

Curriculum Vitae

- **Name** Dr. Rakesh Kumar
- **Designation** Scientist-B
- **Discipline/research area**
Chemoinformatics, Artificial Intelligence, Molecular dynamics, Genomics, metabolomics
- **ORCID ID, h-index** 0000-0002-8807-8421, 6
- **Address (off.)** National Institute of Pathology
Safdarjung Hospital campus,
New Delhi-110029
- **Telephone (off.)**
- **Email address** rakesh.kumar89@icmr.gov.in
- **Educational Qualifications**
 - Ph.D Bioinformatics**
International Center for Genetic Engineering and Biotechnology, New Delhi
 - M.Sc Biotechnology**
Hemwati Nandan Bahuguna Garhwal University, Uttarakhand
 - B.Sc. Medical Technology (Laboratory)**
Post Graduate Institute of Medical Education and Research,
Chandigarh
- **Research Experience**
 - 2022: Scientist-B, ICMR-National Institute of Pathology, New Delhi
 - 2019-2021: Technical Research Assistant, DBT APEX BTIC centre, ICGEB, New Delhi
 - 2016–2018: Senior Research Fellow, ICGEB, New Delhi
- **Awards**
CSIR-JRF, DBT-JRF, GATE
- **Membership/Fellowship of Professional Societies/Associations :**
- **Publications** 8
- **10 best publications**
 1. **Kumar, R.;** Gupta, D., Identification of CYP1B1-specific candidate inhibitors using combination of in silico screening, integrated

knowledge-based filtering, and molecular dynamics simulations. Chem Biol Drug Des 2016, 88, 730-739. **IF: 2.8**

2. **Kumar, R.**; Jade, D., A novel identification approach for discovery of 5-HydroxyTryptamine 2A antagonists: combination of 2D/3D similarity screening, molecular docking and molecular dynamics. 2019, 37, 931-943.

IF: 4.1

3. Roy, S.; **Kumar, R.**; Mittal, V.; Gupta, D., Classification models for Invasive Ductal Carcinoma Progression, based on gene expression data-trained supervised machine learning. Scientific reports 2020, 10, 4113. **IF: 4.9**

4. Shakeel, T.; Gupta, M.; Fatma, Z.; Kumar, R.; **Kumar, R.**; Singh, R.; Sharma, M.; Jade, D.; Gupta, D.; Fatma, T.; Yazdani, S. S., A consensus-guided approach yields a heat-stable alkane-producing enzyme and identifies residues promoting thermostability. JBC 2018, 293, 9148-9161. **IF: 5.4**

5. Sharma, C.; **Kumar, R.**; Kumar, N.; Masih, A.; Gupta, D.; Chowdhary, A., Investigation of Multiple Resistance Mechanisms in Voriconazole-Resistant *Aspergillus flavus* Clinical Isolates from a Chest Hospital Surveillance in Delhi, India. 2018, 62. **IF: 5.9**

6. Pandey, R.; **Kumar, R.**; Gupta, P.; Mohmmmed, A.; Tewari, R.; Malhotra, P.; Gupta, D., High throughput in silico identification and characterization of Plasmodium falciparum PRL phosphatase inhibitors. Journal of biomolecular structure & dynamics 2018, 36, 3531-3540. **IF: 4.1**

7. Ogunmolu, F. E.; Jagadeesha, N. B. K.; **Kumar, R.**; Kumar, P.; Gupta, D.; Yazdani, S. S., Comparative insights into the saccharification potentials of a relatively unexplored but robust *Penicillium funiculosum* glycoside hydrolase 7 cellobiohydrolase. Biotechnology for Biofuels 2017, 10, 71. **IF: 7.6**

8. Jade, D. D.; Pandey, R.; **Kumar, R.**; Gupta, D., Ligand-based pharmacophore modeling of TNF- α to design novel inhibitors using virtual screening and molecular dynamics. Journal of Biomolecular Structure and Dynamics 2020, 1-17. **IF: 4.1**

- **Book Chapters**

- **Projects**

Ongoing

Completed