

Resume

Dr. Nafisa Begam

Assistant Professor
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Phone: +91-9591889845
Date of birth: 29th July 1988
Marital status: Married (Mother of a 4 years old)

Academic Background:

- **B.Sc - Physics (Hons.): (2006 – 2009)** University of Kalyani, West Bengal.
- **M.Sc – Physics: (2009 – 2011)** Indian Institute of Technology Kharagpur.
- **Ph.D: (2011 – 2017)** IISc Bangalore. Honored by the Prof. Anil Kumar Memorial Medal for the best Ph.D thesis in the department of Physics (Experimental Physics 2016-17).
Supervisor: Prof. Jaydeep K. Basu
Ph.D thesis title: Study of dynamics, thermal and rheological properties of polymer grafted nanoparticle-polymer blend.
- **Postdoctoral experience: (2017-2023):** Structural and dynamical evolution in protein solutions during phase transition and gelation.

Current research interest: I am conducting structural and dynamical characterization of model proteins and real proteins systems. Recently, we investigated the kinetics of phase transitions and microscopic dynamics of the protein molecules as well as the aggregates during such processes using time resolved X-ray scattering technique including laboratory-based experiments such as temperature-dependent UV-Vis and infra-red spectroscopy.

Awards:

Award	Organization	Year
Prof. Anil Kumar Memorial Medal for best Ph.D thesis (in experimental Physics)	Indian Institute of Science Bangalore	2018
Alexander von Humboldt postdoctoral research fellowship	Alexander von Humboldt Foundation, Germany	2019-2022

Best 5 Publications in Refereed International Journals:

1. **Nafisa Begam**, Anastasia Ragulskaya, Anita Girelli et al., **Physical Review Letters**, 126 098001, 2021.
2. **Nafisa Begam** and Olga Matsarskaia, Michael Sztucki, Fajun Zhang, Frank Schreiber, **Soft Matter**, 16, 2128-2134, 2020.
3. **Nafisa Begam**, Sivsuresnder Chandran, M. Sprung, and J. K. Basu, **Macromolecules**, 48, 6646–6651, 2015.
4. **Nafisa Begam**, Sivsuresnder Chandran, Nupur Biswas, and J. K. Basu, **Soft Matter**, 11, 1165–1173, 2015.
5. Sivsuresnder Chandran, **Nafisa Begam**, V. Padmanabhan, J. K. Basu. **Nature Communication**, 5, 3697, 2014.