Dr. Divakara T.R.

M.Sc., Ph.D., Professor of chemistry

17 years of Academic Experience

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I am Dr. Divakara completed my B.Sc. (PCM) from Bangalore University, M. Sc. & Ph.D., from University of Mysore. Interested area of research are Biodiesel, Crystallography & Coordination Chemistry. I have passion for teaching, I deliver my teaching with proper examples & analogy wherever required. I keep updating myself with latest development in Engg. Chemistry.

Vidwan Id: 294534; Scopus Id: 57217151124; Google Scholar Id: t-i1fS8AAAAJ

List of Publications in Refreed Journals

1 Synthesis and characterization of biologically active metal complexes of nimesulide.
Divakara T.R., Nagaraja Naik, Arun V.S. and Pragassam A.
Research J. of Chemistry and Environment, 9(4), 87-89(2005)

2 Structural and fungicidal studies of nimesulide metal complexes.
Divakara T.R., Nagaraja Naik and Arun V.S.
Journal of Ultra Chemistry, 1(2), 67-72(2005).

3 Synthesis of pongamia oil biodiesel using potassium carbonate as catalyst in presence of liquor ammonia as a catalyst promoter.
Swarna S., **Divakara T.R.,** Swamy M.T. and Shashidhar S.
International Journal of Research & Analytical Reviews 4(5),(2018).

4 *Methanolysis of Castor Oil Using Potassium Carbonate in Ammonium Hydroxide as a Catalyst.*
Swarna S., Swamy M.T. **Divakara T.R.,** and Mayuri H.S.,
International Journal of Scientific Research & Reviews 7(5),(2019).

5 Phthalocyanine sheet polymer based amperometric sensor for the selective detection of 2,4-dichlorophenol.
Imadadulla Mohammed,Manjunatha Nemakal , Shambhulinga Aralekallu,

Veeresh A. Sajjan, **T.R. Divakara**. Manjunatha Palanna, , C.P Keshavananda Prabu & Lokesh Koodlur Sannegowda.
Journal of Electroanalytical Chemistry,871(114292)2020.

6 Experimental assessment of ternary fuel blends of diesel, hybrid biodiesel and alcohol in naturally aspirated CI engine.
S. Swarna,· M. T. Swamy,**T. R. Divakara**, K. N. Krishnamurthy & S. Shashidhar.
International Journal of Environmental Science and Technology,2021.

7 K_2CO_3 in NH_4OH as an Effective Catalyst Mixture for the Transesterification of High Acid Value Mahua Oil.
S. Swarna, M. T. Swamy,**T. R. Divakara**, K. N. Krishnamurthy, S. Shashidhar & H.V.Srikanth.
Asian Journal of Chemistry, 33 (11) 2021.

8 Synthesis and crystal structure of ebastinium hydrogen fumarate.
P. Priyanka, B. K. Jayanna, H. Kiran Kumar, Vinaya, **T. R. Divakara**, H. S. Yathirajan and S. Parkin.
Acta Crystallographica E,916 (E78) 2022.

9 Synthesis, spectroscopic and crystal structure studies of N-{3-cyano-1-[2,6-dichloro-4-(trifluoro- methyl)phenyl]-4-(ethylsulfanyl)-1H-pyrazol-5-yl}- 2,2,2-trifluoroacetamide.
P. Priyanka, B. K. Jayanna, Y. C. Sunil Kumar, M. T. Shreenivas, G. R. Srinivasa, **T. R. Divakara**, H. S. Yathirajan and S. Parkin.
Acta Crystallographica E, 1084 (E78) 2022.

10 Synthesis and crystal structure of topiramate azidosulfate at 90 K and 298 K.
P. Priyanka, B. K. Jayanna, H. Kiran Kumar, Vinaya, **T. R. Divakara**, H. S. Yathirajan, C. Glidewell and S. Parkin.
Acta Crystallographica E, 984 (E78) 2022.

11 Synthesis and crystal structure of 2-chloro-1-(3- hydroxyphenyl)ethanone.
P. Priyanka, B. K. Jayanna, Vinaya, H. J. Shankara Prasad, T. R. Divakara, H. S. Yathirajan and S. Parkin.
Acta Crystallographica E,1127 (E78) 2022.

