

Curriculum Vitae

Name	SUSHMITA SARKER
Designation	ASSISTANT PROFESSOR
Department	ZOOLOGY
Institution	JANGIPUR COLLEGE
Email	sushmita0102@gmail.com

Academic Qualification

Examination	College/University	Year of Passing
M.SC.	UNIVERSITY OF CALCUTTA	2015
B.SC.	BETHUNE COLLEGE, UNIVERSITY OF CALCUTTA	2013
12 TH	KENDRIYA VIDYALAYA, CBSE	2010
10 TH	KENDRIYA VIDYALAYA, CBSE	2008

Teaching Experience

Organization / Institution	Designation	Duration
JANGIPUR COLLEGE	ASSISTANT PROFESSOR	Dec 18 th , 2023

Area of Specialization: CANCER STEM CELLS, ONCOLOGY,
NANOTHERAPEUTICS.

Publications (*Top Ten*):

- microRNA-205 represses breast cancer metastasis by perturbing the rab coupling protein [RCP]-mediated integrin β 1 recycling on the membrane. Bhattacharya S, Sarker S, Das S, Ahir M, Chattopadhyay S, Ghosh S, Adhikary A. Apoptosis (2024) DOI 10.1007/s10495-023-01912-7
- A mechanistic insight into the potential anti-cancerous property of Nigella sativa on breast cancer through micro-RNA regulation: An in vitro & in vivo study. Das S, Ghosh A, Upadhyay P, Sarker S, Bhattacharjee M, Gupta P, Chattopadhyay S, Ghosh S, Dhar P, Adhikary A. Fitoterapia (2023). DOI: 10.1016/j.fitote.2023.105601
- Fluorometric detection of a chemical warfare agent mimic (DCP) using a simple hydroxybenzothiazole-diaminomaleonitrile based chemodosimeter. Das MK, Mishra T, Guria S, Das D, Sadhukhan J, Sarker S, Dutta K, Adhikary A, Chattopadhyay D, and Adhikari S. New Journal of Chemistry (2022). DOI 10.1039/D2NJ04260F.
- Polyethylene Glycol-Mediated Fusion of Extracellular Vesicles with Cationic Liposomes for the Design of Hybrid Delivery Systems. Mukherjee D, Paul D, Sarker S, Hasan N, Ghosh R, Prasad S, Vemula P, Das R, Adhikary A, Pal S, Rakshit T. ACS Appl. Bio Mater (2021). DOI 10.1021/acsabm.1c00804.
- Delivery of novel coumarin-dihydropyrimidinone conjugates through mixed polymeric nanoparticles to potentiate therapeutic efficacy against triple-negative breast cancer. Ghosh A, Upadhyay P, Sarker S, Das S, Bhattacharjee M, Bhattacharya S, Ahir M, Guria S, Gupta P, Chattopadhyay S. Biomaterials Science 9(16) (2021) 5665-5690.

6. Delivery of gefitinib in synergism with thymoquinone via transferrin-conjugated nanoparticle sensitizes gefitinib-resistant non-small cell lung carcinoma to control metastasis and stemness, Upadhyay P, Ghosh A, Basu A, Pranati P, Gupta P, Das S, Sarker S, Bhattacharjee M, Bhattacharya S, Ghosh S. *Biomaterials Science* 9(24) (2021) 8285-8312.
7. Combinatorial therapy of Thymoquinone and Emodin synergistically enhanced apoptosis, attenuate cell migration and reduce stemness efficiently in breast cancer. Bhattacharjee M, Upadhyay P, Sarker S, Basu A, Das S, Ghosh A, Ghosh S, Adhikary A. *Biochimica et Biophysica Acta (BBA) - General Subjects*. DOI: 10.1016/j.bbagen.2020.129695.
8. Delivery of dual miRNA through CD44-targeted mesoporous silica nanoparticle for enhanced and effective Triple-negative breast cancer therapy. Ahir M, Upadhyay P, Ghosh A, Sarker S, Bhattacharya S, Gupta P, Ghosh S, Chattopadhyay S, Adhikary A. *Biomaterials Science*. (2020) DOI: 10.1039/d0bm00015a
9. Transferrin ornamented thymoquinone loaded polymeric nanoparticle furnishes anti- carcinogenic effect in non-small cell lung carcinoma through modulation of the microRNA pathway. Upadhyay P, Sarker S, Ghosh A, Gupta P, Das S, Ahir M, Bhattacharya S, Chattopadhyay S, Ghosh S, Adhikary A. *Biomaterials Science*, (2019) DOI: 10.1039/C9BM00912D.
10. Methylglyoxal at metronomic doses sensitizes breast cancer cells to doxorubicin and cisplatin causing synergistic induction of programmed cell death and inhibition of stemness Roy A, Sarker S, Upadhyay P, Pal A, Adhikary A, Jana K, Ray M. *Biochemical Pharmacology* (2018). Volume 156, Pages 322-33.

Paper Presented/Attended/Resource Person in Seminar/Conference/Workshops/FDP's (*Top Ten*):

1. Poster presentation at National Conference organized by Amity University on 'Physiology to Pathology: Finding the Therapeutic Roadmap'

Other details(if any): CSIR JRF, 2015