Dr. PARIMAL KUMAR DAS

Associate Professor M. Sc. (Chemistry); PhD (Chemistry)

Overview:

Dr. Parimal Kumar Das has joined this college in July, 1999 as a Lecturer in Chemistry and at present he is in the position of Associate Professor of Chemistry. He completed his Bachelor's degree in Chemistry (Hons) and Master's Degree with specialization of Physical Chemistry from Burdwan University in 1991 and 1993 respectively. Then he was actively engaged in research work and obtained his Ph.D. degree in Science entitled **Solvation Interaction in Various Media by Spectroscopic Techniques**. He has substantial contribution in the field of his research through the publications in several reputed International and National level journals like, **Journal of Chemical Society**, **Spectrochim Acta**, **Journal of Photochemistry and Photobiology**, **Indian Journal of Chemistry** etc. He has been teaching basic courses in Chemistry at the under graduate as well as post graduate level, specially in the branches of Physical Chemistry.

Date of appointment to the present job: 26th July 1999

Other Academic/ Administrative post:

Departmental coordinator : U.G. – February, 2013 – January, 2018 and P.G. – July, 2016 – June, 2018, Teachers' Representative, G.B. T.D.B. College – from September, 2017- to till date

Academic background:

M. Sc. (Chemistry) – Burdwan University, 1993 Ph. D. (Chemistry) - Burdwan University, 2001 GATE : 1994 NET (CSIR) : July, 1995

Information about M Phil/Ph D etc.:

 PhD Topic: Studies on solvation interaction in various media by spectroscopic techniques. (Link: <u>https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:ae90247a-4c07-47d5-81fd-84a2bda9af2a#pageNum=1</u>)

Area of present academic/ Research interest/Research Projects & Schemes and Collaborations:

Research interest:

Solvation interaction by using different spectroscopic tools.

Research projects: (UGC Minor Research Project, Completed)
 Title : Synthesis and fluorometric Studies of a Novel Fluorescent probe for cation recognition
 Sanction No. PSW 012/04-05 dated 03.03.2005, Amount received : Rs. 70000/ (Link: <u>https://documentcloud.adobe.com/link/track?uri=urn:aaid:scds:US:41828da0-7004-4e9c-8a9a e2e6de4a57da#pageNum=1</u>)

Publications:

□ Das P. K., Banerjee D. and Bagchi S. 2007. Spectroscopic Study of association of a hemicyanine dye in mixed aqueous binary solvents, *Spectrochim. Acta: A*, 67, 225.

(https://www.sciencedirect.com/science/article/abs/pii/S1386142506004021?via%3Dihub)

□ Banerjee D., Das P. K., Singha H. and Bagchi S. 2008. Fluorimetric study of interaction of merbromin with trypsin *Spectrochim. Acta: A*, 70, 1109.

(https://www.sciencedirect.com/science/article/abs/pii/S1386142507005914?via%3Dihub)

□ Das P. K., Pramanik R. and Bagchi S. 2003. Absorption spectral band width of charge transfer transition of $E_T(30)$ dye in homogeneous and heterogeneous media *Spectrochim. Acta: A*, 59, 1681.

(https://www.sciencedirect.com/science/article/abs/pii/S138614250200402X?via%3Dihub)

- Laha A. K., Das P. K. and Bagchi S. 2002 Study of preferential solvation in mixed binary solvent as a function of solvent composition and temperature by UV – Vis spectroscopic method *J. Phys. Chem A*, 106, 3230.
 - (Web Link : https://pubs.acs.org/doi/10.1021/jp0121116)
- □ Pramanik R., Das P. K., Banerjee D. and Bagchi S. 2001 Fluorescence of a ketocyanine dye in pure and mixed binary solvents at 77K *Chem. Phys. Lett.*, 341, 507.

(https://www.sciencedirect.com/science/article/abs/pii/S0009261401005462?via%3Dihub)

Ray N., Pramanik R., Das P. K. and Bagchi S. 2001 UV visible spectroscopic study of solvation of 2,6diphenyl-4(2,4,6-triphenyl-1-pyridino)phenolate in ternary solvent mixtures *Chem. Phys. Lett.*, 341, 255.

(https://www.sciencedirect.com/science/article/abs/pii/S0009261401003396?via%3Dihub)

Das P. K., Pramanik R., Banerjee D. and Bagchi S. 2000 Studies of Solvation of Ketocyanine dyes in Homogeneous and Heterogeneous media by UV/Vis Spectroscopic method Spectrochim. Acta: A, 56, 2763.

(https://www.sciencedirect.com/science/article/abs/pii/S1386142500003218?via%3Dihub)

□ Pramanik R., Das P. K. and Bagchi S. 2000 Fluorescence anisotropy of ketocyanine dyes in homogeneous and heterogeneous media. Estimation of micellar microviscosity *Phys Chem. Chem. Phys.*, 2, 4307.

(<u>https://pubs.rsc.org/en/content/articlelanding/2000/CP/b004498i#!divAbstract</u>)

- Das P. K., Pramanik R. and Bagchi S. 2000 Band-width of charge transfer band of ion-pairs and dipolar molecules in neat and mixed binary solvents *Indian J. Chem.*, 39A, 484. (http://nopr.niscair.res.in/handle/123456789/21110)
- Pramanik R., Das P. K. and Bagchi S. 1999 Solubility and solvation interaction in neat and mixed binary solvents *Indian J. Chem.*, 38A, 906.
- (Web Link : <u>http://nopr.niscair.res.in/handle/123456789/15870</u>)
 Pramanik R., Das P. K. and Bagchi S. 1999 Fluorescence anisotropy of ketocyanine dyes in pure and mixed binary solvents *J. Photochem. Photobiol, A:Chem,* 124, 135.

(https://www.sciencedirect.com/science/article/abs/pii/S1010603099000842?via%3Dihub)

Das P. K., Pramanik R., Banerjee D. and Bagchi S. 1998 A study of excited-state dipole moments by monitoring the band width of the charge-transfer transition of ion pairs or dipolar molecules *J. Chem. Soc. Faraday Trans.*, 94, 3573.

(Web Link : https://pubs.rsc.org/en/content/articlelanding/1998/FT/a806448b#!divAbstract)

- A. K. Laha, Das P. K., Banerjee D. and Bagchi S. 1996 UV-VIS spectroscopic study of preferential solvation in mixed binary solvents at various temperatures *J. Chem. Soc. Faraday Trans.*, 92, 1499. (Web Link : https://pubs.rsc.org/en/content/articlelanding/1996/FT/FT9969201499#!divAbstract)
- Banerjee D., Das P. K., Mondal S., Ghosh S. and Bagchi S. 1996 Interaction of ketocyanine dyes with cationic, anionic and neutral micelles *J. Photochem. Photobiol, A: Chem*, 98, 183. (https://www.sciencedirect.com/science/article/abs/pii/1010603096043419?via%3Dihub)