

Prof. Samita Basu, SINP Kolkata

Use of low magnetic field to probe photoinduced electron transfer reactions

EDUCATION

1989: Ph.D. in Chemistry, Jadavpur University (Indian Association for the Cultivation of Science, Jadavpur, Kolkata under supervision of Professor Mihir Chowdhury)

1982: M.Sc. in Chemistry, University of Calcutta

1979: B.Sc. Chemistry Hons, University of Calcutta

ACADEMIC POSITIONS

1992-onwards: Faculty, Chemical Sciences Division, Saha Institute of Nuclear Physics

1990-1992: Lecturer in Chemistry, St. Xavier's College, Kolkata.

AREA(S) OF RESEARCH

Photophysical and photochemical studies on inter- and intra-molecular electron/proton transfer and hydrogen abstraction reactions with small chemically and biologically important molecules and interactions of small drug-like molecules with proteins and DNA bases in homogeneous and heterogeneous confined media as well as with carbon nanodots using steady-state and time-resolved $(10^{-15}-10^{-6}~{\rm second})$ spectroscopic techniques, magnetic field effects and X-Ray crystallography as well as theoretical docking analyses.

PUBLICATIONS

Journals: 138; Book Chapters: 4

GUIDANCE/TEACHING

Number of research fellows to whom Ph.D. degree is awarded: 15

Teaching: Post M.Sc. Biophysical Science: Spectroscopy & Photochemistry Calcutta University – Department of Inorganic Chemistry M.Sc. Spectroscopy

Bidhanhagar College, Kolkata M.Sc: Photochemistry, etc.

AWARDS/ HONOURS

Fellow of the West Bengal Academy of Science and Technology in the year 2010 for contributions in the field of Molecular Spectroscopy and Executive Committee member during 2013 - 2016

Professor P.K. Bose Memorial Award, Indian Chemical Society, 2012

Foundation Day Award for the year 2010 at Saha Institute of Nuclear Physics, Kolkata

Professor, Homi Bhaba National Institute, BARC, Mumbai

NATIONAL/INTERNATIONAL CONFERENCES & WORKSHOPS ATTENDED

Invited Talk: 130 (India:118; Overseas:12).