

# **List of Publications**

**RESEARCH PUBLICATIONS FROM Ph.D. DISSERTATION**

- (1) **Sharma, P.**, Tripathi, A., Tripathi, P.N., Singh, S.S., Singh, S.P., Shrivastava, S.K. Novel Molecular Hybrids of *N*-Benzylpiperidine and 1,3,4-Oxadiazole as Multitargeted Therapeutics to Treat Alzheimer's Disease. *ACS Chemical Neuroscience* 10, 4361-4384 (2019). [Impact Factor: 3.861].
- (2) **Sharma, P.**, Tripathi, A., Tripathi, P.N., Prajapati, S.K., Seth A., Tripathi, M.K., Srivastava, P., Tiwari, V., Krishnamurthy, S., Shrivastava, S.K. Design and development of multitarget-directed *N*-Benzylpiperidine analogs as potential candidates for the treatment of Alzheimer's disease. *European Journal of Medicinal Chemistry* 167, 510-524 (2019). [Impact Factor: 4.833].

**REVIEW ARTICLES PUBLISHED**

- (1) **Sharma, P.**, Srivastava, P., Seth, A., Tripathi, P.N., Banerjee, A.G., Shrivastava, S.K. Comprehensive review of mechanisms of pathogenesis involved in Alzheimer's disease and potential therapeutic strategies. *Progress in Neurobiology* 174, 53-89 (2019). [Impact Factor: 10.658].

**OTHER PUBLICATIONS**

- (1) Tripathi, A., Choubey, P.K., **Sharma, P.**, Seth, A., Saraf, P., Shrivastava, S.K. Design, Synthesis, and Biological Evaluation of Ferulic Acid Based 1,3,4-Oxadiazole Hybrids as Multifunctional Therapeutics for the Treatment of Alzheimer's Disease. *Bioorganic Chemistry* In Press (2019) 103506 <https://doi.org/10.1016/j.bioorg.2019.103506>. [Impact Factor: 3.926].
- (2) Tripathi, A., Choubey, P.K., **Sharma, P.**, Seth, A., Tripathi, P.N., Tripathi, M.K., Prajapati, S.K., Krishnamurthy, S., Shrivastava, S.K. Design and development of molecular hybrids of 2-pyridylpiperazine and 5-phenyl-1,3,4-oxadiazoles as potential multifunctional agents to treat Alzheimer's disease. *European Journal of Medicinal Chemistry* 183, 111707 (2019). [Impact Factor: 4.833].
- (3) Srivastava, P., Tripathi, P.N., **Sharma, P.**, Shrivastava, S.K. Design, synthesis, and evaluation of novel *N*-(4-phenoxybenzyl)aniline derivatives targeting acetylcholinesterase,  $\beta$ -amyloid aggregation and oxidative stress to treat Alzheimer's disease. *Bioorganic & Medicinal Chemistry* 27(16), 3650-3662 (2019). [Impact Factor: 2.802].
- (4) Mishra, P., **Sharma, P.**, Tripathi, P.N., Gupta, S.K., Srivastava, P., Seth, A., Seth, A., Tripathi, A., Krishnamurthy, S., Shrivastava, S.K. Design and Development of 1,3,4-Oxadiazole Derivatives as Potential Inhibitors of Acetylcholinesterase to Ameliorate Scopolamine-Induced Cognitive Dysfunctions. *Bioorganic Chemistry* 89, 103025 (2019). [Impact Factor: 3.926].

