

University Faculty Details Page on DU Web-site

Title Prof.	First Na	ame	Debi	Last Name	Sarkar		Photograph		
Designation	Head		1						
Department	Depart	ment	of Biochem	istry					
Address (Campus) (Residence)	110021 Type V	L 'B, Flat	f Delhi Soutl t No. 6A, Gro						
	Delhi-1								
Phone No (Campus)	91-11-2								
(Residence) optional		91-11-24113869							
Mobile		9810696767							
Fax			4110283						
Email	dpsark	dpsarkar59@gmail.com							
Web-Page									
Education	1								
Degree	Institut			Year		Detai			
Ph.D	Calcutt	a Univ	versity	1986		Carbo medi	is topic: Immunogenicity of ohydrate Determinants ated through Liposomes. ome Mediated Drug ery.		
M. Sc	Banara	s Hinc	lu University	/ 1980		Subje	jects: Biochemistry		
B. Sc (Honours)	Banaras Hindu University		/ 1978		Subje	Subjects: Chemistry (H)			
Career Profile	1					1			
Organisation / Instituti	on	Desi	gnation	Dura	ion	Role			
Dept. of Biochemistry, University of Delhi, Sou Campus, New Delhi.			arch associa		1986	Resea	arch on Liposomes as unomodulators and drug ery using Liposomes		
Lab of Mathematical Biology, National Cancer Institute, NIH, Bethesda, Md 20892, U.S.A.		Visiti	ing Fellow	1986	1988	induc	Research on Animal virus induced cell fusion. Entry Mechanism of Influenza virus.		
Dept. of Biochemistry, University of Delhi, South Campus, New Delhi.		students & Lecturer,		ersity, New Delhi.					
Dept. of Biochemistry, University of Delhi, South Campus, New Delhi.		Senio	or lecturer	1993	1996	Stude	hing M.Sc (Biochemistry) ents & Research in cular Virology, and		

			Drug/Gene Targeting.
Dept. of Biochemistry,	Reader	1996-2002	Teaching M.Sc (Biochemistry)
University of Delhi, South			Students & Research in
Campus, New Delhi.			Molecular Virology, and
			Drug/Gene Targeting.
Dept. of Biochemistry,	Professor	2002-till date	Teaching M.Sc (Biochemistry)
University of Delhi, South			Students & Research in
Campus, New Delhi.			Molecular Virology, and
			Drug/Gene Targeting.

Research Interests / Specialization

Biochemistry, Molecular Virology, Cell Biology, Immunology, Biotechnology, Model Membranes and Drug/Gene Targeting.

Teaching Experience (Subjects/Courses Taught)

Teaching in the post graduate level for the last 29 years on the subject Biochemistry, Molecular Virology, and Immunology.

Honors & Awards

- Awarded a Gold Medal from the Banaras Hindu University for standing first in the M.Sc. (Biochemistry) examination in 1980.
- Awarded a Travel Fellowship by the International Union of Biochemistry to attend the 13th International Congress of Biochemistry, Amsterdam, The Netherlands, August 25th-30th, 1985.
- Awarded an ICRETT Fellowship by the "International Union against Cancer" to work in NCI/NIH, USA for 76 days from May 16th to August 1st, 1989.
- Awarded S. S. BHATNAGAR Prize in BIOLOGICAL SCIENCES, 1998.
- Conferred M. SREENIVASAYA MEMORIAL AWARD, by SBC, India, 2005
- JC BOSE National Fellowship (DST) Award, September, 2010-2015 and extended for another 5 years.
- Conferred the B.K.Bachhawat Memorial Lecture Award by NASI, Allahabad.
- Delivered the Platinum Jubilee Lecture in the Section of New Biology (including Biochemistry, Biophysics & Molecular Biology and Biotechnology) at the 102nd Indian Science Congress held at University of Mumbai, Mumbai during January 3-7, 2015.

