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NAME	DR SAPNA KUMARI M
DESIGNATION	Assistant Professor
QUALIFICATION	M.Sc., Ph.D
EMAIL	sapna@stagnescollege.edu.in
WORK EXPERIENCE (IN YEARS)	9 years
EDUCATIONAL DETAILS	M.Sc. from Mangalore University Ph.D. from Mangalore University

OVERALL TEACHING EXPERIENCE	PREVIOUS WORK EXPERIENCE Institution: Besant Women's College, Kodialbail, Mangaluru Period: July 2010- July 2011 Designation: Lecturer Institution: Department of Post Graduate Studies and Research, St Agnes College (Autonomous), Mangaluru Period: July 2016-till date Designation: Assistant Professor
SPECIALIZATION Ph.D.	Synthetic Chemistry
SPECIALIZATION PG	Applied Chemistry
SUBJECTS TAUGHT AT UG/PG	Organic Chemistry, Spectroscopy, Analytical Chemistry, Inorganic Chemistry

PRESENTATION IN CONFERENCES:
International

1. **M. Sapnakumari**, B. Narayana, S. Samshuddin. Synthesis, characterization and antimicrobial screening studies of some new cyclohexenone derivatives. PP-246, 5th International conference on drug development in orphan/neglected diseases, (CTDDR-2013), CDRI, Lucknow, February, 2013, 26-28.
2. **M. Sapnakumari**, K. Divya, P.S. Nayak, B. Narayana. Synthesis of new prazoline derivatives and their evaluation for antitubercular and DPPH scavenging activity. PP-94, International Conference on Chemical Biology, Disease Mechanisms and Therapeutics (ICCB-2014), CSIR- IICT, Hyderabad, February, 2014, 6-8.

3. K. Divya, **M. Sapnakumari**, P.S. Nayak, B. Narayana. Novel reagent for the spectrophotometric determination of Sulfadoxine by the formation of Co(II) complex. PP-97. International Conference on Chemical Biology, Disease Mechanisms and Therapeutics (ICCB-2014), CSIR- IICT, Hyderabad, February, 2014, 6-8.
4. P. S. Nayak, K. Divya, **M. Sapnakumari**, B. Narayana. Synthesis, characterization and radio-protective study of 1,3,4-oxadiazole derivative on reproductive organs of Drosophila model by the induction of electron beam radiation. PP-102. International Conference on Chemical Biology, Disease Mechanisms and Therapeutics (ICCB-2014), CSIR- IICT, Hyderabad, February, 2014, 6-8.
5. J. Thomas, N. Pradeepkumar, S.B. Shibu, **M. Sapnakumari**. Microwave assisted synthesis and characterization of 2-pyrazoline derivatives. PP-31. International Conference on Frontiers in Chemical Sciences (FCS 2022), Department of Chemistry, University of Calicut, March 2022, 03-05.
6. V. Raj, **M. Sapnakumari**, Microwave assisted synthesis, characterization and corrosion inhibition study of cyclohexanone derivative. International Conference on Advances in Materials Science and Chemistry, Gogte Institute of Technology, Belagavi, March 2023, 02-04.
7. S. Sabu, **M. Sapnakumari**, Synthesis, characterization and corrosion inhibition study of 2-pyrazoline derivative. International Conference on Advances in Materials Science and Chemistry, Gogte Institute of Technology, Belagavi, March 2023, 02-04.
8. F. Salvana, **M. Sapnakumari**, Synthesis, characterization, molecular docking, antimicrobial study of 2-pyrazoline derivatives derived from chalcones. International Conference on Recent research in applied sciences organized by Srinivas Institute of Technology, Mangalore September 2023, 26-27.
9. B. Shetty, **M. Sapnakumari**, Synthesis, characterization, antimicrobial and antioxidant study of spirooxindole derivative. International Conference on Recent research in applied sciences organized by Srinivas Institute of Technology, Mangalore September 2023, 26-27.
10. K. Deepesh, **M. Sapnakumari**, Microwave Assisted Synthesis, Characterization, Antimicrobial and Molecular Docking Study of 2-Pyrazoline Derivatives. International Conference on Recent research in applied sciences organized by Srinivas Institute of Technology, Mangalore September 2023, 26-27.

