About Faculty:

Dr. Omprakash Tanwar currently serves as an Assistant Professor in the Department of Pharmacy at SGSITS, Indore. His primary research interests revolve around antibacterial and anticancer drug discovery. Proficient in molecular modeling, he utilizes advanced drug discovery tools such as Schrodinger-GLIDE, GOLD, Sybil-X, among others.

With over four and half years of extensive research experience, Dr. Tanwar has contributed significantly to multinational drug discovery companies like Piramal Discovery Solutions, Ahmedabad, and TCG-Lifescience, Kolkata. He earned his Ph.D. from Jamia Hamdard University, New Delhi, renowned as one of the premier pharmacy institutions in India.

Dr. Omprakash Tanwar boasts an impressive portfolio, featuring more than 20 international publications. Notably, he served as a SERB International Research Experience (SIRe) fellow at the Department of Pharmacology, University of Oxford, UK, from July to December 2022. Additionally, he holds the role of Innovation Coordinator at the Institution Innovation Council of SGSITS.

His commitment to advancing the field is evident in his presentations at various international conferences in Munich, Germany, Manchester, UK, and Tianjin, China. Dr. Tanwar envisions the establishment of a state-of-the-art drug discovery laboratory and the development of novel drugs for human wellness. His beliefs center on fostering holistic health and wealth for societal well-being.

Work Experience

Industrial Experience	4.2 Year
Academic Experience	7.6 Year
Total Experience	11.8 Year

Research Details:

Research Interest

Dr. Omprakash Tanwar's research focuses on the development of new drugs for the treatment of tuberculosis (TB), cancer, and malaria, employing Rational Drug Design (RDD) tools. In particular, he is dedicated to utilizing advanced molecular modeling techniques, such as Schrodinger-GLIDE, GOLD, Sybil-X, to expedite the drug discovery process.

With a solid foundation in organic and medicinal chemistry, complemented by over five years of experience in multinational drug discovery companies, including roles at Piramal Discovery Solutions and TCG-Lifescience, he is adept at applying theoretical insights to practical drug development.

Dr. Tanwar's doctoral journey at Jamia Hamdard University, New Delhi, laid the groundwork for his commitment to addressing global health challenges. Having contributed to over 21

international publications, his research endeavors aim to make significant strides in rational drug design, ultimately contributing to the development of innovative therapeutic solutions for TB, cancer, and malaria.I am actively seeking collaborative opportunities to advance these research objectives and play a pivotal role in shaping the future of drug discovery for critical diseases

S. No	**List of papers published in SCI Journals in year wise descending order**
1.	**Omprakash Tanwar***, Rajendra Bhadane, Gurdyal S Besra, Neha Kawathekar 'DprE1 Inhibitors: Enduring Aspirations for Future Antituberculosis Drug Discovery', Saloni Yadav, Aastha Soni, *ChemMedChem* **2023**, 18, e202300099 **(**). **IF:3.54(**https://chemistryeurope.onlinelibrary.wiley.com/doi/10.1002/cmdc.202300099**)**
2.	Rajarshi Roy, Md Fulbabu S.K., **Omprakash Tanwar**, Parimal Kar, Computational studies indicated the effectiveness of human metabolites against SARS-Cov-2 main protease, Molecular Diversity, **2023,** 27(4):1587-1602. **IF: 3.8** (https://link.springer.com/article/10.1007/s11030-022-10513-6)
3.	**Omprakash Tanwar***, Aastha Soni Pawan Prajapat Tanu Shivhare Pooja Pandey Puneet K. Samaiya Sharad P Pandey Parimal Kar, Ethyl Pyruvate as a potential defense intervention against Cytokine storm in COVID-19?', *ACS OMEGA*, **2021** https://pubs.acs.org/doi/10.1021/acsomega.1c00157) **(**), **IF-2.89**.
4.	Kalicharan Sharma, **Omprakash Tanwar,** Shweta Sharma, Girdhar Singh Deora, Shakir Ali, M.M. Alam, M.S. Zaman, Vagolu Siva Krishnae, Dharmarajan Sriram, Mymoona Akhter, 'Expansion of a novel lead targeting M. tuberculosis DHFR as antitubercular agents', *Bioorganic Chemistry*, ISSN: 0045-2068, **2019**, **IF: 3.92.** (https://www.sciencedirect.com/science/article/abs/pii/S0968089618319679?via%3Dihub)
5.	Kalicharan Sharma, **Omprakash Tanwar,** Shweta Sharma, Shakir Ali, M.M. Alam, M.S. Zaman, Mymoona Akhter, 'Structural Comparison of *Mtb*-DHFR and *h*-DHFR for Design, Synthesis and Evaluation of Selective Non-Pteridine Analogues as Antitubercular Agents', *Bioorganic Chemistry*, ISSN: 0045-2068, **2018**, 80, 319-333, **IF: 3.92.** (https://www.sciencedirect.com/science/article/abs/pii/S004520681830141X)
6.	Gautam Kumar, **Omprakash Tanwar**, Jitender Kumar, Mymoona Akhter, Supriya Sharma, C.R. Pillai, Md Mumtaz Alam, MS Zama, 'Pyrazole-Pyrazoline as Promising Novel antimalarial agents: A mechanistic study', *European Journal of Medicinal Chemistry*, ISSN: 0223-5234, **2018**, 149, 139-147. DOI: 10.1016/j.ejmech.2018.01.082, **IF: 4.51**.
7.	Pharmacophore based virtual screening, synthesis and SAR of novel inhibitors of Mycobacterium sulfotransferase, Rikta saha, **Omprakash Tanwar**, Md. Mumtaz Alam, Md. Shaquiquzzaman, Shah A. Khan, Mymoona Akhtar, Bioorganic & Medicinal Chemistry Letters, ISSN: 0960-894X, **2015**, 25, 701–707, DOI: 10.1016/j.bmcl.2014.11.079, Impact Factor: 2.33
8.	Structure Based Virtual Screening of MDPI database: Discovery of Structurally diverse and Novel DPP-IV Inhibitors, **Omprakash Tanwar**, Lalima Tanwar, Md.