Publications (LAST FIVE YEARS)

Books / Monographs Nil

In Indexed/	Peer Reviewed Journals		
Year of Publication	Title	<u>Journal</u>	<u>Co-Author</u>
2014	Combination of hepatocyte specific delivery and transformation dependent expression of shRNA inducing transcriptional gene silencing of c-Myc promoter in hepatocellular carcinoma cells.	BMC Cancer, 14, 582	Zakaria Khalid Mohammad, Khan Imran, Mani Prashant, Chattopadhyay Parthaprasad, Sarkar P Debi, Sinha Subrata.
2014	Membrane fusion mediated targeted cytosolic drug delivery through scFv engineered Sendai viral envelopes	Current Molecular Medicine, 15, 1-15	Mukesh Kumar, Prashant Mani, Pooja Pratheesh, Sunandini Chandra, Meghala Jeyakkodi, Parthaprasad Chattopadhyay, Debi P. Sarkarand Subrata Sinha.
2015	Phosphorylation of Nonmuscle myosin II-A regulatory light chain resists Sendai virus fusion with host cells.	Scientific Reports (Nature Group), 5, 10395	Provas Das, Shekhar Saha, Sunandini Chandra, Alakesh Das, Sumit K. Dey, Mahua R Das, Shamik Sen, Debi P Sarkar and Siddhartha S Jana.
2015	A novel placental like alkaline phosphatase promoter driven transcriptional silencing combined with single chain variable fragment based virosomal delivery for neoplastic cell targeting.	Journal of Translational Medicine 13, 254	Imran Khan, Mohammad Khalid Zakaria, Mukesh Kumar, Prashant Mani, Parthaprasad Chattopadhyay,

			Debi P. Sarkar and Subrata Sinha.
2017	Induction of Transcriptional Gene Silencing by Expression of shRNA Directed to c-Myc P2 Promoter in Hepatocellular Carcinoma by Tissue-Specific Virosomal Delivery.	Methods Mol Biol. 2017; 1543:245- 257	Mohammad Khalid Zakaria, Debi P. Sarkar and Parthaprasad Chattopadhyay.
2017	Robust production of therapeutic-protein in animal milk avoiding GMO.	Submitted	Nirmalya Ganguli, Nilanjana Ganguli, Sunandini Chandra, Mayank Choubey, Debi P. Sarkar and Subeer S. Majumdar
2017	Sendai virus recruits cellular villin to remodel actin cytoskeleton during fusion with hepatocytes.	Under review, Mol. Biol. Cell	Sunandini Chandra, Raju Kalaivani, Manoj Kumar, Narayanaswam y Srinivasan and Debi P. Sarkar.
<u>Articles</u>			
1. Or 19 2. Or 10 3. Or 8 th	re Presentations rganized (as a Secretary) the 4 th National Symposiur 992, University of Delhi South Campus (UDSC), New D rganized (as a Convener) the 4 th International Sympos 9 th January, 1996, National Institute of Immunology, N rganised (as a Member) the 5 th International Sympos 9 th January, 1999, Indian Institute of Science, Bangalore 90-Convener, Guha Research Conference (GRC), 2008 a	elhi. sium on Cell Surface I lew Delhi. ium on Cell Surface I s.	Macromolecules, 6 th -

