

Dr. Mahesh Bhat

Assistant Professor,
Department of Chemistry
Poornaprajna College, Udupi



Currently held positions/offices

- Convener for AQAR preparation and Submission, Poornaprajna College (2022)

Educational Qualification

- Ph.D. in Chemistry, University of Mysore (2018)
- KSET (2016)
- M.Sc. in Applied Chemistry from Mangalore University (2011)
- Diploma in Computer Application

Work experience

- Assistant Professor at Poornaprajna College, Udupi (2021-till date)
- Assistant Professor at JSS College for Women, Mysore (2019-2021)
- Lecturer at Bangur Nagar Degree College, Dandeli (2018-2019)
- Assistant Professor at JSS College for Women, Mysore (2017-2018)
- Research Associate at Syngene International Ltd (A Biocon Company), Bangalore (2011-2013)

Awards/Achievements

- Awarded **INSPIRE** Junior Research Fellowship by Department of Science & Technology (DST), Ministry of Science & Technology, New Delhi, Government of India in 2013.
- Senior Research Fellowship by Department of Science & Technology (DST), Ministry of Science & Technology, New Delhi, Government of India during March 2016.

- **Sequent Scientific Ltd** gold medal for securing first rank in Applied Chemistry from Mangalore University (2012).
- Received Sir C. V. Raman scholarship for the period 2006-2009 by the Government of Karnataka.

Areas of interest (Academic)

- Spectroscopy
- Organic Synthesis
- Designing and Planning of the reaction Schemes
- Chromatographic Techniques

Research Publications

Journal articles

1. Bhat, M. Belagali, SL. (2014). Synthesis of Azo-Bridged Benzothiazole-Phenyl Ester Derivatives via Steglich Esterification. *International Journal of current Engineering and Technology*, **2014**, 4(4), 2711-2715.
2. Bhat, M. Belagali, SL. Murali, M. Amruthesh, KN. (2014). Synthesis, characterization and biological activities of hydrazide Schiff's bases. *International Journal of Chemical and Physical Sciences*, 3(6), pp 82-90.
3. Bhat, M. Belagali, SL. (2015). A Study on the Crystal Structure of Ethyl 2-(2, 4-difluoro phenyl) acetate *International Journal of ChemTech Research*, 8, 1271-1274
4. Bhat, M. Belagali, SL. (2016). Theoretical Studies of 4-[(6-ethoxy benzothiazol-2-yl) diazenyl] Phenyl 2-(2,3-dihydro-1H-inden-2-yl) Acetate. *Der Pharma Chemica*, 8(24),36-41
5. Shanthalakshmi, K. Bhat, M. Belagali, SL. (2016). Synthesis of Benzothiazole Schiff's Bases and screening for the Anti-Oxidant Activity. *Journal of Chemical and Pharmaceutical Research*, 8(10),240-243
6. Bhat, M. Belagali, SL. (2016). GuanidinyI benzothiazole derivatives: Synthesis and structure activity relationship studies of a novel series of potential antimicrobial and antioxidants. *Research on Chemical Intermediates (Springer)*, 42(7), 6195-6208

7. Bhat, M. Belagali, SL. Shastry, RP. Rai, RV. (2016). Synthesis, characterization, and biological study of phenylalanine amide derivatives. *Monatshefte für Chemie -Chemical Monthly (Springer)*, 147(11), 2001-2008
8. Bhat, M. Belagali, SL. Hemanth Kumar, NK. Mahadev KS (2016). Synthesis and characterization of novel benzothiazole amide derivatives and screening as possible antimitotic and antimicrobial agents. *Research on Chemical Intermediates (Springer)*, 43(1), 361-378
9. Bhat, M. Belagali, SL. Madan, K. Byrappa, K.(2017). Synthesis, Characterization and Crystal Structure of 4-[(6-ethoxy benzothiazol-2-yl) diazenyl] phenyl 2-(2, 3-dihydro-1H-inden-2-yl) acetate. *Chemical Data Collections*, 7-8, 1-7
10. Bhat, M. Belagali, SL. Shyamala, DC.(2017). Synthesis of Benzothiazolyl Guanidinyll Derivatives and Their *In-Vitro* Antimicrobial and Antioxidant Activity, *The Natural Products Journal*, 7(4), 286-290
11. Bhat, M. Belagali, SL. (2017). Synthesis, Characterization and Biological screening of Pyrazoline conjugated Benzothiazole Analogues, *Future Medicinal Chemistry*, 10(1), 71-87
12. Bhat, M. Ganavi, BC. Sagar, BK. Shekhar EV (2018). Sulfadiazine Guanidyl Derivatives: Synthesis, Characterization and Docking Studies for Potential Antituberculosis Agents *Asian Journal of Chemistry*, 30(9), 2141-214
13. Bhat, M. Belagali, SL. (2018). Guanidinyll and amide conjugated Benzothiazoles as potential anti-tubercular agent and their cytotoxicity study, *Anti-Infective Agents*, 16(2), 121-128
14. Bhat, M. Hemanth Kumar, NK. Jagannatha, S. Belagali, SL. (2019). Anti-mitotic activity of the benzothiazole-pyrazine hybrid derivatives, *Anti-Infective Agents*, 2019, 17, 66-73
15. Bhat, M. Belagali, SL. (2019). Structural Activity Relationship and Importance of Benzothiazole Derivatives in Medicinal Chemistry: A Comprehensive Review, *Mini-Reviews in Organic Chemistry*, 16, 1-28
16. Shekhar, EV. Bhat, M. Shrihari S. (2019). Synthesis and Characterization of the Metal Complexes of Pyrazine-2-Carboxamide Schiff Base. *Journal of Applicable Chemistry*, 8(2), 581-585
17. Bhat, M. Madhu, N. Sagar, BK. Shekhar EV (2019). Sulfoxazole guanidinyll derivatives: Synthesis, Characterization and docking studies for potential anti-TB agents, *Research Journal of Pharmacy and Technology*, 12(4), 1726-1730

