

## PERSONAL PROFILE

**Name** : Dr. Kakali Datta  
**Designation** : Asst. Professor  
**Department** : Chemistry  
**Academic Qualification** : M.Sc. Ph.D.  
**Office address** :  
**Phone (Office)** :  
**Phone/Mobile** : 9474376317  
**Correspondence Address** : Green Park, Amtala , Rajbati -713104  
**email** : dnkakali@rediffmail.com  
**Personal Profile including** :

Passport sized  
Photograph  
(Colour photo  
Preferable)

**a) Biography (within 250 words)**

**b) Research activity (if any) in bullet form (or within 250 words)**

- **Past Research program:** Research field: Experimental work on Donor-Acceptors Charge transfer complexes (Spectroscopically) and some graph theoretical work.
- **Present Research program:**
- **Future research plan:**

**c) List of Publication (if required add Annexure)**

- Paper: During Ph.D. and post Ph.D. publications are given bellow
- Book /Book Chapter(s):

**d) Patent or any other achievement/s or information**

Signature:

**Publications during Ph.D.:**

1. "Studies on labile Charge Transfer complexes .....a series of phenols" Kakali Datta, Asok K. Mukherjee, Manas Banerjee, Bejoy K. Seal; *Spectrochimica Acta A*, 53 (1997) 2587.
2. "Method for construction of Characteristic Polynomials.....Graph Linearization", Kakali Datta and Asok K. Mukherjee, *International Journal of Quantum Chemistry*, 65 (1997) 199.
3. "Charge transfer transition energies of EDA .....with AM1 results" Kakali Datta, Asok K. Mukherjee, Manas Banerjee, Bejoy K. Seal; *Indian Journal of Chemistry*, 38A(1999) 585.
4. "Strongly subspectral pairs .....a common generic graph", Kakali Datta, Manas Banerjee, Asok K. Mukherjee, *Phys.Chem. Chem.Phys*, 1 (1999) 2912.
5. "Characteristic Polynomials .....their subspectrality", G. Mukherjee, K. Datta and A. K. Mukherjee, *Proc. Indian Acad. of Sci.*, 112 No.1, (2000) 27.
6. "Study of a novel reaction .....a charge transfer intermediate", T. Roy, K.Datta, M.K.Nayak, A.K. Mukherjee, M. Banerjee, B.K. Seal, *J.Chem. Soc., Perkin Trans 2*,(1999) 2219.
7. "Kinetic Study of the decay of EDA complexes ..... dianhydride" T. Roy, K. Datta, A.K. Mukherjee, M. Banerjee, B.K. Seal, *Indian Journal of Chemistry*, 37A(1998) 1007.
8. "Spectroscopic and kinetic studies on the electron donor-acceptor .....dianhydride", T. Roy, K. Datta, A.K. Mukherjee, M. Banerjee, B.K. Seal, *Indian Journal of Chemistry*, 36A(1997) 585.
9. "A Pascal's triangle-like approach .....reciprocal graphs", B. Mandal, K. Datta, A.K. Mukherjee, M. Banerjee, *Molecular Physics*, 96 No.11, (1999)1609.
10. Studies on the charge-transfer complexes .....a series of methylbenzene", B. Chakravarty, K. Datta, A.K. Mukherjee, M. Banerjee and B, K. Seal, *Indian Journal of Chemistry*, 37A(1998) 865.
11. Ground state EDA complex formation between [60]fullerene .....aromatic hydrocarbon", K.Datta, M. Banerjee, B.K. Seal and A.K. Mukherjee, *J.Chem. Soc., Perkin Trans 2*,(2000) 531.
12. "A graph theoretical analysis of the electron acceptor properties.....quinol", D.C. Mukherjee, K. Datta and A.K. Mukherjee, *Indian Journal of Chemistry*, 40A (2001) 126.

**Post Ph.D. Publications:**

1. "Study of a reaction between 2,3-dichloro-1,4-Naphthoquinone.....involving EDA adduct as intermediate", K. Datta and A.K. Mukherjee, *Spectrochimica Acta A*, 60 (2004) 1641.
2. "Comparative Study of the Host-Guest Complexes.....in different solvents", Kakali Datta, Manas Banerjee and Asok K. Mukherjee, *The Journal of Physical Chemistry B*, 108 (2004) 16100.
3. "Study of quenching of anthracene fluorescence by [60]fullerene", K. Datta and A.K. Mukherjee, *Spectrochimica Acta A*, 65 (2006) 261.
4. "Construction and Utilisation of Planar Graphs .....use of threefold rotational symmetry", B. Mandal, K. Datta, M. Banerjee and A.K. Mukherjee, *The International Journal of Quantum Chemistry*,105 (2005) 201.
5. "Aggregation of [70]fullerene .....A chemical kinetic experiment", K. Datta and A.K. Mukherjee, *The Journal of Chemical Physics*, 124 (2006) 144509.
6. "A comparative study of molecular complexation of [60]fullerene and [70]fullerene .....by UV-Vis spectroscopic method", K. Datta and A.K. Mukherjee, *Spectrochimica Acta A*, 62 (2005) 66.
7. Spectroscopic and thermodynamic study of charge-transfer interaction between Vitamin B<sub>6</sub> .....varying composition", K. Datta, Dalim Kumar Roy and A.K. Mukherjee, *Spectrochimica Acta A*, 70 (2008) 425.

**Minor Research Project of Grant Amount Rs. 142500.00 (Sanction No. F. PSW-017/08-09 (ERO) has been completed.**

