

Dr. Mohit Chandra Kamthania

Associate Professor

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Contact No: +91-976 023 9096

Educational Qualification:

Ph.D Biotechnology (Jiwaji University), M.Tech.Biotechnology (Bundelkhand University),

B.Tech.(Bundelkhand University),, PGDIPR (WIPO)

Total Experience: 16 yrs

Academic: 16 yrs. | Research: 14 yrs

Areas of Interest:

Computational Biology & Immunoinformatics, Structure based vaccine designing

Brief Profile:

Dr. Mohit Kamthania has immense teaching experience and he has very well shaped the growth of intellect amongst students at various disciplines in biotechnology. Many students in reputed research institutes in India have seen their nurturing under his supervision. Dr. Mohit completed his Ph.D from Jiwaji University Gwalior. He did his M.Tech & B.Tech (Biotechnology) from Bundelkhand University Jhansi. He has 16 years of teaching experience and 14 years of research experience. His expertise is in Computational Biology & Immunoinformatics.

Dr. Kamthania has published 26 international research papers in renowned journals. He is supervising PhD students for their research work at SAGE University, Bhopal. He has also guided 23 students of M.Tech/B.Tech/M.Sc. for their project/dissertation work. He

worked as convener of an international conference & has also organized various workshops & seminars. He has worked as program coordinator/head in previous organizations.

Research publications in International Journal:

Total Citation Index: 1014 (h-index: 11, i10-index: 12)

SCI/SCOPUS Indexed Journal

- Srivastava, S., Verma, S., Kamthania, M., Agarwal, D., Saxena, A. K., Kolbe, M. & Pandey, K. C. (2022). Computationally validated SARS-CoV-2 CTL and HTL Multi-Patch vaccines, designed by reverse epitomics approach, show potential to cover large ethnically distributed human population worldwide. *Journal of Biomolecular Structure and Dynamics*, 40(5), 2369-2388. DOI: 10.1080/07391102.2020.1838329 (Impact Factor: 5.20) (Citation:10)
- Srivastava, S., Verma, S., Kamthania, M., Saxena, A. K., Pandey, K. C., Pande, V & Kolbe, M. (2023). Exploring the structural basis to develop efficient multi-epitope vaccines displaying interaction with HLA and TAP and TLR3 molecules to prevent NIPAH infection, a global threat to human health. *Plos one*, 18(3), e0282580. DOI: 10.1371/journal.pone.0282580 (Impact Factor: 3.75) (Citation: 01).
- Sharma, D., & <u>Kamthania</u>, <u>M.</u> (2021). A new emerging pandemic of severe fever with thrombocytopenia syndrome (SFTS). *Virusdisease*, 32(2), 220-227.
 DOI: <u>10.1007/s13337-021-00656-9</u> (Impact Factor: 0.99) (Citation: 07).
- Srivastava, S., Verma, S., <u>Kamthania</u>, M., Kaur, R., Badyal, R. K., Saxena, A. K., & Pandey, K.C. (2020). Structural Basis for Designing Multiepitope Vaccines Against COVID-19 Infection: In Silico Vaccine Design and Validation. *JMIR Bioinformatics and Biotechnology*, 1(1), e19371 doi: 10.2196/19371 (Citation: 09).
- Srivastava, S., <u>Kamthania</u>, M., Singh, S., Saxena, A. K., & Sharma, N. (2018). Structural basis of development of multi-epitope vaccine against Middle East respiratory syndrome using in silico approach. *Infection and drug resistance*, 11, 2377. doi: 10.2147/IDR.S175114 (Impact Factor: 4.00) (Citation: 27)