11. Dilsha, **M. Sapnakumari**, Synthesis, Characterization, Antimicrobial, Antioxidant Study of Chalcone and Cyclohexanone Derivative. International Conference on Recent research in applied sciences organized by Srinivas Institute of Technology, Mangalore September 2023, 26-27.
12. Jinsha, **M. Sapnakumari**, Synthesis, characterisation and corrosion inhibition studies spirooxindole derivative. International conference on Transformative Chemistry for a sustainable future organized by St Aloysius (Deemed to be University) on March 2024, 15.
13. Mayoosha, **M. Sapnakumari**, Investigation of the Inhibition Effect of Newly Synthesized Spiro-Oxindole Derivative on Mild Steel in Hydrochloric Acid Medium. International conference on Transformative Chemistry for a sustainable future organized by St Aloysius (Deemed to be University) on March 2024, 15.
14. K. Deepesh, **M. Sapnakumari**, Inhibition effect of newly synthesized pyrazoline carbaldehyde derivative on mild steel using HCl. International conference on Transformative Chemistry for a sustainable future organized by St Aloysius (Deemed to be University) on March 2024, 15.

National

1. K. Anjusha, G. D'souza, **M. Sapnakumari**. Synthesis and characterization of metal complexes of schiff bases of 3-chloro-2-fluoroaniline. PP.49. Proceedings of National Conference on "Current Advances in Chemical Sciences-NCCACS", University College of Science, Tumkur, Tumakur University, March, 2018, 16. ISBN No: 978-93-82694-52-6
2. R. K. Pavithran, **M. Sapnakumari**. Synthesis and characterization of spiropyrrolidine derivative. PP 63. Proceedings of National Conference on "Current Advances in Chemical Sciences-NCCACS", University College of Science, Tumkur, Tumakur University, March, 2018, 16. ISBN No: 978-93-82694-52-6
3. G. D'souza, **M. Sapnakumari**. Synthesis, characterization and study of metal complexes of Sciff bases of benzhydrazide. International Conference on "Recent Innovations in Arts, Science and Technology", Lord Venkateshwara Engineering College, Kancheepuram, Tamilnadu, March, 2018, 19.

4. S. Sumaiya, **M. Sapanakumari**, L. Christeena. Synthesis, characterization and study of antimicrobial activities of chalcone and cyclohexenone. OP. O12. National Conference on “Synthetic, Spectroscopic and Structural Chemistry”, Govinda dasa college, Suratkal, March, 2019, 15-16.
5. F. Savina, **M. Sapanakumari**, L. Christeena. Synthesis, characterization and antimicrobial activities of benzhydryde Schiff bases and its metal complex. PP. P11. National Conference on “Synthetic, Spectroscopic and Structural Chemistry”, Govinda dasa college, Suratkal, March, 2019, 15-16.
6. C. Jennifer, **M. Sapanakumari**, L. Christeena. Synthesis, spectral characterization and biological study of pyridine derivative from chalcone. PP. P32. National Conference on “Synthetic, Spectroscopic and Structural Chemistry”, Govinda dasa college, Suratkal, March, 2019, 15-16.
7. S. Aswinraj, **M. Sapanakumari**. Synthesis, characterization and corrosion inhibition study of spirooxindole derivative. National Conference on Recent Development in Chemical Sciences (RDCS 2023), Sahyadri Science college, Shivamogga, February, 2023, 20-21.

