

## FACULTY DATABASE

Name: Ms. Dhivya.L. S

Designation: Assistant Professor

Department: Pharmaceutical Chemistry

E Mail ID: dhivya3396@gmail.com

Affiliation: Faculty of Pharmacy, Dr. M.G.R. Educational and  
Research Institute, Velappanchavadi, Chennai-600077



### EDUCATION

Sl.No.	Course	Department	Affiliation
1	Ph.D.	Pharmaceutical Chemistry (Synopsis Submitted)	SRM Institute of Science and Technology
2	M.Pharm	Pharmaceutical Chemistry	The Tamil Nadu Dr.M.G.R Medical University, Guindy
3	B.Pharm	Pharmacy	SRM University

### OTHER DETAILS

#### Courses:

- Drug Discovery- an approach to Cheminformatics.
- Molecular Modelling by using Autodock tools, Schrodinger and Dynamics simulation using Desmond.
- Current Regulatory Requirements for Conducting Clinical Trials in India for Investigational New Drugs/New Drug (Version 3.0).
- Drug Metabolism and Pharmacokinetics.

## Research Interest:

- Designing of small heterocyclic molecules targeting InhA
- Tuberculosis
- Genitourinary Tuberculosis with HIV infection

## Publications

### *Published Papers*

International Publications: Published 14 papers in Sci-Indexed, Scopus Indexed Journals and Web of Science (**Cumulative Impact Factor 33.5**)

1.**Dhivya LS**, Kathiravan MK Synthesis of novel furan-based chalcone derivatives as anti-tuberculosis agents: in vitro, cytotoxicity assessment and in silico. Future Med Chem. 2023 Sep;15(18): doi: 10.4155/fmc-2022-0110. **(IF=4.2)**

2.Nayak SPRR, **Dhivya LS**, R R, Almutairi BO, Arokiyaraj S, Kathiravan MK, Arockiaraj J. Furan based synthetic chalcone derivative functions against gut inflammation and oxidative stress demonstrated in in-vivo zebrafish model. Eur J Pharmacol. 2023 Aug 11:175994. doi: 10.1016/j.ejphar.2023.175994. Epub ahead of print. PMID: 37574161. **(IF=5)**

3.**Dhivya L. S.**, Kathiravan M. K. & Gopalakrishnan Thamilselvan (2023) Design, synthesis and anti-Tb evaluation of chalcone derivatives as novel inhibitors of InhA, Journal of Biomolecular Structure and Dynamics, DOI: [10.1080/07391102.2023.2227711](https://doi.org/10.1080/07391102.2023.2227711). **(IF=4.4)**

4.Samupindi T.L., Saravanan V., Narayanan P.L., **Sumathi D.L.**, Kathiravan M.K. Molecular modelling investigation on 4-aminoquinoline derivatives as potent anti-tubercular agents (2022) Journal of Medical Pharmaceutical and Allied Sciences, 11 (5), pp. 5304 - 5311, DOI: 10.55522/jmpas. **(IF=0.2)**

5.Pradeepa BR, Vijayakumar TM, **Dhivya LS**, Manikandan K. In-silico comparison of cytochrome P450 inhibitory and dopaminergic activity of Piperine, Curcumin and Capsaicin. Nat Prod Res. 2022 Oct 18:1-6. doi: 10.1080/14786419.2022.2134862. Epub ahead of print. PMID: 36255130. **(IF=2.3)**

6.Vaithiyalingam M, **Sumathi DL**, Sabarathinam S. Isolation and In silico Study of Curcumin from *Curcuma longa* and Its Anti-Diabetic Activity. Appl Biochem Biotechnol. 2023 Feb;195(2):947-957. doi: 10.1007/s12010-022-04173-3. Epub 2022 Oct 15. PMID: 36242725. **(IF=3.164)**

7.**Dhivya L.S.**, Mohan Maruga Raja M.K., Kathiravan M.K. Computational Investigation of Plant-based Bioactive Compounds as Inhibitors against Tuberculosis (2022) Journal of Natural Remedies, 22 (3), pp. 457 - 471,DOI: 10.18311/jnr/2022/30194. **(IF=0.350)**

