

FACULTY DATABASE

Name: Dr.B.GEETHA

Designation: Associate Professor

Department: Pharmaceutical Chemistry / Analysis

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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	Sri Venkateswara College of Pharmacy/JNTUA
2	M.Pharm	Pharmaceutical Chemistry	Sri Padmavathi School of Pharmacy/JNTUA
3	M.S (Master of Science)	General Chemistry	Texas A & M University, Texas, USA
4	B.Pharm	-	Annamacharya College of Pharmacy/JNTU

OTHER DETAILS

Courses:

- Pharmaceutical Organic Chemistry (Theory & Lab)
- Pharmaceutical Inorganic Chemistry
- Pharmacognosy-Lab
- Intellectual Property Rights
- Medicinal Chemistry-I & II
- Computer Aided Drug Design

Research Interest:

- Organic synthesis of compounds by using Green Chemistry.
- Insilico studies of compounds using different software.
- Designing, synthesis, Characterization and biological screening of various compounds.
- Qualitative and quantitative Analysis of drugs.
- Isolation of natural products.

Publications

Published Papers

1. Sumitha A, Parthiban Brindha Devi, Vidhya Subramanian, **B. Geetha**, G. Vaishnavi, “In silico molecular docking studies of drugs Donepezil and Galantamine towards SARS-CoV-2 main protease (Mpro)”, *Biomedicine*, 43(4), 1193-1197.
2. Vinod K. Nelson, Mohana Vamsi Nuli, Juturu Mastanaiah, Mohamed Saleem T. S. **Geetha Birudala** et al., “Reactive oxygen species mediated apoptotic death of colon cancer cells: therapeutic potential of plant derived alkaloids”, *Frontiers in Endocrinology*, 2023, volume 14, 1-21.
3. Vinod K. Nelson, Chitikela P. Pullaiah, Mohammed Saleem TS, Shubhadeep Roychoudhury, Sasikala Chinnappan, Beere Vishnusai, Ravishankar Ram Mani, Geetha Birudala & Kavya Sree Bottu, “NATURAL PRODUCTS AS THE MODULATORS OF OXIDATIVE STRESS: AN HERBAL APPROACH IN THE MANAGEMENT OF PROSTATE CANCER”, *Advances in Experimental Medicine and Biology*, An imprint of Springer, Cham, 2022, volume 1391,161–179. (Springer)
4. Geetha Birudala, Harikrishnan N, Vinod Kumar Nelson, Nagendra Babu Mennuru, “BIOACTIVES AND PHARMACOLOGY OF ACALYPHA WILKESIANA MÜLL.-ARG.”, *Phytochemical Composition and Pharmacy of Medicinal Plants*, Apple Academic Press, An imprint of taylor&francis, 48 chapter, 21-28.
5. Swarnalatha Dugasani, Nagendra Babu Mennuru, Vinod Kumar Nelson, Geetha Birudala, “BIOACTIVES AND PHARMACOLOGY OF PREMNA HERBACEA ROXB. (FAMILY: LAMIACEAE)”, *Bioactives and Pharmacology of Medicinal Plants*, Apple Academic Press-An imprint of taylor&francis, 53 chapter, 269-278.
6. Nagendra Babu Mennuru, Ramadevi Birudala, and Geetha Birudala, “PATHOGENESIS, CLINICAL MANIFESTATIONS AND TREATMENT OF LEPROSY”, *Viral, Parasitic, Bacterial, and Fungal Infections*, Academic press – An imprint of Elsevier, 49 chapter-2022, 609-615. (Elsevier).
7. Geetha.B, Harikrishnan.N, Sharmili.P, Esther Rani.E, Haripriya.A, Hemalatha C.N, “IN SILICO ANALYSIS AND MOLECULAR DOCKING STUDIES OF NOVEL

THIAZOLIDINEDIONE DERIVATIVES AGAINST PPAR- γ ”, *Rasayan Journal of Chemistry*, 15(2), 2022, 1419-1426.

