


NAME	Dr. Puniti Mathur		
DESIGNATION	Associate Professor		
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CONTACT NUMBER	0120-4392204		
RESEARCH INTERESTS	Molecular modeling and dynamics of proteins, peptide design, synthesis and solution conformation		
EDUCATIONAL QUALIFICATIONS:			
Name of College / University	Degree	Year	
All India Institute of Medical Sciences, New Delhi	Ph.D	2003	
IIT Roorkee	MSc. Biotechnology	1997	
Title of Ph.D. thesis : Synthesis and Conformational Studies on Bioactive Peptides containing α , β - dehydroamino acids			
EXPERIENCE (in chronological order)			
Designation	Type of post held (teaching/ research)	Name of the Institute	Year (From – To)
Research Assistant	Research	International Center for Genetic Engineering and Biotechnology, New Delhi	2003-2004
Assistant Manager	Industry research	Dabur Pharma Research Foundation, Sahibabad, Ghaziabad	2004-2008
Assistant Professor	Teaching and research	Amity Institute of Biotechnology, Amity University, Noida	2008-May 2017
Associate Professor	Teaching and research	Centre for Computational Biology and Bioinformatics, Amity Institute of Biotechnology, Amity University, Noida	June 2017-present
No. of Ph.D. students supervised	Awarded: (no. only) Ongoing: 3		
PUBLICATIONS	<p>Supriya Srivastava, Seneha Santoshi, Balwant Kishan Malik, Puniti Mathur (2017) Molecular modeling and molecular dynamics studies of SPECT protein of Plasmodium falciparum and in silico screening of lead compounds <i>International Journal of Pharmaceutical Sciences and Research</i> (Accepted)</p> <p>Rajesh Pal, Gauri Misra and Puniti Mathur (2017) In Silico Screening Of Small Molecule Modulators Of Zika Virus Proteins <i>Proceedings of the 7th International Conference Confluence 2017 on Cloud Computing, Data Science and Engineering</i> 7943179, pp. 381-386 (IEEE) doi: 10.1109/CONFLUENCE.2017.7943179</p>		

Supriya Srivastava, Puniti Mathur (2016) Homology Modeling and Docking Studies of Pfmc2TM Maurer's cleft two transmembrane protein –A Potential Drug Target in Malaria. *International Journal of Control Theory and Applications* 9(3):219-225

Uzma Khanam, Balwant Kishan Malik, Puniti Mathur, Bhawna Rathi (2016) Identification of novel inhibitors for mitogen-activated protein kinase kinase 4 by virtual screening and molecular dynamics simulation techniques. *International Journal of Pharmacy and Pharmaceutical Sciences* 8(7): 262-268

Madhvi Gupta Datta, Puniti Mathur, V.S. Chauhan (2011) De novo design, synthesis and solution conformational study of two didehydroundecapeptides: effect of nature and number of amino acids interspersed between Δ Phe residues. *Journal of Peptide Science* 17(12): 783-790

Gupta Madhavi, Bagaria Ashima, Mishra Aseem, Mathur Puniti, Basu Atanu, Ramakumar S, Chauhan VS (2007) Self-assembly of a dipeptide containing conformationally restricted dehydrophenylalanine residue to form ordered nanotubes *Advanced Materials* 19(6): 858-861

Puniti Mathur, N.R. Jagannathan, V.S. Chauhan (2007) α , β - Dehydrophenylalanine containing cecropin-melittin hybrid peptides: conformation and activity. *J. Peptide Science* 13(4): 253-262.

Puniti Mathur, U.A. Ramagopal, S. Ramakumar, N. R. Jagannathan, V.S. Chauhan (2006) Stabilization of unusual structures in peptides using α , β – dehydrophenylalanine: Crystal and solution structures of Boc-Pro- Δ Phe-Val- Δ PheAla-OMe and Boc-Pro- Δ Phe-Gly- Δ Phe-Ala-OMe. *Biopolymers (Peptide Science)* 84 (3): 298-309

Puniti Mathur, S. Ramakumar, V. S. Chauhan (2004) Peptide Design using α , β - dehydroamino acids: From β - turns to helical Hairpins. *Biopolymers (Peptide Science)* 76(2): 150-161

Padyana A. K., Ramakumar S., Mathur P., Jagannathan N. R., Chauhan V. S.(2003) Role of a two-residue spacer in an α , β -didehydrophenylalanine containing hexapeptide: Crystal and solution structure of Boc-Val- Δ Phe-Leu-Ala- Δ Phe-Ala-OMe. *J. Peptide Science* 9: 54-63.

Ramagopal U. A., Ramakumar S., Mathur P., Joshi, R. M., Chauhan V. S. (2002) Dehydrophenylalanine zippers: strong helix-helix clamping through a network of weak interactions.

	<p><i>Protein Engineering</i> 15: 331-335.</p> <p>Mathur P., Srivatsun S., Joshi R.M., Jagannathan N. R., Chauhan V. S. (1999) Dehydrophenylalanine containing analogs of Trypticidin show increased biological activity. <i>J. BioSciences</i>. 24: 42.</p>
PATENTS (1)	Synthetic peptide as glucokinase activator for treatment of Type 2 diabetes (3973/DEL/2015) Filed
RESEARCH PROJECTS Ongoing: (1)	<p>“Design, synthesis and biological activity of non-coded amino acids containing peptides as potential activators of hepatic glucokinase: Implications in Type 2 diabetes therapy” Funded by Department of Biotechnology (BIOCARE) as Principal Investigator</p>
AWARDS & HONOURS/ DISTINCTIONS	<ul style="list-style-type: none"> • Senior Research Fellowship Council of Scientific and Industrial Research (CSIR) Government of India, India • Qualified GATE in 1997 • M.Sc. Biotechnology Scholarship of Department of Biotechnology Government of India, India
MEMBERSHIP with Professional/ Academic bodies	<ul style="list-style-type: none"> • Life member of Indian Biophysical Society • Member of N.M.R. Society of India • Life member of Indian Peptide Society