- Srivastava, S., <u>Kamthania</u>, M., Kumar Pandey, R., Kumar Saxena, A., Saxena, V., Kumar Singh, S., Kumar Sharma, R., & Sharma, N. (2019). Design of novel multi-epitope vaccines against severe acute respiratory syndrome validated through multistage molecular interaction and dynamics. *Journal of Biomolecular Structure* and *Dynamics*, 37(16), 4345-4360. doi.org/10.1080/07391102.2018.1548977 (Impact Factor: 5.20) (Citation: 20)
- Kamthania, M., Srivastava, S., Desai, M., Jain, A., Shrivastav, A., & Sharma, D. K. (2019). Immunoinformatics Approach to Design T-cell Epitope-Based Vaccine Against Hendra Virus. *International Journal of Peptide Research and Therapeutics*, 25(4), 1627-1637. doi.org/10.1007/s10989-018-09805-z (Impact Factor: 2.10) (Citation: 13)
- Kamthania, M. & Sharma, D. K. (2016). Epitope-based peptides prediction from proteome of Nipah virus. *International Journal of Peptide Research and Therapeutics*, 22(4), 465-470. DOI 10.1007/s10989-016-9526-8 (Impact Factor: 2.10) (Citation: 07)
- Kamthania, M., & Sharma, D. K. (2015). Screening and structure-based modeling of T-cell epitopes of Nipah virus proteome: an immunoinformatic approach for designing peptide-based vaccine. 3 Biotech, 5(6), 877-882. DOI 10.1007/s13205-015-0303-8 (Impact Factor: 2.89) (Citation: 17)
- Shekher, R., Sehgal, S., <u>Kamthania</u>, M., & Kumar, A. (2011). Laccase: microbial sources, production, purification, and potential biotechnological applications. doi: <u>10.4061/2011/217861</u> Enzyme research, 1-11. (Citation: 321).
- Renu, Ali, S., Hussain, A., Srivastava, S., <u>Kamthania</u>, M., & Jha, A. K. (2020). In-Silico sreening of T-cell Epitopes as Vaccine Candidate from Proteome of H9N2 Virus. *Biosc.Biotech.Res.Comm.* DOI: http://dx.doi.org/10.21786/bbrc/13.4/77 2020;13(4), 2145-2151.
- Pal, A., <u>Kamthania</u>, M. C., & Kumar, A. (2014). Bioactive Compounds and Properties of Seaweeds—A Review. *Open Access Library Journal*, 1(4), 1-17.
 DOI: <u>10.4236/oalib.1100752</u> (Impact Factor:0.26) (Citation: 88)

PEER REVIEWED JOURNAL

- 13. Srivastava, S., Verma, S., <u>Kamthania</u>, M., Kaur, R., Badyal, R. K., Saxena, A. K., & Pandey, K. (2020). Structural basis to design multi-epitope vaccines against Novel Coronavirus 19 (COVID19) infection, the ongoing pandemic emergency: an in silico approach. *bioRxiv*. (Citation: 10).
- Azhar, M., Saifi, N., Jha, A, K., & <u>Kamthania</u>, M. (2019). Hantavirus Infection and Its Current Information as Emerging Pathogens: A Review. *International Journal for Research in Applied Science & Engineering Technology*, 7(VI), 2033-37.
- 15. Thakur, D., Verma, P., Mathur, R., <u>Kamthania</u>, M., and Jha, A, K. (2019). Reversal of Hypermethylation and Activation of Tumor Suppressor Genes Due to Plant Extracts in Prostate Cancer. *Adv Biotech & Micro* 14(1)1-4.
- Thakur, D., Verma, P., Deepa, Kumar, M., Goel, H., Syeda, S., <u>Kamthania</u>, M., Shrivastava, A., & Jha, A. K. (2019). Reversal of Promoter Hypermethylation of RASSF1A Gene Caused By *Aloe barbadensis miller* and *Murraya koenigii* In Cervical Cancer. *RJPBCS* 10(4) 211.
- Kamthania, M., Kumari, R., Ali, S., Hussain, A., & Jha, A. K. (2018). Current information of H9N2 virus zoonotic infection and its emerging pandemic potential: A review. Community Acquired Infection, 5(2), 11. DOI:10.4103/cai.cai_2_20
- Kamthania, M., Saxena, J., Saxena, K., & Sharma, D. K. (2014). Milk Adulteration:
 Methods of Detection & Remedial Measures. *International Journal of Engineering and Technical Research*, 1, 15-20. (Citation: 52)
- Singh, V., <u>Kamthania</u>, M., Pavan, R., Singh, S., & Kumar, N. (2014). Biosensor Developments: Application in crime detection. In *National Conference on Synergetic Trends in engineering and Technology (STET-2014) International Journal of Engineering and Technical Research ISSN* (2321-0869). (Citation: 03)
- Saxena, K., Jain, S., Sharma, D. K., Dua, R., <u>Kamthania</u>, M. (2014) Applications of Integrated Microfluidic Devices in Environmental Monitoring: A Review. *The Journal of Energy and Environmental Science, Photon* 128, 521-530. (Citation: 04)

