



Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to **VTU**
Approved by **AICTE**
Accredited by **NAAC** with **A+** Grade
6 Programs Accredited by **NBA**
(CSE. ISE. ECE. EEE. MECH. CV)

Faculty Name	Dr. SUNIL KUMAR Y C	
Academic Designation	Professor & HoD	
Educational Qualification	B.Sc, M. Sc, Ph.D	
Experience in Years	8 (Industry) + 7 (Teaching)	
Area of Interest	Organic Chemistry	
Date of Birth	21/02/1977	
Email ID	hodchem@dsatm.edu.in sunilyc@gmail.com	
Educational Details		
• Ph.D in Chemistry, University of Mysore, 2008. • M.Sc. in Chemistry, University of Mysore, 2001 • B.Sc. PCM, University of Mysore, 1998.		
Personal Details		
• Date of Birth: 21/02/1977 • Hobbies: Listening to music • Languages Known : Kannada, English, Hindi		
Professional Experience		
• Worked as a Research Associate, Syngene International Pvt Ltd (April 2002 - April 2005) • Worked as an Assistant professor, R V Engineering College Bangalore (June 2011 - June 2012) • Worked as a Scientist (Project Manager) team leader, GVK Bio Hyderabad (June 2013 – July 2014) • Worked as an Assistant professor, Ramaiah University of Applied Sciences Bangalore (July 2014 – August 2020) • Worked as group leader, Kohlen Laboratories LLP Mysore-570016 (August 2020 – Feb 2021) • Worked as group leader, Bioneds Bangalore (April 2021- Jan2021) • Worked as a Chief Scientific officer (CSO), Honey Chem Pharma Research (Jan2021- NOV 2022) • Currently working as Associate Professor and HoD, Dept. of Chemistry, Dayananda Sagar Academy of Technology & Management from (NOV 2022- till date)		

Publications :International Journals:

1. R. Mahesh, **Y.C. Sunil Kumar**, Anjanapura V. Raghu d “Plant extracts and green nano composites as sustainable corrosion inhibitors: A comprehensive review” *Sustainable Chemistry One World* Vol 8, Dec 2025, 100132. <https://doi.org/10.1016/j.scowo.2025.100132>.
2. Spandana Rameshwar, **Sunil kumar Y.C.**, Kumara. M. N., Umashankara. M “Design, Synthesis and Biological evaluation of Non-Hemolytic Membrane Disruptive Anticancer Peptides” *International Journal of Engineering Research & technology* Volume 14, Issue 06, June 2025 <https://doi.org/10.5281/zenodo.18104109>.
3. Neetha S., Santhosh C., Vinay, Sadashiva M. P, Santosh Kumar Verma. **Sunil Kumar Y. C** “Synthesis, structure elucidation, DFT, molecular docking studies, and antioxidant activities of thiazole derivative: A combined experimental and computational study” <https://doi.org/10.1016/j.molstruc.2025.143430>.
4. AR Nair, MG Mohan, C Raksha, A Sreekumar, P Manoj, **Y C Sunil Kumar** “Unveiling the dual-state emissive behaviour of 4, 6-diarylpyrimidin-2-amines through a plug-and-play approach” *Scientific Reports* 14 (1), 29795, 2024. <https://doi.org/10.1038/s41598-024-81723-1>.
5. AR Nair, **Y C Sunil Kumar**, A Sivan “Synthesis and in-depth investigation of the photophysical and electrochemical properties of novel pyrazole cored DAD molecules” *Optical Materials* 134, 113117,2022 <https://doi.org/10.1016/j.optmat.2022.113117>.
6. UB Gadgoli, **Y C Sunil Kumar**, D Kumar “An Insight into the Metabolism of 2, 5-Disubstituted Monotetrazole Bearing Bisphenol Structures: Emerging Bisphenol A Structural Congeners” *Molecules* 28 (3), 1465 2023. doi: 10.3390/molecules28031465.
7. Shamantha Kumar, B. M. Rajesh, B. H. Doreswamy, **Y. C. Sunilkumar**, Ajil N. Nair & Mohit Bajpai “Synthesis, crystal structure, spectroscopic characterization, Hirshfeld surface analysis, DFT calculation and molecular modeling studies of 1- (4-Nitro-phenyl)-3,5-di-thiophen-2-yl-1H-pyrazole” *Molecular Crystals And Liquid Crystals- Accepted in 2022* <https://doi.org/10.1080/15421406.2022.2031446>
8. Umesh B. Gadgoli,* **Sunil Kumar Y.C.**, Deepak Kumar, Balaram Ghosh, and Onkar Prakash Kulkarni “ Estrogenic Activity of Tetrazole Derivatives Bearing Bisphenol Structures: Computational Studies, Synthesis, and In Vitro Assessment” Accepted in 2021 <https://doi.org/10.1021/acs.jcim.1c01077>
9. B. V Jeevan, **Y. C. Sunil Kumar**, and K.S. Rangappa. “Mild and Efficient Enantioselective Synthesis of All Stereoisomers of Cordiarimide B and Their Antioxidant Study”*Asian Journal of Chemistry*. 2018, 30, 927-932. <https://doi.org/10.14233/ajchem.2018.21170>
10. Mahanthaswamy Hiremath, **Y C. Sunil Kumar**, M. Umashankara, K. Mantelingu, K.S. Rangappa “Stereoselective synthesis of N-benzyl (2S,3S,4S)-3-hydroxy-4-methylproline” *Tetrahedron:Asymmetry*.2016,27,261–267. <https://doi.org/10.1016/j.tetasy.2016.02.008>
11. Goverdhan Mehta, **Y. C. Sunil Kumar**, ManabendraDas “A Diels-Alder strategy towards the novel pentacyclic natural product fluostatin C: A concise synthesis of 6-deoxyfluostatin C” *Tetrahedron Letters*, 2011, 52, 3505-3508. <https://doi.org/10.1016/j.tetlet.2011.04.113>
12. Goverdhan Mehta, **Y. C. Sunil Kumar**, TabrezBabu Khan “Total syntheses of the fungal metabolites (±)-acremine A, B and I” *Tetrahedron Letters*. 2010, 51, 5112–5115. <https://doi.org/10.1016/j.tetlet.2010.07.110>
13. Goverdhan Mehta, TabrezBabu Khan, **Y. C. Sunil Kumar** “Total synthesis of the fungal metabolite (±)-acremine G: acceleration of a biomimetic Diels–Alder reaction on silica gel” *Tetrahedron Letters*. 2010, 51,5116–5119. <https://doi.org/10.1016/j.tetlet.2010.07.109>
14. Benaka Prasad, **Y. C. Sunil Kumar** Shashidhara Prasad J. and Rangappa K.S. “Synthesis, Characterization and Crystal Structure Studies of 1-(4-Chloro-benzenesulfonyl)-piperdin-4-yl-diphenyl-methanol”. *Polish J. Chem*. 2007, 81, 1191-1199. (Invited Article).
15. **Y. C. Sunil Kumar**, Sadashiva, M.P. “An efficient synthesis of 2-(1-methyl-1,2,5,6-tetrahydropyridin-3-yl)morpholine:a potent M₁ selective muscarinic agonist”. *Tetrahedron*