Total Publicatio	n Profile optional
<u>Books</u>	03
In Indexed/ Pee	er Reviewed Journals 57
Articles	57
Conference Pre	esentations 04
<u>conterence</u> Fit	
Public Service /	University Service / Consulting Activity
	of the Research Council of CIMAP (CSIR), Lucknow
	Iember, of the Academic Committee of CCMB, CSIR; IMTECH, CSIR; ICGEB, New Delhi.
	lead of Biochemistry Dept., UDSC and Dean of Faculty of Interdisiplinary and Applied
	UDSC. Currently, Head of Biochemistry Dept., UDSC
	Task Force, Basic Research in Modern Biology, DBT, RCGM, DBT; Task Force on Fast
Track Pro	
v. Former m	nember, Academic Council and Executive Council of Delhi University, Delhi.
Professional So	cieties Memberships
	eviewer of research papers from BBA, Biomembrane, FEBS Letters, Biotechniques, IJBB,
	nb. Biol, Antiviral research etc.
	is a member in the Editorial Board of "Human Gene Therapy", MaryAnn Liebert Inc.
	s, PA, USA.
	ber SBC (INDIA).
	nember of Guha Research Conference (GRC), India
v. Elected m	nember of Molecular Immunology Forum, India.
vi. Elected, F	ellow of The National Academy of Sciences, India (1996).
vii. Elected, F	ellow of The Indian Academy of Sciences (2007).
viii. Elected F	ellow of the Indian National Science Academy (INSA), New Delhi, 2011.
	Grants / Collaborations)
	a Principal Investigator on a DST (Govt. of India) sponsored Research Project (1991-1995),
	n Approach for Target Specific Delivery of Biologically active Molecules Using Virosomes
-	nic Vesicles". (Net Grant Value Rs. 21,79,000)
	a Principal Investigator on a CSIR (Govt. of India) sponsored Research Project (1992-
	tled "Biophysical studies on the Formation and Dynamics of Viral Components and
	of their Potential as Fusogenic Particulate Carriers for Introducing Biological Molecules
 Worked as Feb.1995, e Nuclear De 	 Ils". (Net Grant Value Rs. 14,27,677) a Principal Investigator on a DBT (Govt. of India) sponsored Research Project w.e.f. entitled "Role of Glycosylation of Sendai Viral Fusion ProteinTargeted Cytosolic and livery System". (Net Grant Value Rs. 32,86,000) Co-Principal Investigator in a DBT (Govt. of India) sponsored Research Project w.e.f.

Jan.1996, entitled "Liposomal and Allied Lipid Vesicles--- Development of Therapeutic Products". (Net Grant Value Rs. 32,81,000)

- Worked as a Principal Investigator on a CSIR (Govt. of India) sponsored Research Project w.e.f. Sept.1996, entitled "Virosome-Mediated Delivery-----Antisense Therapeutics". (Net Grant Value Rs. 22,00,000)
- Worked as a Principal Investigator on a DBT (Govt. of India) sponsored Research Project w.e.f March, 1998 entitled "Development of Recombinant Sendai Virus----Therpeutic Importance" (Net Grant value Rs. 32,00,000)
- Worked as a Principal Investigator on a CSIR (Govt. of India) sponsored Research Project, NMITLI programme, w.e.f. March, 2001 entitled "Development of Advanced Drug Delivery Systems" (Net Grant Value Rs. 72,00,000) till 2004.
- Working as a PI on a PANACEA BIOTEC Ltd., Lalru, Punjab sponsored Project entitled "Virosome Mediated Anticancer Drug Delivery" wef April, 2003 (Net Grant Value Rs. 46, 00,000).
- Worked as a PI on a DBT sponsored Project entitled "Development of the Process for Mass Production of Targeted Delivery of Antigens Through Nanoparticles Using Sendai Virus System" w.e.f. March, 2003 (Net Grant Value Rs. 62,00,000) till 2006.
- Working as Co-PI with Dr. Saumitra Das, Dept. of Microbiology and Cell Biology, Indian Institute of Science, Bangalore-560012 on a DBT sponsored project entitled "Inhibition of HCV RNA translational and replication using small RNAs" w.e.f. November, 2005 (Net Grant Rs. 23.34 Lakhs).
- Working as Co-PI in a DBT sponsored Project with Prof. Subrata Sinha, Dept. of Biochemistry, AIIMS, New Delhi entitled "Therapy of Infectious & Chronic Disesaes-Targeted Gene Delivery & Long Term Specific Modulation of Gene Expression" w.e.f. September, 2006, with a total amount of Rs. 93.43 Lakhs.
- Working as Co-PI in a DBT sponsored project with Dr. Sandeep Saxena, NII, New Delhi entitled "Utilization of siRNA tools to study ------ nanoparticle derived from Sendai virus" w.e.f. 2008, with a total amount of Rs. 97.36 Lakhs.
- Working as Co-PI in a DBT sponsored project with Dr. SS Jana, IACS (DST), Kolkata entiltled "Role of Nonmescle Myosin II in virus-cell fusion" w.e.f. 2009, with a total budget of Rs. 8.82 Lakhs.
- Working as Co-PI in a collaborative project with Prof. SS Ghosh, IIT, Guwahati, NE/DBT programme entitled "Novel nanoscale materials-----antimicrobial and anticancer activities" w.e.f. April 2011, Rs. 75 lakhs.

Other Details