- 21. Dubey, R. K., Gupta, R., <u>Kamthania</u>, M., & Pavan, R. (2014). Antibacterial and Antioxidant activity of Saraca asoca, Eclipta prostrate and Achyranthes aspera. In *National Conference on Synergetic Trends in engineering and Technology (STET-2014) International Journal of Engineering and Technical Research ISSN* (2321-0869).
- 22. Deb, R., <u>Kamthania</u>, M., & Bhowmik, S. (2013). Food Shelf Life Enhancement: The Preservative Potential of Turmeric. *International Journal of Agriculture and Food Science Technology*, 4(2), 30-32. (Citation:01)
- 23. Sharan, M., & <u>Kamthania</u>, M. (2021). A Review on First Members of COVID-19 Vaccines in Phase 3 around the Globe. *J Adv Sci Res,12(1);36-45.* doi.org/10.55218/JASR.202112105
- Mishra, M., Aqdas M., Kumar, D., Bhadauriya, A S., Kumar, T., & <u>Kamthania</u>, M. (2021). In-silico Screening of T-cell Epitopes as Vaccine Candidate from Proteome of Menangle Virus. *International Journal of Research Publication and Reviews (IJRPR)*. 2(7), 661-675.
- 25. Mishra, M., Sharma, R. & <u>Kamthania</u>, M. (2021). Current information of Menangle virus, a novel zoonotic paramyxovirus: A review. *International Journal of Research Publication and Reviews (IJRPR)*. 2(7), 1499-1502.

Papers presented in International Conferences:

- Naseem Saifi, D.K. Sharma, Mohit <u>Kamthania.</u> Screening and structure-based modeling of T-cell epitopes of Chandipura virus proteome: An immunoinformatic approach for designing the epitope-based vaccine. International Conference on "Life Security on Earth", held at Chaturbhuj Shri Ram Mandir Parisor Mandu Dhar, Madhya Pradesh, India from Feb 22-24, 2020
- Mohit <u>Kamthania</u>: Role of Intellectual property right & the efforts required for Food Security in India. 1st International Conference on Environment and Society (ICES 2019) at Harcourt Butler Technical University (HBTU), Kanpur held on Dec., 22-23, 2019.
- 3. Soni Singh, Mohit <u>Kamthania</u>, Sukrit Srivastava, Alok Jha. In-silico comparative structural analysis of 5-HT2A receptor in Homosapiens. International conference

- on emerging trends in protein science & proteomics "GenoPro2017" at Invertis Univ. Bareilly, Sep. 15-16, 2017.
- Mohit <u>Kamthania</u>, Shraddha, Shashank Shekhar, Ajay Kumar, Prakash Kumar. Oral presentation on "Marker-assisted selection for insect resistance in maize" in International Symposium on Angiosperm Systematics & phylogeny: Retrospects & Prospects at NBRI, Lucknow in 12-14 Nov. 2009, pp158.
- Shraddha, Lal Ratnakar Singh, Mohit <u>Kamthania</u>, Akanksha Sharma, Ajay Kumar.
 Poster presentation on "Plant beneficial fungus Trichoderma virens required for induced systemic resistance in Maize" in International Symposium on Angiosperm Systematics & phylogeny: Retrospects & Prospects at NBRI, Lucknow 12-14 Nov. 2009, pp161.
- 6. Mohit <u>Kamthania</u>, Sukrit Srivastava. Poster presentation on "Proposed technique for permanent cure of hormonal deficiency" in International conference entitled "International Conference on Recent Advances in Biomedical and Therapeutic Sciences" (ICRABTS)-2005 organized by I.B.S, Bundelkhand University Jhansi, in collaboration with Erasmus MC, Rotterdam.

