

Name	DR. PUJA PAUL
Qualification	MSc, PhD
Specialisation	Organic Chemistry
Research Area	Biophysical Chemistry
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List of publication	Attached as Annexure I
Awards and Scholarships won	<ol style="list-style-type: none"> 1. National Eligibility Test Fellowship of the Council of Scientific and Industrial Research Govt. of India (2008). 2. Recipient of Dr. Gurdip Singh award for Best Thesis in Thermal Analysis for the year 2013 at BARC, Mumbai.
Institutional Membership	<ol style="list-style-type: none"> 1. INDIAN BIOPHYSICAL SOCIETY (Regn. No. S/6701, Act XXVI of 1961, Established: July 6, 1961) 2. DNA SOCIETY OF INDIA (Regn. No. S/1L/60949, Act XXVI of 1961, Established: 2009) 3. INTERNATIONAL BIOPHYSICAL SOCIETY (Member ID 84350 for year 2016-17)
Conference attended	Attached as Annexure II
Project Work	NA

Annexure I

1. **Paul P.**, Hossain M., Yadav R.C., Kumar G.S. (2010) Biophysical studies on the base specificity and energetics of the DNA interaction of photoactive dye thionine: Spectroscopic and calorimetric approach. *Biophys. Chem.*, 148, 93-103. (ISSN 0301-4622)
2. **Paul P.**, Kumar G.S. (2010) Toxic interaction of thionine to deoxyribonucleic acids: Elucidation of the sequence specificity of binding with polynucleotides. *J. Hazard. Mater.*, 184, 620-626. (ISSN 0304-3894)
3. **Paul P.**, Hossain M., Kumar G.S. (2011) Calorimetric and thermal analysis studies on the binding of phenothiazinium dye thionine with DNA polynucleotides. *J. Chem. Thermodynamics*, 43(7), 1036-1043. (ISSN 0021-9614)
4. **Paul P.**, Kumar G.S. (2012) Thionine interaction to DNA: Comparative spectroscopic studies on double stranded versus single stranded DNA. *J Fluoresc.*, 22(1), 71-80. (ISSN 1573-4994)
5. **Paul P.**, Kumar G.S. (2013) Spectroscopic studies on the binding interaction of phenothiazinium dyes toluidine blue O, azure A and azure B to DNA. *Spectrochim. Acta Part A: Molecular and Biomolecular Spectroscopy*, 107, 303–310. (ISSN 1386-1425)
6. **Paul P.**, Kumar G.S. (2013) Thermodynamics of the DNA binding of phenothiazinium dyes toluidine blue O, azure A and azure B. *J. Chem. Thermodynamics*, 64, 50-57. (ISSN 0021-9614)
7. **Paul P.**, Kumar G.S. (2013) Targeting ribonucleic acids by toxic small molecules : Structural perturbation and energetics of interaction of phenothiazinium dyes thionine and toluidine blue O to tRNA^{phe}. *J. Hazard. Mater.*, 263, 735-745. (ISSN 0304-3894).
8. **Paul P.**, Kumar G.S. (2014) Self-structure formation in polyadenylic acid by small molecules: new insights from the binding of planar dyes thionine and toluidine blue O. *RSC advances*, 4, 25666-25674. (ISSN 2046-2069)
9. **Paul P.**, Kumar G.S. (2014) Photophysical and calorimetric investigation on the structural reorganization of poly(A) by phenothiazinium dyes azure A and azure B. *Photochemical and Photobiological Sciences*, 13 (8), 1192-1202. (ISSN 1474-9092)
10. **Paul P.**, Mati S.S., Bhattacharyya S.C. and Kumar G.S. (2017) Spectroscopic, calorimetric, cyclic voltammetric and molecular modeling studies of new methylene blue-polyadenylic acid interaction and comparison to thionine and toluidine blue O: Understanding self-structure formation by planar dyes. *Dyes and Pigments* 136, 205-218. (ISSN 0143-7208)
11. **Paul P.**, Mati S.S., Bhattacharyya S.C. and Kumar G.S. (2017) Exploring the binding interaction of phenothiazinium dyes methylene blue, new methylene blue, azure A and azure B to tRNA^{phe}: Spectroscopic, thermodynamic, voltammetric and molecular modeling approach. *Phys. Chem. Chem. Phys.* 19, 6636-6653. (ISSN 1463-9084)
12. **Paul P.**, Chatterjee S., Pramanik A., Bhattacharyya S.C., Karmakar P. and Kumar G.S Thionine Conjugated Gold Nanoparticles Triggers Apoptotic Activity Towards HepG2 Cancer Cell Line, communicated to *ACS Biomaterials Science & Engineering*

