

# Nabanita Nag



## Contact:

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Ph.D. in Chemistry: from TIFR, Mumbai, 2008.

Post M.Sc. in Biophysical Sciences: from SINP Kolkata, 2001.

M. Sc. in Chemistry (Organic): from University of Calcutta, 2000.

B. Sc. in Chemistry: from Presidency College, Kolkata, 1998.

## Research Interest:

Biophysical chemistry; Dynamics of proteins, nucleic acids using time-resolved fluorescence and relaxation kinetics; Structural -functional correlations of biomacromolecules using time-resolved vibrational spectroscopy.

## Teaching expertise:

Spectroscopy and its application in biological system; Enzyme kinetics; Structural biology; Mechanism in Organic Chemistry.

## Thesis

Recognition of base mismatch in DNA by MutS and transduction of mismatch recognition signal.

## Selected Publication

1. *A single mismatch in the DNA induces enhanced aggregation of MutS. Hydrodynamic analyses of the protein-DNA complexes.*  
Nabanita Nag, G. Krishnamoorthy, Basuthkar J. Rao. *FEBS J.* 2005; **272**(24) 6228-43.
2. *Dynamics of DNA and protein-DNA complexes viewed through time-domain fluorescence.*  
Nabanita Nag, *et.al.*  
Reviews in Fluorescence, 2006; (vol 3) Edited by: Chris D. Geddes, J R Lakowicz, Springer Publications, USA
3. *Altered dynamics of DNA bases adjacent to a mismatch: A cue for mismatch recognition by MutS.*  
Nabanita Nag, G. Krishnamoorthy, Basuthkar J. Rao. *J Mol Biol.* (2007) **374** 39-53.