- (5) Tripathi, P.N., Srivastava, P., **Sharma, P.**, Seth, A., Shrivastava, S.K. Design and development of novel N-(pyrimidin-2-yl)-1, 3, 4-oxadiazole hybrids to treat cognitive dysfunctions. *Bioorganic & Medicinal Chemistry* 27(7), 1327-1340 (2019). [Impact Factor: 2.802].
- (6) Tripathi, P.N., Srivastava, P., **Sharma, P.**, Tripathi, M.K., Tripathi, A., Seth, A., Rai, S.N., Singh, S.P., Shrivastava, S.K. Biphenyl-3-oxo-1,2,4-triazine linked piperazine derivatives as potential cholinesterase inhibitors with anti-oxidant property to improve the learning and memory. *Bioorganic Chemistry* 85, 82-96 (2019). [Impact Factor: 3.926].
- (7) Srivastava, P., Tripathi, P.N., **Sharma, P.**, Rai, S.N., Singh, S.P., Srivastava, R.K., Shankar, S., Shrivastava, S.K. Design and development of some phenyl benzoxazole derivatives as a potent acetylcholinesterase inhibitor with antioxidant property to enhance learning and memory. *European Journal of Medicinal Chemistry* 163, 116-135 (2019). [Impact Factor: 4.833].
- (8) Srivastava, P., Tripathi, P.N., **Sharma, P.**, Shrivastava, S.K. Quantitative Structure Activity Relationship based Design, Synthesis, and Evaluation of Novel Diarylether derivatives as a potent Acetylcholinesterase inhibitor and Antioxidant to treat Cognitive dysfunctions. *Current Trends in Biotechnology and Pharmacy* 13(2), 124-145.
- (9) Shrivastava, S.K., Sinha, S.K., Srivastava, P., Tripathi, P.N., **Sharma, P.**, Tripathi, M.K., Tripathi, A., Choubey, P.K., Waiker, D., Aggarwal, L.M., Dixit, M., Kheruka, S.C., Gambhir, S., Shankar, S. & Srivastava, R.K. Design and development of novel p-aminobenzoic acid derivatives as potential cholinesterase inhibitors for the treatment of Alzheimer's disease. *Bioorganic Chemistry* 82, 211-223 (2018). [Impact Factor: 3.926].
- (10) Shrivastava, S.K., Tripathi, P., Srivastava, P., **Sharma, P.**, Tripathi, A., Seth, A., Tripathi, M.K. Synthesis, evaluation and docking studies of some 4-thiazolone derivatives as effective lipoxygenase inhibitors. *Chemical Papers* 72, 2769-2783 (2018). [Impact Factor: 1.246].
- (11) Seth, A., **Sharma, P.**, Tripathi, A., Choubey, P., Srivastava, P., Tripathi, P. & Shrivastava, S. Design, synthesis, evaluation and computational studies of nipecotnic acid-acetonaphthone hybrids as potential antiepileptic agents. *Medicinal Chemistry* 14, 409-426 (2018). [Impact Factor: 2.530].
- (12) Seth, A., **Sharma, P.**, Tripathi, A., Choubey, P.K., Srivastava, P., Tripathi, P.N. & Shrivastava, S.K. Design, synthesis, evaluation and molecular modeling studies of some novel N-substituted piperidine-3-carboxylic acid derivatives as potential anticonvulsants. *Medicinal Chemistry Research* 27, 1206-1225 (2018). [Impact Factor: 1.720].

- (13) Banerjee, A.G., Das, N., Shengule, S.A., **Sharma, P.**, Srivastava, R.S. & Shrivastava, S.K. Design, synthesis, evaluation and molecular modelling studies of some novel 5, 6-diphenyl-1, 2, 4-triazin-3 (2H)-ones bearing five-member heterocyclic moieties as potential COX-2 inhibitors: A hybrid pharmacophore approach. *Bioorganic Chemistry* 69, 102-120 (2016). [**Impact Factor: 3.926**].
- (14) Banerjee, A.G., Kothapalli, L.P., **Sharma, P.**, Thomas, A.B., Nanda, R.K., Shrivastava, S.K. & Khatanglekar, V.V. A facile microwave assisted one pot synthesis of novel xanthene derivatives as potential anti-inflammatory and analgesic agents. *Arabian Journal of Chemistry* 9, S480-S489 (2016). [**Impact Factor: 3.298**].