	Mumtaz Alam, Md. Shaquiquzzaman, Mymoona Akhter, Bioorganic & Medicinal Chemistry Letters, ISSN: 0960-894X **2014**, 24, 3447–3451, DOI: 10.1016/j.bmcl.2014.05.076, Impact Factor: 2.33.
9.	Novel Hydrazine derivatives as selective DPP-IV inhibitors: Findings of Virtual Sc Synthesis and antimalarial activity of Quinoline substituted Furanone derivatives and their identification as selective Falcipain-2 inhibitors, Mymoona Akhter, Rikta Saha, **Omprakash Tanwar**, Md reening and Validation through Molecular Dynamics Simulations, **Omprakash Tanwar**, Girdhar Singh Deora, Lalima Tanwar, Gautam Kumar, Shridhara Janardhan, Md. Mumtaz Alam, Md. Shaquiquzzaman, Mymoona Akhtar, Journal of Molecular Modeling, ISSN: 1610-2940, **2014**, DOI 10.1007/s00894-014-2118-7, Impact Factor: 1.98.
10.	Synthesis, 3D-QSAR and docking studies of pyrimidine nitrilepyrazoline: a novel class of hybrid antimalarial agents, Akranth Marella, Mymoona Akhter, Mohammad Shaquiquzzaman, **Omprakash Tanwar**, Garima Verma, Mohammad Mumtaz Alam, Medicinal Chemistry Research, ISSN: 1554-8120, **2014**, DOI 10.1007/s00044-014-1188-5, Impact Factor: 1.61.
11.	Synthesis and antimalarial activity of Quinoline substituted Furanone derivatives and their identification as selective Falcipain-2 inhibitors, Mymoona Akhter, Rikta Saha, **Omprakash Tanwar**, Md. Mumtaz Alam, M.S. Zaman, Medicinal Chemistry Research, ISSN: 1554-8120, **2014**, DOI 10.1007/s00044-014-1139-1, Impact Factor: 1.61.
12.	Synthesis and biological evaluation of some new pyrazoline substituted benzenesulfonylurea/thiourea derivatives as anti-hyperglycaemic agents and aldose reductase inhibitors, Syed Ovais, H. Pushpalatha, G. Bhanuprakash Reddy, Pooja Rathore, Rafia Bashir, Shafiya Yaseen, Alhamza Dheyaa, Raed Yaseen, **Omprakash Tanwar**, Mymoona Akthar, Mohammed Samim, Kalim Javed, European Journal of Medicinal Chemistry, ISSN; 0223-5234, **2014**, 80, 209-217, DOI: 10.1016/j.ejmech.2014.04.046, Impact Factor: 3.49.
13.	Recent Updates on Biological Activities of Oxadiazoles, Rikta Saha, **Omprakash Tanwar**, Akranth Marella, M. Mumtaz Alam, Mymoona Akhter, Mini-Reviews in Medicinal Chemistry, ISSN: 1875-5607, **2013**, 13, 1027-46, DOI: 10.2174/1389557511313070007, Impact Factor: 2.86.
14.	Pyrazolines: A Biological Review, Akranth Marella, Md. Rahmat Ali, Md Tauquir Alam, Rikta Saha, **Omprakash Tanwar**, Mymoona Akhter, Md. Shaquiquzzaman, M. Mumtaz Alam, Mini-Reviews in Medicinal Chemistry, ISSN: 1875-5607, **2013**, 13, 921-31, DOI: 10.2174/1389557511313060012, Impact Factor: 2.86.