8. Geetha.B, Harikrishnan.N, “EMPOWERING WOMEN THOROUGH MICRO FINANCE : STATUS AND EMERGING CHALLENGES”, Book chapter on Empowering Women, Dr.MGR Educational and Research Institute, 8th March 2022, ISBN: 978-93-5593-750-6.
9. Birudala Geetha, Andrew L. Petrou, Marina Mansour, Sarah M. Tadros, Datta V. Naik, Gregory A. Moehring, “CHIRAL AMINE LIGANDS AT RHENIUM(V) PENTAHYDRIDE COMPLEXES ALLOW FOR CHARACTERIZATION OF AN ENERGETICALLY ACCESSIBLE AND REVERSIBLE STERIC INVERSION OF DIASTEREOTOPIC PHOSPHORUS ATOMS”, *Inorganica Chimica Acta*, 531 (2022), 2022, 1-9 (Elsevier).
10. Geetha.B, Sharmili.P, Esther Rani.E, Haripriya.A, Nandhini.M, Yuvashri.N, Harikrishnan.N, “PEROXISOME PROLIFERATOR-ACTIVATED RECEPTOR GAMMA(PPAR- γ): A POTENTIAL TARGET FOR TYPE 2 DIABETES MELLITUS”, *International Journal of Pharmaceutical Research*, 13 (3), 2021, 1451-1456.
11. B. Geetha, G. Swarnalatha, G.V. Subba Reddy, “MICROWAVE ASSISTED SYNTHESIS, QSAR AND MOLECULAR DOCKING STUDIES OF 2,4-THIAZOLIDINEDIONE DERIVATIVES”, *Rasayan Journal of Chemistry*, 12(3), 2019, 1064-1071.
12. B. Geetha, G. Swarnalatha, G.V. Subba Reddy, “MOLECULAR DOCKING AND QSAR STUDIES OF NOVEL 2,4 THIAZOLIDINEDIONE BASED BENZYLAMINE DERIVATIVES AGAINST PPAR γ (1ZGY) AS ANTI-DIABETIC AGENTS”, *International Journal of Pharmaceutical Research*, 11(2), 2019, 363-369.
13. B. Geetha, G. Swarnalatha, G.V. Subba Reddy, “BIOLOGICAL EVALUATION OF SYNTHESISED THIAZOLIDINEDIONE DERIVATIVES FOR ANTI-DIABETIC ACTIVITY ON STZ CAUSED DIABETES IN RATS”, *International Journal of Research in Pharmaceutical Sciences*, 10(2), 2019, 1042-1048.
14. B. Geetha, V. Gunasekaran, G.V. Subba Reddy, “THIAZOLIDINEDIONE DERIVATIVES AS ANTIDIABETIC AGENTS: A SHORT REVIEW”, *International Research Journal of Pharmacy*, 9(2), 2018, 1-6.
15. B. Geetha, “ISOLATION AND BIOACTIVITIES OF CYNODON DACTYLON: A CASE STUDY”, *International Journal of Scientific Research*, 4(9), 2015, 357-360.
16. B. Geetha, “PLURIPOTENT STEM CELLS FOR VASCULAR DISEASE THERAPY”, *International Research Journal of Pharmacy*, 6(9), 2015, 602-604.

17. B. Geetha, "SYNTHESIS, CHARACTERIZATION AND BIOLOGICAL ACTIVITY EVALUATION OF SOME 2-(1,1-DIMETHYL GUANIDINYL)-4,5-DIARYL IMIDAZOLES", International Journal of Current Trends in Pharmaceutical Research, 3(6), 2015, 1093-1098.

Working Papers / Projects

1. Geetha B, Pavithra N, Praveen R, Pravin Kumar M, Harikrishnan N "In Silico Analysis And Molecular Docking Studies Of Phytochemicals As Potent Inhibitors Of Rhinosinusitis" , Asian Journal of Chemistry
2. Received Seed Grant fund (Rs.50,000) from Advanced Medical Research Institute (AMRI)-Dr.MGR Educational and Research Institute for "Design and Formulation of Novel Antibiotic Nasal Spray"

ACADEMIC/ INDUSTRY EXPERIENCE

S.No.	Name of the Institution/Industry	From	To	Years of Experience
1.	Faculty of Pharmacy, Dr.M.G.R Educational and Research Institute	Nov 2020	Till Date	3 years
2.	Sri Venkateswara College of Pharmacy	Dec 2015	Nov 2020	5 years

OTHER PROFESSIONAL EXPERIENCES

1. Internet: Information searching and retrieval using various medical search engines viz., Google scholar, Science Direct, PubMed etc.,
2. MS-Office (word, Excel, Power point)
3. Ability to handle various software and computer programs related to biological activity and toxicity prediction such as PASS, Molinspiration, Osiris, ECOSAR, GUSAR etc.,

PROFESSIONAL MEMBERSHIP

- Indian Association of Colleges of Pharmacy-IACP-289.
- Association of Pharmaceutical Teachers of India- AP/LM-765
- Registered pharmacist by Pharmacy Council of India (PCI)

ACHIVEMENTS AND AWARDS

1. Received NewGen DST Project fund (Rs.2,50,000) from the Dr.MGR Educational and Research Institute for “ Designing of Liquorice as buccal film for aphthous ulcer”
2. Received Seed Grant fund from Advanced Medical Research Institute (AMRI)- Dr.MGR Educational and Research Institute for “Design and Formulation of Novel Antibiotic Nasal Spray”
3. Received NewGen DST Project fund (Rs.2,50,000) from the Dr.MGR Educational and Research Institute for “Inoto Orthotic Device ”
4. Received Welch scholarship from Texas A&M University, USA.
5. Stood first place in oral presentation of Annual symposium in Texas A & M University, Kingsville, Texas.
6. Stood second place in poster presentation of 7th Annual Symposium in Texas A & M International University, Laredo, Texas.