



Dr. Anjali Jha

DST-INSPIRE Faculty

Agharkar Research Institute, Pune

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Research Area

- Protein misfolding & aggregation, amyloid and prion biology, nanoparticles assisted drug delivery agents to target alzheimer disease.
 - Primary research interest is mainly focused on designing drug-nanoparticles/peptides conjugates to target Alzheimer's disease.
 - Research interest: to test the efficacy of these therapeutic conjugates on animal model systems bearing amyloid aggregates. This research problem will utilize a multipronged approach by combining the tools of cell biology, protein chemistry and spectroscopy.
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Education & Scientific Career

- Postdoctoral: Department of Bioengineering, Stanford University, USA.
 - Ph.D.: Tata Institute of Fundamental Research (TIFR), Mumbai, India. Thesis title: Site-specific dynamics of proteins and protein fibrils revealed by time-domain fluorescence
 - M.Sc. in Chemistry, Indian Institute of Technology, Roorkee, India
 - B.Sc. in Chemistry, Nowrojee Wadia College, University of Pune, India.
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Awards

- INSPIRE Faculty Award- Dec 2013 in Chemistry from DST, Govt. of India.
- RIKEN fellowship for internship project in the laboratory of Prof. Tahei Tahara at Molecular Spectroscopy Laboratory, RIKEN, Japan (2008).
- Selected in TIFR for pursuing PhD and received fellowship from Department of Atomic Energy (DAE), Government of India (2005-2010).
- Qualified National Eligibility Test for Lectureship and awarded Junior Research Fellowship (NET- JRF) by CSIR-UGC, India (2005) (not availed).
- Qualified Graduate Aptitude Test in Engineering (GATE) in Chemistry Percentile Score 88.9 (2005).

- First Class with Distinction in B.Sc. University of Pune, India.
 - Scholarship from Indian Air Force (AFGIS) for two years for pursuing higher secondary education
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Publications

1. A Jha, M Ganesh Kumar, HN Gopi, KM Paknikar: Inhibition of β -Amyloid aggregation through a Designed β -hairpin Peptide. *Langmuir*, (2018), 34: pp 1591–1600. (* Corresponding Author)
2. Jha A, Udgaonkar JB, Krishnamoorth G: Characterization of the heterogeneity and specificity of interpolypeptide interactions in amyloid protofibrils by measurement of site-specific fluorescence anisotropy decay kinetics. *J Mol Biol.* (2009), 393:735-52. (Featured as the journal cover page article))
3. Jha A, Ishii K, Udgaonkar JB, Tahara T, Krishnamoorthy G: Exploration of the correlation between solvation dynamics and internal dynamics of a protein. *Biochemistry* (2011), 50:397-408
4. Jha A, Narayan S, Udgaonkar JB, Krishnamoorthy G: Solvent-induced tuning of internal structure in a protein amyloid protofibril. *Biophys J.* (2012), 103:797-806.
5. Jha A, Udgaonkar JB, Krishnamoorthy G (2008): Towards elucidating the internal structure of protofibrils: Site-specific fluorescence anisotropy decay kinetics. *Proceedings of Trombay Symposium on Radiation & Photochemistry*, 308