




University Faculty Details Page on DU Web-site

Title	Prof.	First Name	Debi	Last Name	Sarkar	
Designation	Professor					
Department	Department of Biochemistry					
Address (Campus)	University of Delhi South Campus, New Delhi-110021					
(Residence)	Type VB, Flat No. 6A, Ground Floor, UDSC, New Delhi-110021					
Phone No (Campus)	91-11-24111967					
(Residence)	91-11-24113869					
Mobile	9810696767					
Fax	24115270, 24110283					
Email	dpsarkar59@gmail.com					
Web-Page						
Education						
Degree		Institution		Year	Details	
Ph.D		Calcutta University		1986	Thesis topic: Immunogenicity of Carbohydrate Determinants mediated through Liposomes. Liposome Mediated Drug Delivery.	
M. Sc		Banaras Hindu University		1980	Subjects: Biochemistry	
B. Sc (Honours)		Banaras Hindu University		1978	Subjects: Chemistry (H)	
Career Profile						
Organization / Institution		Designation		Duration	Role	
Dept. of Biochemistry, University of Delhi, South Campus, New Delhi.		Research associate		1985-1986	Research on Liposomes as Immunomodulators and drug delivery using Liposomes	
Lab of Mathematical Biology, National Cancer Institute, NIH, Bethesda, Md 20892, U.S.A.		Visiting Fellow		1986-1988	Research on Animal virus induced cell fusion. Entry Mechanism of Influenza virus.	
Dept. of Biochemistry, University of Delhi, South Campus, New Delhi.		Lecturer		1988-1993	Teaching M.Sc (Biochemistry) students & Research. Honorary Lecturer, Jawaharlal Nehru University, New Delhi.	
Dept. of Biochemistry, University of Delhi, South		Senior lecturer		1993-1996	Teaching M.Sc (Biochemistry) Students & Research in	

Campus, New Delhi.			Molecular Virology, and Drug/Gene Targeting.
Dept. of Biochemistry, University of Delhi, South Campus, New Delhi.	Reader	1996-2002	Teaching M.Sc (Biochemistry) Students & Research in Molecular Virology, and Drug/Gene Targeting.
Dept. of Biochemistry, University of Delhi, South Campus, New Delhi.	Professor	2002-till date	Teaching M.Sc (Biochemistry) Students & Research in 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 23 years on the subject Biochemistry, Molecular Virology, and Immunology.			
Honors & Awards			
<ul style="list-style-type: none"> • 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 • Conferred Prof. B.K. Bachhawat Memorial Lecture Award 2011 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)			
Monographs			
<u>Year of Publication</u>	<u>Title</u>	<u>Publisher</u>	<u>Co-Author</u>
In Indexed/ Peer Reviewed Journals			
<u>Year of Publication</u>	<u>Title</u>	<u>Journal</u>	<u>Co-Author</u>

2010	Reciprocal regulation of AKT and MAP Kinase dictates virus-host cell fusion	Journal of Virology, 84, 4366-4382	Sharma, NR., Mani, P., Nandwani, N., Mishra, R., Rana, A. and Sarkar, Debi P.
2012	Inhibition of the interaction between NS3 protease and HCV IRES with a small peptide: A novel therapeutic Strategy.	Molecular Therapy, 21, 57-67	Upasana Ray, Chaitrali Laha Roy, Anuj Kumar, Prashant Mani, Angel Praveen Joseph, G. Sudha, Debi P Sarkar, N. Srinivasan and Saumitra Das.
2012	Targeting ribosome assembly on the HCV RNA using a small RNA molecule.	RNA Biology, 9, 1-10	Prasanna Bhat, Sivakumar Vadivel Gnanasundram, Prashant Mani, Debi P Sarkar and Saumitra Das.
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 (ID 31720).	Current Molecular Medicine, <i>in press</i>	Mukesh Kumar, Prashant Mani, Pooja Pratheesh, Sunandini Chandra, Meghala Jeyakkodi, Parthaprasad Chattopadhyay, Debi P. Sarkar

and Subrata
Sinha.

Articles

Conference Presentations

1. Organized (as a Secretary) the 4th National Symposium on Liposome Research, 1st - 4th March, 1992, University of Delhi South Campus (UDSC), New Delhi.
2. Organized (as a Convener) the 4th International Symposium on Cell Surface Macromolecules, 6th-10th January, 1996, National Institute of Immunology, New Delhi.
3. Organised (as a Member) the 5th International Symposium on Cell Surface Macromolecules, 4th-8th January, 1999, Indian Institute of Science, Bangalore.
4. Co-Convener, Guha Research Conference (GRC), 2008 at Gangtok, Sikkim

Total Publication Profile *optional*

Monographs 3

In Indexed/ Peer Reviewed Journals 50

Reviews -

Conference Presentations 4

Public Service / University Service / Consulting Activity

- i. Member, of the Research Council of CIMAP (CSIR), Lucknow
- ii. Former Member, of the Academic Committee of CCMB, CSIR; IMTECH, CSIR; ICGEB, New Delhi.
- iii. Former Head of Biochemistry Dept., UDSC and Dean of Faculty of Interdisciplinary and Applied Sciences, UDSC.
- iv. Member, Task Force, Basic Research in Modern Biology, DBT, RCGM, DBT; Task Force on Fast Track Project, DST.
- v. Former member, Academic Council and Executive Council of Delhi University, Delhi.

Professional Societies Memberships

- i. Ad-Hoc Reviewer of research papers from BBA, Biomembrane, FEBS Letters, Biotechniques, IJBB, Mol. Memb. Biol, Antiviral research etc.
- ii. Elected as a member in the Editorial Board of "Human Gene Therapy", MaryAnn Liebert Inc.

Publishers, PA, USA.

- iii. Life Member SBC (INDIA).
- iv. Elected member of Guha Research Conference (GRC), India
- v. Elected member of Molecular Immunology Forum, India.
- vi. Elected, Fellow of The National Academy of Sciences, India (1996).
- vii. Elected, Fellow of The Indian Academy of Sciences (2007).
- viii. Elected Fellow of the Indian National Science Academy (INSA), New Delhi, 2011.

Projects (Major Grants / Collaborations)

- Worked as a Principal Investigator on a DST (Govt. of India) sponsored Research Project (1991-1995), entitled "An Approach for Target Specific Delivery of Biologically active Molecules Using Virosomes and Fusogenic Vesicles". (Net Grant Value Rs. 21,79,000)
- Worked as a Principal Investigator on a CSIR (Govt. of India) sponsored Research Project (1992-1996), entitled "Biophysical studies on the Formation and Dynamics of Viral Components and Evaluation of their Potential as Fusogenic Particulate Carriers for Introducing Biological Molecules into the Cells". (Net Grant Value Rs. 14,27,677)
- Worked as a Principal Investigator on a DBT (Govt. of India) sponsored Research Project w.e.f. Feb.1995, entitled "Role of Glycosylation of Sendai Viral Fusion Protein-----Targeted Cytosolic and Nuclear Delivery System".(Net Grant Value Rs. 32,86,000)
- Worked as 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----Therapeutic 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" w.e.f. 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 entitled “Role of Nonmuscle 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.