UNIVERSITY OF CALCUTTA

ACADEMIC DEPARTMENT

FACULTY ACADEMIC PROFILE/ CV

1. **Full name of the faculty member**: Dr. Smritimoy Pramanik
2. **Designation**: Assistant Professor
3. **Specialization** : Physical Chemistry, Analytical Chemistry
4. **Passport size photograph** :

5. **Contact information** :

Room No. 25, Dept. of Chemistry
University of Calcutta, Rajabazar Science College
92, Acharya Prafulla Chandra Road,
Kolkata – 700009, West Bengal,
INDIA
Email ID: spchem@caluniv.ac.in, smritimoyju@yahoo.co.in
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6. **Academic qualifications**:

College/ university from which the degree was obtained	Abbreviation of the degree
Jadavpur University	B.Sc.
Jadavpur University	M.Sc.
Jadavpur University	Ph.D.

7. **Positions held/ holding:**

- March, 2016 to Till date: Assistant Professor in Chemistry at University of Calcutta, Kolkata, India
- November, 2015 to February, 2016: DST-INSPIRE Faculty, Institute of Advanced Study in Science and Technology, Guwahati.
- May, 2009 to March, 2015: Frontier Institute for Biomolecular Engineering Research, Konan University, Japan.

8. **Research interests**:

- *Effect of homogeneous and heterogeneous crowding on the behaviour of biomolecules (Mimic Intracellular crowding environment)*
- *Effect of intracellular interfaces on the behaviour of biomolecules (Membrane biophysics)*
- *Protein-Nucleic acids interaction (Central dogma of gene expression)*
- *Targeted cell specific drug delivery*

9. **Research guidance** :

Number of researchers awarded M.Phil/ Ph.D degrees: None
Number of researchers pursuing M.Phil/ Ph.D: 3

10. **Projects :**

Completed projects: None

Current projects: 2

S.No	Title	Cost in Lakh	Duration	Agency
1.	Formulation of Stimuli Responsive Artificial Light Harvesting Systems	29.92	3 years	DST-SERB
2.	Effect of intracellular interfaces on the central dogma of gene expression	35.00	5 years	DST-INSPIRE Faculty

11. **Select list of publications**:
    a) ***Journals:***

Sl. No.	Author(s)	Title	Complete Reference of Journal
24.	Y.Teng, S. Pramanik, H. Tateishi-Karimata,T Ohyama, N. Sugimoto	Drastic stability change of X-X mismatch in d(CXG) trinucleotide repeat disorders under molecular crowding condition.	*Biochem. Biophys. Res. Commun.* 496 **2018** 601-607.
23.	H. Tateishi-Karimata, S. Pramanik, N. Sugimoto	DNA sensor's selectivity enhancement and protection from contaminating nucleases due to a hydrated ionic liquid.	*Analyst* 140 **2015** 4393-4398.
22.	H. Tateishi-Karimata, M. Nakano, S. Pramanik, S. Tanaka, N. Sugimoto	i-Motifs are more stable than G-quadruplexes in a hydrated ionic liquid	*Chem. Commun.* 51 **2015** 6909-6912.
21.	S. Pramanik, H. Tateishi-Karimata, N. Sugimoto	Organelle-Mimicking Liposome Dissociates G-quadruplexes and Facilitates Transcription.	*Nucleic Acids Res.* 42 **2014** 12949-12959.
20.	H. Tateishi-Karimata, S. Pramanik, S. Nakano, D. Miyoshi, N. Sugimoto	Dangling Ends Perturb the Stability of RNA Duplexes Responsive to Surrounding Conditions. **(Selected as inside back cover article)**	*ChemMedChem.* 9 **2014** 2150-2155.
19.	S. Pramanik, S. Nagatoishi, N. Sugimoto	DNA tetraplex structure formation from human telomeric repeat motif (TTAGGG):(CCCTAA) in nanocavity water pools of reverse micelles. **(Selected as inside back cover article)**	*Chem. Commun.* 48 **2012** 4815-4817.
18.	S. Chall, S. Pramanik, S. Dhar, A. Saha, S. C. Bhattacharya	Facile room temperature synthesis of Lanthanum Oxalate nanorods and their interaction with antioxidative Naphthalimide derivative.	*J. Nanosci. Nanotech.* 12 **2012** 2229-2238.