PUBLICATIONS

1. Mahesha, **M. Sapna Kumari**, B.S. Chethan, T. Jinkle, M.V. Deepa, N.S. Lingegowda, N.K. Lokanath, S. Naveen. Multicomponent synthesis structural and molecular dynamics simulation studies of a novel spirooxindol derivative. *Chem. Phys. Impact*, Volume 8, 2024, ISSN: 2667-0224
<https://doi.org/10.1016/j.chphi.2024.100467>
2. **M. Sapanakumari**, K. Divya, K. B. Aswin, J. Dalin. Antimicrobial and antioxidant study of some newly synthesized chalcones and cyclohexenone derivatives. *Asian J. Chem.*, 2023, 35(1), 114-118.
3. **M. Sapanakumari**, B. Narayana, P.M. Gurubasavarajswamy, Sarojini, B.K. Design, synthesis and pharmacological evaluation of new pyrazoline derivatives. *Monatsh. Chem.*, 2015, 146, 1015-1024; DOI 10.1007/s00706-014-1371-x.

4. **M. Sapnakumari**, B. Narayana, S. Samshuddin, B.K. Sarojini. 2'-[(4-Fluorophenyl)carbonyl]-1'-phenyl-1',2',5',6',7',7a'-hexahydrospiro[indole-3,3'-pyrrolizin]-2(1*H*)-one. *Molbank*, 2013, M802; doi:10.3390/M802.
5. **M. Sapnakumari**, B. Narayana, B.K. Sarojini. Synthesis, characterization and biological evaluation of 1'-(4-bromophenyl)-2'-[(4-fluorophenyl)carbonyl]-1',2',5',6',7',7a'-hexahydrospiro[indole-3,3'-pyrrolizin]-2(1*H*)-one. *J. Single Mol. Res.*, 2014, 2, 54-59.
6. **M. Sapnakumari**, B. Narayana, K.S Shashidhara, B.K. Sarojini. Multicomponent synthesis, biological evaluation and molecular docking of new spiro-oxindole derivatives. *J. Taibah Univ. Sci.*, 2017, 11, 1008-1018.
7. **M. Sapnakumari**, B. Narayana, B.K. Sarojini, L.N. Madhu. Synthesis of new indazole derivatives as potential antioxidant agents. *Med. Chem. Res.*, 2014, 23, 2368–2376.
8. **M. Sapnakumari**, B. Narayana, H.S. Yathirajan, J.P. Jasinski, R.J. Butcher. Ethyl 6-(4-chlorophenyl)-4-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate. *Acta Cryst.*, 2013, E69, o1839-o1840.
9. R. Sharma, **M. Sapnakumari**, B. Narayana, B.K. Sarojini, V.K. Gupta, R. Kant. Synthesis, characterization and crystal structure of 3'-[(4-fluorophenyl)carbonyl]-5'-(hydroxymethyl)-4'-phenylspiro[indole-3,2'-pyrrolidin]-2(1*H*)-one. *Eur. Chem. Bull.*, 2014, 3, 183-186.
10. W.S. Loh, C.K. Quah, T.S. Chia, H.K. Fun, **M. Sapnakumari**, B. Narayana. Synthesis and crystal structures of *N*-substituted pyrazolines. *Molecules*, 2013, 18, 2386-2396.
11. H.K. Fun, T.S. Chia, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. (*E*)-3-(4-Chlorophenyl)-1-(4-fluorophenyl)prop-2-en-1-one. *Acta Cryst.*, 2012, E68, o629.
12. H.K. Fun, C.W. Ooi, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. 1-[3-(4-Fluorophenyl)-5-phenyl-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone. *Acta Cryst.*, 2012, E68, o2634.
13. H.K. Fun, T.S. Chia, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. 5-(4-Bromophenyl)-3-(4-fluorophenyl)-1-phenyl-4,5-dihydro-1*H*-pyrazole. *Acta Cryst.*, 2012, E68, o2680.