Papers presented in National Conferences:

- Laiba Zaheen Khan & Mohit <u>Kamthania</u>. Global impact of zero emission concepts and its use in sustainable development. National Seminar on Current Research in Environment and Sustainable Development (NSCRESD) at Department of Chemistry, College of Life Sciences, Gwalior held on Sep., 21, 2019.
- Karishma Sharma, Soni Singh, Mohit Chandra <u>Kamthania</u>. "Advances of implantable electrochemical biosensors based on nanotechnology" National Conference on Advances in Computing Applications (NCACA), Department of Computer Applications, IET, Mangalayatan University, April, 7-8, 2016.
- Mohit <u>Kamthania</u>: "Biofuels for sustainable future energy resours" in National conference entitled Bioresources as a key to value added products at Mangalayatan University, Aligarh held on April 29-30, 2016.

- Mohit <u>Kamthania</u>: Milk Adulteration, Method of Detection and Remedial measures. National conference (STET-2014) at Esan College of Engineering, Mathura held on 25-26 April, 2014
- Mohit <u>Kamthania</u> & Deepika Bhaskar, "Immunoinformatics: screening of potential T-cell antigenic determinants in proteomes of Respiratory Syncytial Virus for epitope vaccine design" in National Seminar of Importance of Biodiversity & Green Technology at Govt. college Chachoda-Binaganj (M.P.), Feb 12-13, 2014
- 6. Pathak Neeraj Kumar and <u>Kamthania</u> Mohit. Antimicrobial activity of simple (water) extracts of Calotropis procera leaf and flower against Staphylococcus aureus. National Conference on Emerging Trends in Biotechnology and Pharmaceutical Research, Mangalayatan University, Aligarh held on Feb 18-19, 2012 pp 132.
- 7. Ravi Shekher, Deepak Kumar Sharma, Shraddha, Mohit **Kamthania** and Ajay Kumar (2012) Isolation and characterization of α-Amylase producing bacteria from soil. National Conference on Emerging Trends in Biotechnology and Pharmaceutical Research, Mangalayatan University, Aligarh, Feb 18-19, pp 95
- 8. Mohit <u>Kamthania</u> and Jyoti Saxena (2012). Ayurvedic Bhasm: Conventional and Biotechnological Approach. National Conference on Emerging Trends in Biotechnology and Pharmaceutical Research, Mangalayatan University, Aligarh, 18-19 Feb., 2012 pp 137
- Mohit <u>Kamthania</u>, Sukrit Srivastava. Oral presentation on "Proposed technique for permanent cure of hormonal deficiency" in All India Paper Presentation Contest (TECHTRIX-2005) organized by IET- Bundelkhand University, Jhansi & got 3rd Rank.
- 10. Mohit <u>Kamthania</u>, Sukrit Srivastava, Ankit Srivastava. Presenting a functional model on "Process development for removal of hormonal deficiency" in All India Engineering model contest (TECHNEX-2005) organized by IT-Gymkhana-BHU-Varansi.
- 11. Mohit <u>Kamthania</u>, Sukrit Srivastava. Poster presentation on "Fungal Friends", on Bioremediation & Environmental Toxicology at Institute of Environment & Development Studies, at Bundelkhand University, Jhansi 2005.

International/National Conference & Workshops Attended:

- Participated in National Webinar on "Intellectual Property Rights: Emerging issues, challenges and human intellect" organized by Anand Vihar College for Women, Bhopal, India on 28 Feb., 2022.
- Attended the three day ICDD-2017 workshop & Conference on "International Conference on Drug Design" organized by Schrodinger at Convention Centre, JNU, Delhi held on 7-9 April 2017.
- Attended the two day workshop entitled "Good Laboratory Practices" a joint workshop by JALMA, Agra & Mangalayatan Univ. at Mangalayatan University, Aligarh held on May 11-12, 2015.
- Attended the three day workshop on "Bioinformatics workshop on Drug Design" at Supercomputing Facility for Bioinformatics & Computational Biology, Indian Institute of Technology, Delhi held on 7-9 Sep. 2014.
- 5. Participated in a Two-day ISTE Workshop on Aakash for Education conducted by Indian Institute of Technology, Bombay on 10-11 Nov. 2012.
- Attended the National symposium on "Current trends in Biochemical, Biomedical & Environmental Science' at Dept. of Biochemistry, Faculty of Life Science, AMU, Aligarh held on 22 Feb., 2011.
- 7. Attended the Two day workshop on "METLAB & its application in engineering" at I.E.T. Mangalayatan University, Aligarh held on 23-24 April 2011.
- Attended the two day workshop on "Nanoscience & Nanotechnology" at Dept. of Applied Physics, Z.H. College of Engg. & Tech. Aligarh Muslim University, Aligarh held on 26-27 March, 2011.
- Attended a national training on "Bioinformatics & its application in Drug Designing" organized by Bioinformatics infrastructure facility, Department of biotechnology, Kumaun University, Nainital, 22-23 March, 2011.
- 10. Attended the Bioexcellence workshop "Whole genome expression profiling using QPCR & Microarray Technology" at i-Life discoveries pvt ltd. Gurgaon held on 5th Feb., 2011.
- 11. Attended the hands on Training in 'Basic Techniques in Recombinant DNA technology' at College of Life Science, Gwalior from 29-1 May 2011.

