their improved efficacy in mounting an antioxidant and immunomodulatory response compared to curcumin: an in vitro study	North East Regional Research Scholars' Meet Regional	Department of Life Science Assam University, Silchar	2017
19	Synthesis of curcumin conjugated gold nanoparticles and their improved efficacy in mounting an antioxidant and immunomodulatory response compared to curcumin: an in vitro study	National seminar on Charting And Managing Biodiversity: Perceptions And Priorities National	Department of Ecology Assam University, Silchar	March 8-9, 2016
20	"Heavy metal induced male infertility and associated immunobiological implications with respect to testicular immunopriviledge	National Seminar on ADVANCES IN BIOTECHNOLOGY RESEARCH: Current Trends and Future Prospects. National	Assam University, Silchar	March 25-26, 2014.
21	Heat Shock Proteins as Chaperones in Tumorigenesis: A review on their Role in Regulation of Apoptosis	National	Assam University, Silchar	March 25-26, 2014.
22	Potential therapeutic applications of noble nanoparticles in cancer treatments	National Seminar on Micro and Macro resources in Biomolecular Technology National	University of North Bengal,Siliguri,	February 25-26, 2013

Workshops

- 1. Workshop on Polymerase Chain Reaction in Medical and Biological Sciences organized by USIC and Department of Biophysics, Molecular Biology and Genetics, University of Calcutta; September 11-13, 2002.
- 2. Workshop (CME) on Basic Immunology organized by Department of Immunology, Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow; November 22, 2003.
- 3. Training course on "Application of Research Techniques in Reproductive Biomedicine" organized by National Institute of Health and Family Welfare (NIHFW), Munirka, New Delhi (December 3-14, 2007) as a sponsored candidate of Assam University.
- 4. Participated in the XIII Annual Congress of the Society of Andrology, India, organized by NIHFW and Indian Institute of Technology, Kharagpur. (December 15-16, 2007).
- 5. Alexander Hollaender Workshop on Genetic Toxicology at Indian Institute of Toxicological Research, Lucknow (December 15-17, 2008).
- 6. Workshop on Basic Bioinformatics (January 19-20, 2009) at Assam University, Silchar.

- 7. DNA Barcoding. National Workshop on DNA Barcode of Life at Department of Biotechnology, Assam University (April 07, 2009).
- 8. DBT-Short term training course (21 days) on PCR based Advanced DNA Fingerprinting, Assam University (April 21-May 5, 2010)
- 20th Indo-US Flow Cytometry Workshop and Symposium on Advanced Molecular Techniques, Cachar Cancer Hospital & Research Centre, Silchar, Assam, India, Live Education Task Force, International Society for Advancement of Cytometry (LETF-ISAC), Trust for Education and Training in Cytometry (TETC), Cachar Cancer Hospital and Research Centre (CCHRC) (March 24-26, 2019)
- 10. Two Day Web Symposium on Creating a Better Workplace for Women Assam University, Silchar, Internal Complaints Committee (ICC), Assam University, Silchar (July 28-29, 2020)
- 11. The Challenges and Scientific Advances of SARS-COV2, Assam University, Silchar, Department of Microbiology, Assam University in collaboration with Springer Nature (August 27, 2020)
- 12. National Workshop on Advanced Course on Clinical Pharmacology (ACCP) and Good Clinical Practice (GCP), Department of Pharmacology, Silchar Medical College and Hospital (November 06-07, 2022)
- 13. Course Director, Workshop and Hands-on Training on Biological Chemistry, Cell Biology and Quantitative Methods, Department of Biotechnology, Assam University, Silchar (January 06-10, 2025)

Academic Programs

Sl.	Name		Sponsoring Agency	Place
No.				
1	Orientation Programme	July 06 - August	Academic Staff College,	Kolkata,
		01, 2009	University of Calcutta	WB
2	Refresher Course Life-	November 19 -	Academic Staff College,	Kolkata,
	Sciences	December 08,	University of Calcutta	WB
		2012		
3	2 Weeks -Faculty Development	July 14-25,	Triguna Sen School of	Silchar,
	Programme on Effective Teaching	2014	Technology and Assam University Teachers'	Assam
			Association, Assam	
			University, Silchar	
4	2 Weeks -Faculty Development	March 19-31,	NSTEDB, Department of	Silchar,
	Programme on Effective Teaching	2018	Science and Technology, Govt. of India	Assam

Resource Person in Outreach Activities:

Sl.	Name	Date	Department (AUS)
No.			
1	Science Vs Superstition	September 13, 2023	Physics
2	Gender Sensitisation	October 17, 2023	Biotechnology

3	Gender Sensitisation	November 30, 2023	Chemistry
4	Gender Sensitisation	December 21, 2023	Microbiology
5	Gender Sensitisation	March 22, 2024	Pharmaceutical Science
6	Health Hazards of Traditional Cooking: The Reach and Socio-Economic Impacts of PM Ujjwala Yojana	December 04, 2023	Economics
7	Gender Sensitisation	March 28, 2023	Hindi
8	Gender Sensitisation	March 12, 2024	Economics
9	Gender Sensitisation	November 06, 2024	Chemistry
10	Gender Sensitisation	November 05, 2024	Biotechnology
