

Name: Sayan Bagchi
Division: Physical Chemistry
Email: s.bagchi@ncl.res.in
Phone: 020-2590-3048



Education
and
experience

- B. Sc., Chemistry, Presidency College, Kolkata, India
- M. Sc., Chemistry, IIT Kanpur, Kanpur, India
- Ph. D, University of Pennsylvania, Philadelphia, USA
- Post-doctoral Research, Stanford University, Stanford, USA

Research
subjects:

- Physical Chemistry
- Spectroscopy
- Biophysical

Research
Areas

- Physical Chemistry
- Biophysics / Biophysical Chemistry
- Spectroscopy / Ultrafast Spectroscopy
- Laser Spectroscopy and Instrumentation
- Theory and Computational Chemistry

Recent
publications

- **Bagchi, S**; Boxer, S. G.; and Fayer, M. D.; *Ribonuclease S Dynamics Measured Using a Nitrile Label with 2D IR Vibrational Echo Spectroscopy*, J. Phys. Chem. B, 116 (2012) 4034-4042
- **Bagchi, S**; Fried, S. D.; and Boxer, S. G.; *A Solvatochromic Model Calibrates Nitriles' Vibrational Frequencies to Electrostatic Fields*, J. Am. Chem. Soc., 134 (2012) 10373-10376
- **Bagchi, S**; Thorpe, D. G.; Thorpe, I. F.; Voth, G.A., and Fayer, M. D.; *Conformational Switching between Protein Substates Studied with 2D IR Vibrational Echo Spectroscopy and Molecular Dynamics Simulations*, J. Phys. Chem. B, 114 (2010) 17187-17193
- **Bagchi, S**; Nebgen, B. T.; Loring, R. F.; and Fayer, M. D.; *Dynamics of a Myoglobin Mutant Enzyme: 2D IR Vibrational Echo Experiments and Simulations*, J. Am. Chem. Soc., 132 (2010) 18367-18376
- **Bagchi, B**; Falvo, C.; Mukamel, S; and Hochstrasser, R. M.; *2D-IR Experiments and Simulations of the Coupling between Amide-I and Ionizable Side Chains in Proteins: Application to the Villin Headpiece* J. Phys. Chem. B, 113 (2009) 11260-11273