12. Attended the International SFRR Satellite Symposium on "Free radical in health and Disease" at Aligarh Muslim University, Aligarh 17-18 march 2009.

FDP Attended:

 Participated in the Faculty Development Program on "An Overview of Revised Guidelines for NAAC Accreditation Framework in Higher Education Institutions" Organized by Anand Vihar College For Women, Bhopal held from 16-24 Sept. 2021.

Awards/Recognitions:

- 1. Got "Best Teacher Award for Biotechnological Innovations 2022" during International Conference by Asian Biological Research Foundation Prayagraj.
- 2. Got "Best Teacher Award for School of Sciences 2022" during Teachers Day by Hon'ble Vice Chancellor, SAGE University Bhopal.
- 3. Ranked 3rd in "All India paper presentation" (TECHTRIX-2005), Bundelkhand University Jhansi.
- Ranked 5th in award winning competitive examination organized by Bundelkhand University Association for Advancement of Chemical and Biomedical Sciences (BUAACBS)-2004.
- 5. Letter of Appreciation 2010" issued by Vice Chancellor Mangalayatan University for efficient services towards the institution for the year 2010.
- 6. "5 Glorious Years" award in recognition of especially meritorious services for Mangalayatan University from 2008 to 2013.

Workshops/Seminars/Conference Organized:

- 1. Organized the International Conferences on "Recent Advances in Sciences and Engineering" as Convener, held at SAGE University Bhopal, India on 23rd April 2022.
- 2. Organized the International Conference on "Biotechnology & Applied Microbiology (ICBAM)-2020" as Organizing member, held at Faculty of Life Sciences, Institute of

- Applied Medicines & Research (IAMR), Ghaziabad, U.P., India from Feb 07-08, 2020.
- 3. Organized a National Conference on "Bioresourses as a key to Value Added Products" (NCBKVAP2016), Mangalayatan University, Aligarh held on April 2016.
- 4. Organized a National Conference entitled "National Conference on Emerging Trends in Biotechnology and Pharmaceutical Research" at I.B.M.E.R., Mangalayatan University, Aligarh, Feb 18-19, 2012.
- 5. Organized a Spiritual workshop entitled "Workshop on Vihangamyoga" at Shipra auditorium, Mangalayatan University, Aligarh, Nov. 16, 2011.
- Organized a workshop entitled "Good Laboratory Practices" a joint workshop by JALMA, Agra & Mangalayatan University held at Mangalayatan University, Aligarh on May 11-12, 2015.
- 7. Organized Technovation (Working Model contest) at Mangalayatan University, Aligarh, 2014.

Membership of Professional Bodies:

1. Life member of ABRF Allahabad.

Other Achievements:

- 1. Programme Coordinator (Aug. 2019-Aug. 2021), IAMR, Ghaziabad
- 2. Programme Coordinator of Department of Biotechnology, Mangalayatan University from July 2008 to August 2012.
- 3. Invited as Guest lecturer on Bioinformatics for M.Sc. Biotechnology Students from 26-27 Oct., 2012 at Gandhi Vocational College, Guna, Jiwaji University.
- 4. Editorial Board Member for the International Journal Community Acquired Infection-ISSN 2225-6482.
- 5. Managing Editor of International Journal of Life science and Bioengineering (Int. J. Lif. Sci. Bioengg), India (ISSN 2394-5516).

6. Supervisor of 06 PhD student:

Ms.Gunjan Choudhary

Ms. Archana Mahal

Ms. Rakhi Patel

Ms. Shivangi Pathak

Mr. Pankaj Sohaney

Ms. Trupti Khade