

Sonal Vijay Pande

Doctoral Researcher

B-401, Sanidhya complex, Custom road
Vapi, Dist: Valsad, Gujarat-396191
India
+91 9427006925
sonalpande09@gmail.com

Professional Summary

Ability to manage and conduct research independently in an organization. Seeking to enhance skills and aid new research.

Education

- **Ph. D in Pharmacy Pharmacology- 2022-2025**

L.M College of Pharmacy affiliated to *Gujarat Technological University*

Project domain: Neuroscience

Thesis title: Enhancing oral bioavailability of polyphenols using metabolic adjuvants

No. of Publications: 06

Book chapter: 01

- **Master's in Pharmacy in Pharmacology(M.Pharm)- 2018-2020**

SSR College of Pharmacy affiliated to *Savitribai Phule Pune University*

First Class with distinction- 86.08%

Awarded with 1st Rank in University

Project domain: Neuroscience

Thesis title: Neuroprotective effect of curcumin combination with diclofenac and probiotics (as bio enhancers) against Alzheimer's disease

No. of Publications: 02

- **Bachelor's in Pharmacy(B.Pharm)- 2014-2020**

SSR College of Pharmacy affiliated to *Savitribai Phule Pune University*

First Class with distinction- 77.83%

Awarded with 7st Rank in University

Work experience

Senior Research Officer at Research & Development Meril Diagnostics Pvt Ltd	Sept 2020- Jan 2022
Internship at Sovereign Pharma Pvt Ltd, Daman	June-August 2017
Internship at Sun Pharma Pvt Ltd, Silvassa	June-July 2016

Achievements and extracurricular

- Awarded 1, 50,000 INR by the Student Start-up Innovation Council, Government of India, for a research project during Ph.D.
- Awarded with fellowship of Scheme of developing high quality of research SHODH-2022 during Ph.D.
- Secured 1st rank in Savitribai Phule Pune University M.Pharm Pharmacology 2020
- Secured 7th rank in Savitribai Phule Pune University in B. Pharmacy year 2018.
- Selected for Azadi ka Amrit Mahotsav Grand state level– Hackathon final 2023
- Won 2nd prize at Poster Presentation at National Level Seminar sponsored by GUJCOST on “Emerging technologies in Pharmaceutical sciences Innovated Methods and Techniques” 2019
- Selected for State level Research Project Competition Aviskar 2018 selected for University level and Research Project Competition Aviskar 2019
- Completed online CSIR-Summer Research Training Programme 2020
- Completed SWAYAM online UGC course in “Academic writing” with 92 marks out of 100
- Completed courses by Uppsala monitoring center on Pharmacovigilance 2020 Completed
- course by WHO On Vaccine Basic Safety.
- Completed course on Patent Analysis Research, Patent Filing Strategy, Clinical trial network

Research experience

- New product Development of VTM, RNA extraction kit, Lyophilized kit, FIA, Dry swab, Gargle test, CRISPR, SHERLOCK.
- Develop new products, redesign existing products (RT-PCR Lyophilized), and perform validation/ testing on product concepts.
- Handling technology transfer for new products and proceed further documentation like submitting specification and Change closure form, product transfer form.
- Troubleshooting with respect to initial batches along with production.
- Preparation of Design history file, Dossier, Market Kit validation studies protocol and report.
- Execute timely testing for stability of product and test methods development/validation of protocol and reports.
- Develop scientific presentation to give at national and international meetings.
- Perform and validate all aspects of research program and experiments.

- Design and execute plans to improve current products and create new ones based on market research

Key projects

- Development of RNA extraction kits (Dry swab kit, Gargle based),Rapids kit.
- Development of Fluoroimmunoanalyser Rapid detection.
- Lyophilization of components which are unstable at room temperature. In-vitro viral inactivation study
- In-vivo study on transgenic mice for cancer therapy
- Development of RT-PCR Kits such as COVID-19 Room temperature stable, Hepatitis C.

Software's skills:

Autodock vina, Schrödinger, Mendeley, Ms.Office, Graph pad prism, Chem draw, Design expert

Domain skills

- Have a core knowledge of working and handling with Computational aided drug design software's such as Autodock vina and Schrödinger.
- Core expertise in Molecular pharmacology, Regulatory toxicology.
- Remarkable experience in handling, training and dosing of a variety of animals like rat, mice, guineapig, rabbit and aquatic animals like zebra fish.
- Familiarity with general maintenance duties and medical treatments of animals.
- Research and scientific writing skills in Animal study, Preclinical protocol designing.
- Handling of RT-PCR instruments of models such as QIAGEN, HIMEDIA, THERMO.
- Processing extraction of DNA/RNA Samples(COVID-19 samples, HCV, HIV, HBsAg)
- Good operating practice of Gel electrophoresis, SDS-PAGE, ELISA and Rapid kits.
- Conducting lyophilization of Enzyme, viral genome, probes and scaling to market.
- Designing Primer and Probe for RT-PCR.
- Detailed knowledge of GCP and ICH guidelines.
- Basic understanding of Regulatory requirements for Clinical research and Pharmacovigilance.
- Knowledge of drug safety and different clinical trial phases.
- Ability to communicate effectively and professionally with a wide range of people in both verbal and, written form.
- Ability for maintaining and reporting accurate records including technical service records, animal census, sterilization logs, breeding records, transgenic data, anesthesia machine logs, animal receiving and deposition logs, etc.
- Ability to communicate and collaborate with members of multidisciplinary team.

▪ Publications

Sr.no	Publication article	Journal	Impact factor
1	Nanocarriers for the Delivery of Neuroprotective Agents in the Treatment of Ocular Neurodegenerative Diseases	Pharmaceutics. 2023 Mar 3;15(3):837.	6.51
2	Acute and sub -acute toxicity study of anti - obesity herbal granules in Sprague Dawley rats	Brazilian Journal of Biology. 2022 Aug 8;84.	1.32
3	Amelioration of intracerebroventricular streptozotocin -induced cognitive dysfunction by Ocimum sanctum L. through the modulation of inflammation and GLP -1 levels.	Metabolic Brain Disease. 2022 Oct;37(7):2533 - 43.	3.66
4	Therapeutic Approaches to Amyotrophic Lateral Sclerosis from the Lab to the Clinic.	Current Drug Metabolism. 2022 Mar 1;23(3):200 - 22.	2.96
5	Potential of anti -Alzheimer activity of curcumin by probiotic Lactobacillus rhamnosus UBLR - 58 against scopolamine -induced memory impairment in mice.	Naunyn - Schmiedeberg's Archives of Pharmacology. 2020 Oct;393(10):1955 - 62.	2.23
6	Lactobacillus Rhamnosus UBLR - 58 and Diclofenac Potentiate the Anti -Alzheimer Activity of Curcumin in Mice.	Current Enzyme Inhibition. 2021 Jan 1;17(1):49 - 56.	0.73
7	Effect of Lactobacillus rhamnosus and Diclofenac with Curcumin for neuronal restoration and repair against Scopolamine induced Dementia in Zebrafish (Danio rerio)"	Current Enzyme Inhibition. 2023 April 03	0.73
Book chapter			
1	Antimalarial Drug Resistance: Trends, Mechanisms, and Strategies to Combat Antimalarial Resistance	Advances in Treatment of Infectious Diseases 2023 Mar 7 (pp. 43 - 69). Cham	Advances in Treatment of Infectious Diseases 2023 Mar 7 (pp. 43 - 69). Cham
Under review			
1	An Update on Strategies to Deliver Protein and Peptide Drugs to the Eye		
2	Role of Hepatitis C Virus in Dry Eye Disease		