8.**Dhivya LS**, Sarvesh S, S AS. Inhibition of Mycobacterium tuberculosis InhA (Enoyl-acyl carrier protein reductase) by synthetic Chalcones: a molecular modelling analysis and in-vitro evidence. J Biomol Struct Dyn. 2022 Jun 24:1-19. doi: 10.1080/07391102.2022.2086922. Epub ahead of print. PMID: 35751128. **(IF=4.4)**

9. **Dhivya LS**, Pradeepa BR, Sarvesh S. Synthesis and in vitro studies for structure-based design of novel chalcones as antitubercular agents targeting InhA. *Future Med Chem.* 2022 Jun;14(12):851-866. doi: 10.4155/fmc-2022-0052. Epub 2022 May 12. PMID: 35548879. **(IF=4.2)**

10. **Dhivya L.S.**, Haritha M., Anjana G.V., Priya D. In Silico Screening of Triphala Churna against Bacterial Agents (2022) *Journal of Natural Remedies*, 22 (2), pp. 221 - 232, DOI: 10.18311/jnr/2022/28664. **(IF=0.350)**

11. Priya D., Gopinath P., **Dhivya L.S.**, Vijaybabu A., Haritha M., Palaniappan S., Kathiravan M.K. Structural Insights into Pyrazoles as Agents against Anti-inflammatory and Related Disorders (2022) *Chemistry Select*, 7 (5), DOI: 10.1002/slct.202104429. **(IF=2.1)**

12. Suresh AJ, Nandini S, Sangeetha K, **Dhivya LS**, Surya PR. Design, Synthesis and In Vitro Biological Evaluation of Pyridine, Thiadazole, Benzimidazole and Acetyl Thiophene Analogues as Anti Tubercular Agents Targeting Enzyme InhA. *Curr Comput Aided Drug Des.* 2021;17(6):773-784. doi: 10.2174/1573409916666200724152827. PMID: 32713342. **(IF=1.7)**

13. Sumithra M., Choudhury S., **Dhivya L.S.**, Nithyanand M., Zachariah J., Sharmila Protective role of *Borreria hispida* against galactosamine induced diabetic cataract; *Research Journal of Pharmacy and Technology* 12 (3), 1235-1238. **(IF=0.675)**

14. Anand D., Sathish M., **Dhivya L.S.**, In-vitro  $\alpha$ -amylase and  $\alpha$ -glucosidase inhibitor activities of *Albizia procera* stem bark; *Asian Journal of Pharmaceutical and Clinical Research* 11 (9), 344-47.

## Patents

### Patent Granted

Pyridine, Thiadiazole, Benzimidazole and Acetyl Thiophene Analogues as Anti-Tubercular agents targeting enzyme InhA (Enoyl Acyl Carrier Protein Reductase): Design, Synthesis and in vitro Biological Evaluation. **(Patent No. 416920)**

### Patent Published

Design, Synthesis and Anti-Tubercular Evaluation of Furan Based Chalcone Derivatives targeting InhA. **(Patent Ref No. 202341045592)**

### *Working Papers / Projects*

Benzimidazole derivatives as Anti-Tubercular Agents

Halogenated Chalcone based Flavone as Anti-Tubercular Agents

Heterocyclic Chalcones as Anti-Tubercular Agents

## ACADEMIC/ INDUSTRY EXPERIENCE

S.No.	Name of the Institution/Industry	From	To	Years of Experience
1	Dr.M.G.R Educational and Research Institute	04.10.2023	Till date	1 month
2	State Drug Testing Laboratory, Indian Medicine, Arumbakkam	01.08.2019	30.08.2020	01 Year

## OTHER PROFESSIONAL EXPERIENCES

Experience in Organic Synthesis and Green Chemistry

Experience in Handling HPLC

Experience in Handling UV

Experience in Handling FT-IR

## PROFESSIONAL MEMBERSHIP

Registered Pharmacist

## ACHIEVEMENTS AND AWARDS

2017 - 2019 Awarded research fellowship to pursue M. Pharm Pharmaceutical Chemistry in Madras Medical College, Chennai, India.

2018 Awarded Cash Prize for qualifying Prelims in Pan South India Pharma Quiz at Madras Medical College.

Awarded silver medal for Best Researcher category on Research day conducted by SRMIST in the year of 2023.

Awarded as Best Research Scholar with Highest number of Quality Publications from SRM College of Pharmacy for the year 2022 – 2023.