



**Dr. M. Vijjulatha M.Sc., Ph.D**  
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Prof. M. Vijjulatha (born 1970) did her M.Sc (1992) and Ph.D (1998) in Chemistry from University of Hyderabad as Junior Research Fellow and Senior Research Fellow (CSIR, New Delhi, India). She joined as faculty in Osmania University in December 1999 and has 25 years of research and 18 years of teaching experience. So far, she has supervised 06 PhD's and presently guiding 10 students for their doctoral degree. Her area of Specialization is organic chemistry and research area is Molecular modeling and medicinal chemistry. Thrust area of interested is computational design and synthesis of Novel drug like molecules having high potency towards inhibition of HIV-1 with special focus on non trivial proteins and inhibition of proteins involved in signaling and transduction, DNA synthesis, angiogenesis, antiviral, antibacterial and antimalarial. She has 64 scientific articles in peer-reviewed journals with 258 citations to her credit. She is a member of American Chemical Society and Life Member of Indian Science Congress. She has reviewed several research articles of reputed international Journals, in the field of Molecular modeling and Medicinal chemistry like Medicinal Chemistry Research, Royal Society of Chemistry advances, Bioorganic and medicinal chemistry, Bioorganic and medicinal chemistry letters, Computer aided drug design, computational biology and chemistry, journal of biological structure and dynamics, Indian journal of chemistry Sec-B etc.. She is a Resource person for many Institutes like NIPER Hyderabad, JNTU Hyderabad, several post graduate colleges, pharmacy colleges and an invited speaker for national and international conferences. She is a recipient of major research grants from University Grants Commission - Computational Design, Synthesis and Activity Studies of Novel High Affinity Human Dihydrofolate Reductase (DHFR) Inhibitors (2008-2011); Department of Science and Technology “**Young Scientist Scheme**” (Chemical Science) on Computational Design and Synthesis of Novel Cyclic Urea as HIV – 1 Protease Inhibitors (2010-2013), were novel cyclic urea molecules having better interaction with HIV-1 protease were computationally established. Council for Scientific and Industrial Research - Computational Design, Docking, QSAR, Synthetic and Activity Studies on Thymidylate Synthase (Human and E.coli) (2011-2014); **DST-SERB** Empowerment and Equity Opportunities for Excellence in Science: “Computational design and synthesis of small molecule inhibitors targeting non-trivial proteins of HIV-1” (2013-2017) here new methodology was developed to synthesize novel substituted urea and thio urea molecules that act as HIV-1 gp120 CD4 binding inhibitors, computational Amalgamation of Multi Receptor Conformation Docking protocol to 6D QSAR studies was used for determining accurate binding affinity values; UGC Major Research Project - Combining Multiple receptor conformation docking and 3D QSAR protocols for identification and design of Novel *Cycloguanil* derivatives as *Plasmodium falciparum* DHFR inhibitors. (2013-2017), Novel series of naphthyl bearing 1,2,3-triazoles, synthesized and evaluated for their in vitro antiplasmodial activity against pyrimethamine (Pyr)-sensitive and resistant strains of *Plasmodium falciparum*, displayed superior activity to Pyr against resistant strain; Mentor for DST Women Scientist Scheme A (**Ms. Sabiha Fatima**) Computational Design and Synthesis of PARP – 1 inhibitors, (2013-2016). UGC UPE FAR OU “Diversity oriented privileged structures as Anti-cancer and Anti-malarial drug molecules.”(2014). UGC UPE FAR OU - “Design, synthesis and activity studies of novel kinase inhibitors targeting signalling cascade in cell proliferation.” (2017) and DST-PURSE Programme - “Signaling and Metabolism based Development of Therapeutic Targets for Age Related Pathologies with Focus on Cancer” (2017- 2021). She has successfully completed seven research projects worth more than Rs. 1.0 crore and has two ongoing projects. Her research group has presented 59 papers in national and international conferences and they have won best paper awards. The topics of her interest for teaching are Asymmetric synthesis, conformational analysis, Principles of Drug design and drug discovery, Lead modification and SAR Studies, QSAR studies and computer aided drug design.