14. H.K. Fun, W.S. Loh, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. 1-[5-(4-Bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone. *Acta Cryst.*, 2012, E68, o2586.
15. H.K. Fun, W.S. Loh, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. 1-[5-(4-Bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]butan-1-one. *Acta Cryst.*, 2012, E68, o2655.
16. R. Kant, V.K. Gupta, K. Kapoor, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. Ethyl 6-(4-bromophenyl)-4-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate. *Acta Cryst.*, 2012, E68, o2917-o2918.
17. R. Sharma, **M. Sapnakumari**, B. Narayana, B.K. Sarojini, R. Kant, Synthesis, characterization and crystal structure of 1-[5-(4-bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]-2-chloropropan-1-one. *Rasayan J. Chem.*, 2016, 9(2), 95-100.
18. **M. Sapnakumari**, B. Narayana, S. Samshuddin, B.K. Sarojini. Synthesis and characterization of new 1,2-diazepine derivative. *Der Pharma Chemica*, 2012, 4, 2198-2201.
19. **M. Sapnakumari**, B. Narayana, K. Divya, K. Singh, S. Anthal, V.K. Gupta, R. Kant. Synthesis, characterization and crystal structure of ethyl 2-amino-4-(4-fluorophenyl)-6-phenylcyclohexa-1,3-diene-1-carboxylate. *Mol. Cryst. Liq. Cryst.*, 2014, 605, 146–154.
20. A. Najiya, C.Y. Panicker **M. Sapnakumari**, B. Narayana, B.K. Sarojini, C.V. Alsenoy. Molecular structure, FT-IR, first order hyperpolarizability, NBO analysis, HOMO and LUMO, MEP analysis of (*E*)-3-(4-chlorophenyl)-1-(4-fluorophenyl)prop-2-en-1-one by HF and density functional methods. *Spectrochim. Acta A.*, 2014, 133, 526–533.
21. Y.S. Mary, C.Y. Panicker, **M. Sapnakumari**, B. Narayana, B.K. Sarojini, A.A. Al-Saadi, C.V. Alsenoy, J.A. War. Molecular structure, FT-IR, vibrational assignments, HOMO-LUMO, MEP, NBO analysis and molecular docking study of ethyl-6-(4-chlorophenyl)-4-(4-fluorophenyl)-2-oxocyclohex-3-ene-1-carboxylate. *Spectrochim. Acta A.*, 2015, 138, 73-84.
22. Y.S. Mary, C.Y. Panicker, **M. Sapnakumari**, B. Narayana, B.K. Sarojini, A.A. Al-Saadi, C.V. Alsenoy, J.A. War. FT-IR, NBO, HOMO-LUMO, MEP analysis and molecular docking study of 1-[3-(4-Fluorophenyl)-5-phenyl-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone. *Spectrochim. Acta A.*, 2015, 136, 483-493.

