

Name: Dr. VISHAL SINGH

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Profile Details:

Dr. Vishal Singh has received his Bachelor's degree in Chemistry (Hons.) from Faculty of Science, Banaras Hindu University (BHU), Varanasi in July 2011 and Master's degree with specialization in Physical Chemistry from Department of Chemistry, University of Delhi (DU), Delhi in December 2013. He obtained his Doctoral (Ph.D.) degree in September 2021 in the area of Theoretical and Computational Biophysical Chemistry under the supervision of Prof. Parbati Biswas from Theory and Simulation Lab, Department of Chemistry, University of Delhi, Delhi. His thesis title is "Stochastic Dynamics of Protein Misfolding and Aggregation". Dr. Singh did post-doctorate from Delhi School of Public Health, Institution of Eminence (DSPH-IOE), University of Delhi, Delhi from December 2021 to March 2024. His research area includes the theoretical and computational bio-physical chemistry, stochastic physics and stochastic processes, barrier crossing problems and the rare events. He has worked on the theoretical and computational study of the kinetics and dynamics of the protein folding, misfolding and aggregation in terms of the neurodegenerative disorders. He uses multivariate mathematical models with a stochastic and statistical approach to estimate the pathways and prevalence of the neurodegenerative disorders on the onset of age. His research work also includes the mathematical and computational analysis of barrier crossing problems for the multi-state conformational transitions of proteins and nucleic acids. Dr. Singh has published more than 10 research articles and chapters in books in the reputed international journal. He is a life-time member of the Chemical Research Society of India.

Presently, he has been working as an Assistant Professor in the Discipline of Chemistry, School of Sciences, Indira Gandhi National Open University, New Delhi since July, 2024.

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