Publication in Conference Proceedings

Biophysical Studies on the Interaction of Thionine Gold Nanoconjugate to Serum Albumin, **Paul, P.**, Kumar, G.S. and Bhattacharyya S.C., *Biophysical journal*, Volume **110**, Issue 3, Supplement 1, p47a, 16 February 2016 DOI: <http://dx.doi.org/10.1016/j.bpj.2015.11.322>

Annexure II

Presentations in National Symposia's

1. **Paul, P.** and Yadav, R.C. (2009) *Comparative studies of the interaction of ethidium and berberine with AMP, ATP and poly(A)*, National Symposium on Cellular and Molecular Biophysics, January 22-24, 2009, Hyderabad, India .
2. **Paul, P.** and Kumar, G.S. (2010) *Biophysical studies on the DNA binding of thionine*, National Symposium on Recent Trends in Biophysics, February 13-15, 2010, Varanasi, India.
3. **Paul, P.** and Kumar, G.S. (2010) *Studies on the interaction of thionine to deoxyribonucleic acids: Elucidation of the sequence specificity of binding*, National Conference on New Arena in Photosciences, August 28, 2010, JU, Kolkata, India.
4. **Paul, P.** and Kumar, G.S. (2012) *Understanding the interaction of thionine to synthetic and natural DNAs: A structural and energetic approach*, Annual Meeting of the Indian Biophysical Society, 19th-21st Jan, 2012, University of Madras, Chennai.
5. **Paul, P.** and Kumar, G.S. (2012) *Comparative studies on the interaction of thionine and toluidine blue O to tRNA^{phe}: A structural and energetic approach*, National conference on Photosciences: Contemporary Challenges and Future Perspectives, 12th-14th Dec, 2013, Jadavpur University, Kolkata.
6. **Paul, P.** and Kumar, G.S. (2013) *Thermal analysis and spectral studies on the interaction of phenothiazinium dyes with DNA* at Nineteenth Symposium and workshop on Thermal Analysis, 19th-21st Dec, 2013, BARC, Mumbai.

Presentations in International Symposia's

1. **Paul, P.** and Kumar, G.S. (2011) *Sequence-specific interaction of phenothiazine dye thionine with polynucleotides: Spectroscopic and thermodynamic studies*, 7th Asian Biophysics Association (ABA) Symposium & Annual Meeting of the Indian Biophysical Society (IBS), 30th Jan-2nd Feb, 2011, New Delhi, India.
2. **Paul, P.** and Kumar, G.S. (2011) *Interaction of phenothiazine dye thionine with natural and synthetic DNAs: Binding characteristics, base sequence specificity and selectivity*, International Conference on Biomaterials and Implants: Prospects and possibilities in the new millennium (BIO2011), 21st-23rd July, 2011, CGCRI, Kolkata, India.
3. **Paul, P.** and Kumar, G.S. (2011) *Intercalation of thionine to DNA: Insights into the chemistry in terms of structural and energetic aspects*, International Symposium on Chemistry and Complexity, 6th-8th Dec, 2011, IACS, Kolkata, India.
4. **Paul, P.**, Kumar, G.S. and Bhattacharyya S.C. (2016) *Biophysical studies on the interaction of thionine gold nanoconjugate to serum albumin*, Biophysical Society 60th Annual Meeting, 27th February-2nd March, 2016, Los Angeles, California, USA.

Participation in Symposium

ACS- Chemistry for life, An initiative from the American Chemical Society held on 12th Oct, 2012, IACS, Kolkata, India.