23. Y.S. Mary, C.Y. Panicker, **M. Sapnakumari**, B. Narayana, B.K. Sarojini, A.A. Al-Saadi, C.V. Alsenoy, J.A. War, H.K. Fun. Molecular structure, FT-IR, vibrational assignments, HOMO-LUMO analysis and molecular docking study of 1-[5-(4-Bromophenyl)-3-(4-fluorophenyl)-4,5-dihydro-1*H*-pyrazol-1-yl]ethanone. *Spectrochim. Acta A.*, 2015, 136, 473-482.
24. Y.S. Mary, C.Y. Panicker, P.L. Anto, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. Molecular structure, FT-IR, NBO, HOMO and LUMO, MEP and first order hyperpolarizability of 1-(2,4-Dichlorophenyl)-3-(3,4,5-trimethoxyphenyl)prop-2-en-1-one by HF and density functional methods. *Spectrochim. Acta A.* 2015, 135, 81–92.
25. Y.S. Mary, C.Y. Panicker, **M. Sapnakumari**, B. Narayana, B.K. Sarojini, A.A. Al-Saadi, C.V. Alsenoy, J.A. War, H.K. Fun. Infrared spectrum, structural and optical properties and molecular docking study of 3-(4-Fluorophenyl)-5-phenyl-4,5-dihydro-1*H*-pyrazole-carbaldehyde. *Spectrochim. Acta A.*, 2015, 138, 529-538.
26. R. Kant, V.K. Gupta, K. Kapoor, **M. Sapnakumari**, B.K. Sarojini, B. Narayana. (*IZ*)-1-[(*2E*)-3-(4-Bromophenyl)-1-(4-fluorophenyl)prop-2-en-1-ylidene]-2-(2,4-dinitrophenyl)hydrazine. *Acta Cryst.*, 2012, E68, o2193.
27. H.K. Fun, T.S. Chia, **M. Sapnakumari**, B. Narayana, B.K. Sarojini. (*2E*)-1-(2,4-Dichlorophenyl)-3-(3,4,5-trimethoxyphenyl)prop-2-en-1-one. *Acta Cryst.*, 2012, E68, o1465.
28. B. Narayana, **M. Sapnakumari**, J.P. Jasinski, P.M. Fraiser, H.S. Yathirajan. Ethyl 2-amino-6-(4-bromophenyl)-4-(4-fluorophenyl)cyclohexa-1,3-diene-1-carboxylate. *Acta Cryst.*, 2013, E69, o1473.
29. B. Narayana, **M. Sapnakumari**, B.K. Sarojini, J.P. Jasinski. 3-(4-Fluorobenzoyl)-4-(4-fluorophenyl)-4-hydroxy-2,6-diphenylcyclohexane-1,1-dicarbonitrile. *Acta Cryst.*, 2014, E70, o736–o737.
30. K. Divya, B. Narayana, **M. Sapnakumari**. Spectrophotometric determination of frusemide using *N*-Halosuccinimides, *Oxid. Commun.* (Accepted).
31. K. Divya, B. Narayana, **M. Sapnakumari**. Sensitive spectrophotometric determinations of paracetamol and protriptyline HCl using 3-chloro-7-hydroxy-4-methyl-2*H*-chromen-2-one. *ISRN Spectroscopy*, 2013, 2013, 1-6.

32. K. Divya, B. Narayana, **M. Sapnakumari**. Validated spectrophotometric methods for the determination of diclofenac diethylamine. *Int. J. Phar. Sci. Res.*, 2013, 4, 3635-3640.

AWARDS AND ACHIEVEMENTS	<ol style="list-style-type: none">1. First Rank with Gold medal in M.Sc Applied Chemistry (2010)Awarded INSPIRE Fellowship by Department of Science and Technology, Government of India (From August 2011 to June 2016)
RESEARCH INTERESTS	Synthetic Organic Chemistry, Medicinal Chemistry, Crystallography
RESEARCH PROJECTS GUIDED	PG Students Research Projects
ADMINISTRATIVE RESPONSIBILITIES	Head of the Department (April 2022-till date)

NPTEL/FDP/COURSERA/ CERTIFICATE COURSES COMPLETED

TYPE	YEAR	TITLE	DURATION
NPTEL	2020	Application of Spectroscopic methods in Molecular Structure Determination	2020 September to 2020 December
Coursera	2020	Introduction to molecular spectroscopy	27-10-2020 to 28-11-2020
FDP	2021	Outcome based education	10-06-2021 to 15-06-2021
FDP	2022	e-content development	27-09-2022 to 01-10-2022
FDP	2022	Practical aspects of ICT tools and online teaching in current scenario	19-08-2022 to 25-08-2022
Refresher course	2022	New age teaching methods and skills in higher education	17-08-2022 to 31-08-2022
FDP	2023	Blended learning: Concepts and tools	01-07-2023 to 07-07-2023
FDP	2023	Spectroscopic Techniques and its applications	24-07-2023 to 28-07-2023
NPTEL	2023	Application of Spectroscopic methods in Structure Determination	2023 September to 2023 December