18. Bhat, M. Belagali, SL. (2020). Benzothiazole azo-ester derivatives as anti-TB agents, in-vitro and in-silico studies, *Anti-Infective Agents*, 18(1),15-23, 2020
19. Mamatha, SV. Bhat, M. Sagar, BK. Meenakshi, SK (2019). Synthesis, characterization, crystal structure Biological activity of 4-{2-[5-(4-Fluoro-phenyl)-[1,3,4]oxadiazol-2-ylsulfanyl]-ethyl}-morpholine. *Journal of Molecular structure*, 1196, 186-193
20. Mamatha, SV. Bhat, M. Belagali, SL. (2020). Synthesis and SAR Evaluation of Mercaptotriazolo derivatives as anti-inflammatory agents. *International Journal of ChemTech Research*, 01, 187-198
21. Mamatha, SV. Belagali, SL. Bhat, M. mounika, T. (2020). Synthesis, Characterization and Antimicrobial Activity of Mercapto oxadiazole Aanalogs. *Journal of Applicable Chemistry*, 2020, 9(1), 38-46
22. Mamatha, SV. Belagali, SL. Bhat, M (2020). Synthesis and SAR Evaluation of Mercapto Triazolobenzothiazole Derivatives as Anti-tuberculosis Agents, *Anti-Infective Agents*, 2020, 18, 15-213
23. Mamatha, SV. Bhat, M. Kumar, HK. Gowda, DC. Mounika, T. Meenakshi, SK (2020). Design, synthesis and SAR evaluation of mercaptooxadiazole analogs as anti-tubercular, anti-diabetic and anti-bacterial agents, *Chemical Data Collection*, 26, 1-11
24. Mamatha, SV. Belagali, SL. Bhat, M (2020). Design, synthesis and SAR bioevaluation of benzophenone-mercaptooxadiazole analogs. *Medicine in Drug Discovery*, 3, 1-9
26. Mamatha, SV. Belagali, SL. & Bhat, M (2020). Synthesis, characterization and evolution of oxadiazole as promising anticancer agent. *SN Applied sciences*, 2: 882-896
27. Mamatha, SV. Belagali, SL. Bhat, M. & Kumbar VM. (2020). Design and Synthesis of Novel Coumarin Conjugated Acetamides as Promising Anticancer Agents: An In Silico and In Vitro Approach, *Anti-Cancer Agents in Medicinal Chemistry*, 20: 1-10.
28. Sekhar, EV. Karki, SS. Rangaswamy, J. Bhat, M. & Kumar, S. (2021). Synthesis, characterization, and biological evaluation of some 4-((thiophen-2-ylmethylene) amino)benzenesulfonamide metal complexes, *Beni-Suef University Journal of Basic and Applied Sciences*, 10(28), 1-9

29. Sagar, BK. Kumar, MD. Bhat, M & Sekhar, EV. (2021). Synthesis, characterization and anticancer activity of piperazine amide derivative, *IJPSR*, 12(10), 1000-1007
30. Sekhar, EV. Rangaswamy, J. Bhat, M. & Naik, N. (2021). 2-(4-nitrophenyl)iminomethyl phenol Schiff base metal complexes: Synthesis, spectroscopic characterization, anticancer and antimicrobial studies. *Inorganic Nano-metal Chemistry*. (Accepted- November 26, 2021)

Book Chapters/Conference proceedings

1. Bhat, M. Belagali, SL. Mamatha, SV. Sekhar EV & Supreeth, M. (2021) Design, Synthesis of Sulfadiazine and Sulfisoxazole Guanidine Derivatives as Promising Anti-TB agents: An *in-silico* and *in-vitro* Approach, Current Perspectives on Chemical Sciences Vol. 5, pp 29-38. Book Publisher International, ISBN-978-93-90516-13-1
2. Bhat, M. Belagali, SL. Mamatha, SV. & Sekhar EV. (2021). Importance of Quinazoline and Quinazolinone derivatives in Studies in Natural Chemistry, Elsevier book series, Chemistry of natural products.