15.	Pharmacophore Model Generation and 3D-QSAR Analysis of N-Acyl and N-Aroylpyrazolines for Enzymatic and Cellular B-Raf Kinase Inhibition, **Omprakash Tanwar**, Akranth Marella, Sandeep Shrivastava, M. Mumtaz Alam, Mymoona Akhtar, Medicinal Chemistry Research, ISSN; 1554-8120, **2013**, DOI 10.1007/s00044-012-0210-z, Impact Factor: 1.61.
16.	3D Quantitative Structure–Activity Relationship for Quinoline, Benzimidazole and Benzofuran-Based Analogs as Phosphodiesterases IV (PDE-IV) Inhibitors, Akranth Marella, **Omprakash Tanwar**, Rikta Saha, M. Mumtaz Alam, M. Shaquiquzzaman Zaman, Mymoona Akhter, Medicinal Chemistry Research, ISSN: 1554-8120, **2013**, DOI 10.1007/s00044-012-0457-4, Impact Factor: 1.61.
17.	Identification of ZINC02765569: A Potent Inhibitor of PTP-1B by vHTS, Prashant Joshi, Girdhar Singh Deora, Vandana Rathore, **Omprakash Tanwar**, ArunK Rawat, A. K. Srivastava, Deepti Jain, Medicinal Chemistry Research, ISSN: 1554-8120, **2013**, 22, 28-34, DOI: 10.1007/s00044-012-0007-0, Impact Factor: 1.61.
18.	3D-QSAR of Amino-Substituted Pyrido[3,2b]Pyrazinones as PDE-5 Inhibitors**,** **Omprakash Tanwar**, Rikta Saha, Md. Mumtaz Alam, Mymoona Akhtar, Medicinal Chemistry Research, ISSN: 1554-8120, **2012**, 21, 202-11, DOI: 10.1007/s00044-010-9523-y, Impact Factor: 1.61.
19.	Modeling VEGFR Kinase Inhibition of Aminopyrazolopyridine Urea Derivatives Using Topological and Physicochemical Descriptors: A Quantitative Structure Activity Analysis Study, Ashutosh Kumar Pandey, **Omprakash Tanwar**, Girdhar Singh Deora, Chandrabose Karthikeyan, N. S. Hari Narayana Moorthy, Piyush Trivedi, Medicinal Chemistry Research, ISSN: 1554-8120, **2012**, 21, 3958-64, OI:10.1007/s00044-011-9926-4 Impact Factor: 1.61.
20.	2-D QSAR Studies of Steroidal Natural Products Oleanic Acid and Their Semisynthetic Derivatives as Potent Protein Tyrosine Phosphatase-1B Inhibitors, Prashant Joshi, **Omprakash Tanwar**, Sujit Rambhade, Mukesh Bhaisare, Deepti Jain, Medicinal Chemistry Research, ISSN: 1554-8120, **2012**, 21, 351-61, DOI: 10.1007/s00044-010-9529-5, Impact Factor: 1.61.
21.	3D QSAR of Aminophenyl Benzamide Derivatives as Histone Deacetylase Inhibitors, Mahipal, **Omprakash Tanwar**, Chandrabose Karthikeyan, N. S. Hari Narayan Moorthy, Piyush Trivedi, Medicinal Chemistry, ISSN: 1875-663, **2010**, 6, 277-85, DOI: 10.2174/157340610793358846, Impact Factor: 1.37.