#### PATENTS PUBLISHED/FILED FROM Ph.D. DISSERTATION

- (1) **Sharma, P.**, Tripathi, A., Tripathi P.N., Avhad, A., Shrivastava, S.K. Synthesis of *N*-benzylpiperidine and 5-(2,4-dichlorophenyl)-1,3,4-oxadiazole hybrid with multifunctional activities against Alzheimer's Disease. **Indian Patent** 201911034164 dated 24.08.2019- Filed.
- (2) **Sharma, P.**, Tripathi, A., Tripathi P.N., Salunke, P., Shrivastava, S.K. *N*-(1-benzylpiperidin-4-yl)-5-(4-(trifluoromethyl) phenyl)-1,3,4-oxadiazol-2-amine as multitargeted ligand to treat Alzheimer's disease. **Indian Patent** 201911034930 dated 29.08.2019- Filed.

#### OTHER PATENTS PUBLISHED/FILED

- (1) Shrivastava, S.K., **Sharma, P.**, Tripathi, P.N., Srivastava, P., Srivastava, R.K., Shankar, S. Methods for treating cancer and metabolic syndrome. **United States Patent**- 2932719-025-US1 dated 04.05.2018- PCT Filed.
- (2) Tripathi, A., **Sharma, P.**, Choubey, P.K., Shrivastava, S.K. A novel compound for treating Alzheimer's disease and a method of preparation thereof. **Indian Patent** 201911034300 dated 26.08.2019- Filed.
- (3) Tripathi, A., **Sharma, P.**, Choubey, P.K., Shrivastava, S.K. Synthesis of 2-(4-bromophenyl)-5-(4-(pyridin-2-yl)Piperazin-1-yl)-1,3,4-oxadiazole for treating Alzheimer's disease and method of preparation thereof. **Indian Patent** 201911034931 dated 29.08.2019- Filed.

#### BOOK CHAPTERS

- (1) **Sharma, P.**, Tripathi, M. & Shrivastava, S.K. Chapter 18- Cholinesterase as a target for drug development in Alzheimer's disease. In 'Targeting Enzymes for Pharmaceutical Development: Methods and Protocols' *Humana Press, Springer, USA*, pp. 257-286 (2020).

- (2) Kumar, M., **Sharma, P.**, Maheshwari, R., Tekade, M., Shrivastava, S.K. & Tekade, R.K. Chapter 15 - Beyond the Blood–Brain Barrier: Facing New Challenges and Prospects of Nanotechnology-Mediated Targeted Delivery to the Brain. In ‘Nanotechnology-Based Targeted Drug Delivery Systems for Brain Tumors’ *Academic Press (Elsevier)*, pp. 397-437 (2018).

#### CONFERENCE: POSTERS PRESENTED

- (1) Presented a poster at **Basel Life 2019** at **Congress Center, Basel, Switzerland** on topic entitled “Computational exploration to design and synthesise *N*-benzylpiperidines as multifunctional therapeutics to treat Alzheimer’s disease” held during 9-12 September 2019. **International Travel Grant Sanctioned by CSIR-HRDG, New Delhi and IIT (BHU), Varanasi**
- (2) Presented a poster at **20<sup>th</sup> Tetrahedron Symposium, Bangkok, Thailand** on topic entitled “Design and development of *N*-benzylpiperidines as multitargeted ligands for the treatment of Alzheimer’s disease” held on 18-21 June 2019. **Grant Sanctioned by SERB, New Delhi through International Travel Support (ITS) Scheme.**

#### WORKSHOPS ATTENDED

- (1) Attended one day workshop “Structuring your manuscript to impress SCI journal editors and responding to reviewer comments” on 24<sup>th</sup> October 2018 organized by Wiley Publication at IIT (BHU), Varanasi.
- (2) Attended one day workshop “LaTex Software” on 6<sup>th</sup> October 2018 organized by IEEE Student Branch Chapter at IIT (BHU), Varanasi.
- (3) Attended three days workshop “Emerging trends in drug design and molecular modeling” from 19-21 July 2017 organized by Design Innovation Center, Banaras Hindu University, Varanasi and Schrödinger, India.