Letters. 2007, **48**, 4565-4568. <https://doi.org/10.1016/j.tetlet.2007.04.135>

16. S. B. Benaka Prasad, **Y. C. Sunil Kumar**, C. S. Ananda Kumar, C.T. Sadashiva, K. Vinaya, K. S. Rangappa "Synthesis of novel N-methyl-1,2,5,6-tetrahydropyridine-3-derivatives by Suzuki coupling: As acetyl cholinesterase inhibitors". **The Open Medicinal Chemistry Letters**, 2007, **071**, 4-10. [10.2174/1874104500701010004](https://doi.org/10.2174/1874104500701010004)
17. Thimmegowda. N. R, Nanjunda Swamy. S , Ananda Kumar. C. S, **Y. C. Sunil Kumar**, Chandrappa. S, George W. Yip, K. S. Rangappa "Synthesis, characterization and evaluation of benzimidazole derivative and its precursors as inhibitors of MDA-MB-231 human breast cancer cell proliferation". **Bioorg & Med. Chem. Lett.**, 2008, **18**, 432-435. <https://doi.org/10.1016/j.bmcl.2007.08.078>
18. **Y. C. Sunil Kumar**, Manish Malviya, J. N. Narendra Sharath Chandra, C.T. Sadashiva, M.N. Subhash and K.S. Rangappa. "Effect of novel N-Aryl sulphonamide substituted 3-morpholino Arecoline derivatives as muscarinic receptor 1 agonist in Alzheimer's dementia models". **Bioorg & Med. Chem.**, 2008, **16**, 5157-5163. <https://doi.org/10.1016/j.bmc.2008.03.019>
19. Manish Malviya, **Y. C. Sunil Kumar**, M.N. Subhash and K.S. Rangappa. "Muscarinic receptor agonist activity of novel N-arylthioureas substituted 3-morpholino arecoline derivatives Alzheimer's presenile dementia models". **Bioorg & Med. Chem.**, 2008, **16**, 7095-7101. <https://doi.org/10.1016/j.bmc.2008.06.053>
20. **Y. C. Sunil Kumar**, Manish Malviya, M.N. Subhash, and K.S. Rangappa. "Effect of novel N-aryl ureas substituted 3-morpholino arecoline derivatives as muscarinic receptor 1 agonist in Alzheimer's dementia models." **Arkivoc**, 2009, (IX), 45-56. : <https://www.researchgate.net/publication/228890763>
21. Manish Malviya, **Y. C. Sunil Kumar**, Mythri R.B, Venkateshappa C, Subhash M.N, Rangappa K.S. "Muscarinic receptor 1 agonist activity of novel N-aryl carboxamide substituted 3-morpholino arecoline derivatives in Alzheimer's presenile dementia models". **Bioorg. Med. Chem.**, 2009, **17**, 5526-5534. <https://doi.org/10.1016/j.bmc.2009.06.032>
22. S. R. Ranganatha, , Manish Malviya,, **Y. C. Sunil Kumar**, M. N. Subhash, K. S. Rangappa. "Effect of Novel Amino acids and Dipeptides Substituted 3-morpholino Arecoline Derivatives as Muscarinic Receptor 1 Agonists in Alzheimer's Dementia Models." **International Journal of Peptide Research and Therapeutics** 2009, **15**, 323-337. <https://doi.org/10.1007/s10989-009-9194-z>.

Conferences Attended

International Conferences:

- ❖ Dr DS Kothari postdoctoral Fellow Awarded by UGC (University Grant Commission), New Delhi, India. 2009-2010
- ❖ Oral presentation in 5th J-Nost Conference for research scholars organized by department of chemistry, IIT Kanpur on December 4-7, 2009.
- ❖ Participated in "The IISc Centenary Conference" held during 13th-16th December 2008 at the Indian Institute Of Science, Bangalore, India.
- ❖ Presented poster at National symposium on Bioorganic and Medicinal chemistry (NSBM) 2005 held in the Department of Studies in Chemistry, University of Mysore, Mysore-570006, INDIA

National Conferences:

- ❖ Participated in "National Conference on Advances in Materials Research (NCAMR-2017)" held at the Ramaiah university of Applied sciences, Bangalore, India.

Academic Activity

- Heading Department of Chemistry, DSATM.
- Guiding one research scholars.

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