Books

1. Bhat, M & Belagali, S. L. (2021). *In-Silico and In-Vitro Approaches to Screen the Anti-tuberculosis Activity of Benzothiazole Analogs*, Singapore: Bentham Science Publishers Pvt. Ltd. ISBN: 978-981-14-9463-5

Paper presented in conferences/seminars

1. Presented a paper entitled "Synthesis of 2-Amino-3-(4-nitro phenyl) propanoic acid amide derivatives as an *Microsporium gypseum* inhibitors" in the International conference on: New Dimensions in Chemistry & Chemical Technologies- Application in Pharma Industry, held at, Jawaharlal Nehru Technological University, Hyderabad (June, 2014).
2. Presented a paper entitled "Synthesis, Characterization and Biological Screening of Benzothiazole Guanidine Derivatives in the national conference on: Pure and applied chemistry, held at, University of Mysore, Mysuru, Karnataka (December, 2014).
3. Presented a paper entitled "Synthesis and Anti-oxidant study of Benzothiazole Schiff's Bases in the national conference on: Pure and applied chemistry, held at, University of Mysore, Mysuru, Karnataka (December, 2014).

4. *Presented a paper entitled* “Synthesis, Characterization and Biological activity comparison of 2- and 6-substituted Benzothiazole derivatives in the 103rd Indian Science Congress held at University of Mysore, Mysore (January-2016).
5. *Presented a paper entitled* “Synthesis, Analytical and Biological studies of benzothiazole Schiff’s bases in the 103rd Indian Science Congress held at University of Mysore, Mysore (January-2016).
6. *Presented a paper entitled* “Synthesis, Structure Activity Relationship and Anti-TB activity of novel Pyrazole derivatives in the national conference on AFMEEHC-2019 held at Vijnana Bhavan, University of Mysore (March-2019)
7. Presented a paper entitled “Synthesis, Structure Activity Relationship and docking studies of Benzothiazole Guanidine derivatives as potential anti-Mycobacterial agents” in the national conference on: Current Trends in Chemical Research and Development, CTCRD-2019, held at Vivekananda College, Puttur, Karnataka (September, 2019).
8. Presented a paper entitled “Synthesis, characterization and anti-TB activity of Pyrazole-conjugated benzothiazole derivatives” in the National conference on “Science and Technology: Rural Development – 2019” (NCSTRD), held at University of Mysore (October-2019)
9. Presented a paper entitled “Synthesis, Characterization and docking studies of Benzothiazole amide derivatives as potential anti-TB agents in the National conference on “Innovations in Chemical Science” held at University of Mysore (January-2020)

Short-term courses attended

- FDP on Digital Teaching Techniques organized by ICT Academy from 21st September 2021 to 25th September 2021

Seminars/Workshops attended

1. Attended National Education Summit, Held at Mahatma Mandir, Gandinagar, Gujarat, conducted by Govt. of Gujarat (January-2014).
2. Attended UGC sponsored Work Shop on Spectroscopic Techniques, Held at JSS Arts and Science College, Nanjanagud, Conducted by Department of Chemistry, JSS College of Arts and Science, Mysore.
3. Attended work shop on Plagiarism, Held at university of Mysore, conducted by University Library, University of Mysore, Mysore-570 006.

4. Attended workshop on Scifinder, Held at university of Mysore, conducted by University Library, University of Mysore, Mysore-570 006.
5. Attended workshop on “Technology in Higher Education” held at University of Mysore, conducted by Karnataka Jnana Ayoga (Feb -2015).
6. Participated in UGC sponsored National Conference on “Frontier Areas in Chemical Science, held at Bharathi College, Bharathi Nagar, Mandya (Jan- 2015).
7. Participated in One-day National Seminar on “Chemistry and Chemical Biology”, held at University of Mysore, Mysore (May- 2015).
8. Participated in Seminar on “Benefits of nuclear and material science in day to day life”, organized by Indian Nuclear Society, held at University of Mysore, Mysore (August- 2015).
9. Participated in Seminar on “Genetics Today”, held at University of Mysore, Mysore (Oct- 2015).
10. Participated in UGC sponsored National Conference on “Applications of modern analytical techniques to fundamental research in chemistry, held at JSS college of arts, Commerce and Science College, Ooty road, Mysore (March- 2016).
11. Participated in International Conference on “Science and Technology: future Challenges and Solutions”, organized by IJAA, held at University of Mysore, Mysore (August- 2016).
12. Participated in Symposium on advance material, held at Department of Chemistry, SJCE, JSS Science & Technological University on 27th December-2017
13. Participated in International Conference on Nanomaterials and their applications held at University of Mysore, Mususru (March 1-2, 2018).

Members of BOS/BOE

- BOS (PG) member (2019-2021) at JSS College for Women, Mysore

Additional Information

- Reviewer for **Medicinal Chemistry Research** (Springer US, ISSN: 1054-2523), **Chemical Data Collections** and **Mediterranean Chemistry Research** Journals (Morocco, ISSN: 2028-3997).
- Editorial member for Current Electronics and Telecommunications journal