17.	S. Pramanik, S. Nagatoishi, S. Saxena, J. Bhattacharyya, N. Sugimoto	Conformational Flexibility Influences Degree of Hydration of Nucleic Acid Hybrids.	*J. Phys. Chem. B.* 115 **2011** 13862-13872.
16.	S. Pramanik, K. Nakamura, K. Usui, S. Nakano, S. Saxena, J. Matsui, D. Miyoshi, N. Sugimoto	Thermodynamic stability of Hoogsteen and Watson–Crick base pairs in the presence of histone H3-mimicking peptide. **(Selected as inside front cover article)**	*Chem. Commun.* 47 **2011** 2790-2792.
15.	S. Pramanik, S. C. Bhattacharya	Size Tunable Synthesis and Characterization of Cerium Tungstate Nanoparticles via H_2O/ AOT / Heptane Microemulsion.	*Mater. Chem. Phys.* 121 **2010** 125-130.
14.	S. Ito, K. Itoh, S. Pramanik, T. Kusumi, S. Takei, H. Miyasaka	Evaluation of Diffusion Coefficient in a Dextrin-Based Photo-Curable Material by Single Molecule Tracking.	*Applied Physics Express* 2 **2009** 075004.
13.	P. Banerjee, S. Pramanik, A. Sarkar, S. C. Bhattacharya	Deciphering the Fluorescence Resonance Energy Transfer Signature of 3-Pyrazolyl 2-Pyrazoline in Transport Proteinous Environment.	*J. Phys. Chem. B.* 113 **2009** 11429-11436
12.	S. Pramanik, P. Banerjee, A. Sarkar, A. Mukherjee, K. K. Mahalanabis, S. C. Bhattacharya	Spectroscopic investigation of 3-pyrazolyl 2-pyrazoline derivative in homogeneous solvents.	*Spectrochimica Acta Part A* 71 **2008** 1327-1332
11.	S. Pramanik, P. Banerjee, A. Sarkar, S. C. Bhattacharya	Size dependent interaction of gold nanoparticles with transport protein: A spectroscopic study.	*J. Luminescence*, 128 **2008** 1969-1974
10.	P. Banerjee, S. Pramanik, A. Sarkar, S. C. Bhattacharya,	Modulated Photophysics of 3-Pyrazolyl-2-pyrazoline Derivative Entrapped in Micellar Assembly.	*J. Phys. Chem. B.* 112 **2008** 7211-7219
9.	A. Sarkar, S. Pramanik, P. Banerjee, S. C. Bhattacharya	Interaction of 1-anthracene sulphonate with cationic micelles of alkyl trimethyl ammonium bromides (C_nTAB): A spectroscopic study.	*Colloids and Surfaces A* 317 **2008** 585-591.

8.	S. Pramanik, S. C. Bhattacharya, T. Imae	Fluorescence Quenching of 3,7-diamino-2,8-dimethyl-5-phenyl Phenazinium Chloride by AgCl and Ag Nanoparticles.	*J. Luminescence* 126 **2007** 155-159.
7.	P. Banerjee, S. Chatterjee, S. Pramanik, S. C. Bhattacharya	Interaction of Pyrene-1-Carboxaldehyde with micelles and mixed micelles of polyoxyethylene nonyl phenol (Igepal): A spectroscopic study.	*Colloids and Surfaces A* 302 **2007** 44-50.
6.	S. Chatterjee, P. Banerjee, S. Pramanik, A. Mukherjee, K. K. Mahalanabis, S. C. Bhattacharya,	Role of homogeneous solvents on photophysics of 3-pyrazolyl-2-pyrazoline derivative.	*Chem. Phys. Lett.* 440 **2007** 313-320.
5.	S. Pramanik, P. Banerjee, S. C. Bhattacharya	Interaction of 8-hydroxypyrene-1,3,6-trisulphonate in alkyltrimethylammonium bromide (C_nTAB) micellar medium.	*J. Photochem. Photobiol. A* 187 **2007** 384-388.
4.	P. Banerjee, S. Chatterjee, S. Pramanik, Sk. U. Hossain, S. Bhattacharya, S. C. Bhattacharya	Spectroscopic studies of 2-(2-Bromoethyle)-6-nitro benzo [de] isoquinolene-1,3-dione in water/alkanol mixed solvents and nonionic micelle,	*Spectrochemica Acta Part A* 66 **2007** 1110-1114.
3.	S. Chatterjee, S. Pramanik, Sk U. Hossain, S. Bhattacharya, S. C. Bhattacharya	Synthesis and photoinduced intramolecular charge transfer of N-substituted 1,8-naphthalimide derivatives in homogeneous solvents and in presence of reduced glutathione.	*J. Photochem. Photobiol. A* 187 **2007** 64-71.
2.	S. Pramanik, D. Das, K. Das, S. C. Bhattacharya	Synthesis and characterization of nanodispersed molecular aggregates of Prussian Blue in AOT reverse micelle.	*J. Nanosci. Nanotech.* 7 **2007** 663-667.
1.	S. Chatterjee, S. Pramanik, S. C. Bhattacharya	Spectroscopic Study of Some Photographic Developing Agents in Reverse Micelles of AOT in Heptane.	*J. Mol. Liquids* 116 **2005** 131-137.

b) Books/ book chapters *: None*

c) ***Conference/ seminar volumes***:

1. ***International conference on Soft Matter (ICSM-2004),*** Indian Society for Surface Science and Technology and Centre for Surface Science, Jadavpur University; Calcutta-32, India; 18-20 November, 2004.

2. XVII th ***National conference on Photosciences for the millennium (NASPHOM- 2005)*** organized by Indian Photobiology Society, Sambalpur University, Orrisa, India; 19-21 February, 2005.

3. ***International Conference on Recent Trends in Nanoscience & Technology*** organized by School of Material Science & Technology and Centre for Nanoscience & Technology, Jadavpur University, Calcutta**,** India; 7-9 December, 2006.

4. ***National Conference on Photosciences*** organized by Indian photobiology Society and Department of Chemistry, Jadavpur University, Calcutta**,** India; 31 January, 2007.

5. ***International Conference on Soft Systems (ICSS-2008)*** organized by Indian Society for Surface Science and Technology and Centre for Surface Science, Jadavpur University, February 2008.

6. ***90^{th} Annual Meeting of the Chemical Society of Japan*** organized by The Chemical Society of Japan, March 2010.

7. ***The 37^{th} International Symposium on Nucleic Acids Chemistry (ISNAC 2010)*** November 2010.

8. ***91^{st} Annual Meeting of the Chemical Society of Japan*** organized by The Chemical Society of Japan, March 2011.

9. ***The 38^{th} International Symposium on Nucleic Acids Chemistry (ISNAC 2011)*** November 2011.

10. ***92^{nd} Annual Meeting of the Chemical Society of Japan*** organized by The Chemical Society of Japan, March 2012.

11. ***The 39^{th} International Symposium on Nucleic Acids Chemistry (ISNAC 2012)*** November 2012.

12. ***93^{rd} Annual Meeting of the Chemical Society of Japan*** organized by The Chemical Society of Japan, March 2013.

13. ***The 40^{th} International Symposium on Nucleic Acids Chemistry (ISNAC 2013)*** November 2013.

14. ***94th Annual Meeting of the Chemical Society of Japan*** organized by The Chemical Society of Japan, March 2014.

15. ***The 41st International Symposium on Nucleic Acids Chemistry (ISNAC 2014)*** November 2014.

16. ***95th Annual Meeting of the Chemical Society of Japan*** organized by The Chemical Society of Japan, March 2015.

d) ***Other publications*** : None

12. **Membership of Learned Societies**: None

13. **Patents:** None

14. **Invited lectures delivered:** None

15. **Awards :**

S.No.	Name of Award	Awarding Agency	Year
1	DST-INSPIRE Faculty Award	DST, Government of India	2015
2	Outstanding Poster Presentation Award	The 41st International Symposium on Nucleic Acids Chemistry	2014
3	Post-doctoral Fellowship	Konan University	2009
4	Short-term Graduate Student Delegation	Japan Society for the Promotion of Science	2008

16. **Other notable activities** : None