12 Isopropyl 4-aminobenzoate.
P. Priyanka, B. K. Jayanna, H. Kiran Kumar, H. S. Yathirajan, **T. R. Divakara**, S. Foro and R. J. Butcher.
IUCr Data, 220904 (7) 2022.

13 Hydrogen-Bonded Chain of Rings Motif in N-(4- Methoxyphenyl)piperazin-1-ium Salts with Benzoate Anions: Supramolecular Assemblies and Their Energy Frameworks.
Prabhakar Priyanka, Bidarur K. Jayanna, **Thayamma R. Divakara**, Vinay , Yeriyur B. Basavaraju, Hemmige S. Yathirajan, Sean R. Parkin, Lilianna

Chęcińska Gejjalagere P. Suresha.
Crystal, 12 (12) 2022.

14 Crystal structure and Hirshfeld-surface analysis of a monoclinic polymorph of 2-amino-5-chloro-benzo-phenone oxime at 90 K.
D. Geetha, C. N. Kavitha, **T. R. Divakara**, Y. B. Basavaraju, H. S. Yathirajan and S. Parkin
Acta Crystallographica E,610 (E79) 2023.

15 Crystal structure studies and Hirshfeld surface analysis of 4-(di-methyl-aza-nium-yl)-2-hy-droxy-anilinium dichloride monohydrate at 90 K.
H. G. Anil Kumar, T. M. Mohan Kumar, **T. R. Divakara**, D. Geetha, H. S. Yathirajan and S. Parkin
Acta Crystallographica E,827 (E79) 2023.

16 Crystal structure and Hirshfeld-surface analysis of an etoxazole metabolite designated R13
T. M. Mohan Kumar, B. L. Bhaskar, P. Priyanka, **T. R. Divakara**, H. S. Yathirajan and S. Parkin.
Acta Crystallographica E,1270 (E80) 2024.

17 Biodesel Synthesis from mixed non edible oil feedstock using K_2CO_3 in NH_4OH catalyst.
S Swarna. HV Srikanth, R. Anitha, M.T. Swamy, **T.R. Divakara**, K.N. Krishnamurthy, S Shashidhar.
Energy sources 2023.

18 Synthesis, crystal structure and Hirshfeld surface analysis of 5-methyl-1H-pyrazol-3-yl 4-nitro-benzene-sulfonate at 90 K.
Vinaya, S. A. Yakuth, T. M. Mohan Kumar, B. L. Bhaskar, **T. R. Divakara**, H. S. Yathirajan, Y. B. Basavaraju and S. Parkin.
Acta Crystallographica E,1354 (E80) 2024.

19 Crystal structure and Hirshfeld-surface analysis of 1-(4-fluoro-phen-yl)-3,3-bis-(methyl-sulfan-yl)prop-2-en-1-one.
T. M. Mohan Kumar, B. L. Bhaskar, P. Bhavya, **T. R. Divakara**, H. J. Shankara Prasad, H. S. Yathirajan and S. Parkin
Acta Crystallographica E,516 (E81) 2025.

20 Rapid and sensitive electrochemical detection of paracetamol using EuZrO3-modified carbon paste electrode.
C. S. Chidan Kumar, K. S. Mahesh Lohith, M. N. Ramachandra, **T. R. Divakara**, P. Sumesh, Abdel-Basit Al-Odayni, Madan Kumar Shankar and S. Chandraju.
Scientific Reports,2025

21 Electrochemical Engineering of Nd^{3+} -Doped $SrGa_2O_4$ for Advanced Supercapacitor Energy Storage Applications.

C. S. Chidan Kumar, G. Raghavendra, M. S. Parvathy Thampi, **T. R. Divakara**, K. H. Hemakumar, S. Chandraju.
Chemistry Select, 2026.

Publication in Symposia

1. Synthesis and characterization of biologically active metal complexes of nimesulide.
   Divakara T.R., Nagaraja Naik and Arun V.S.
   NSBM-05, DOS in Chemistry, University of Mysore, pp52, p72, 5-7 October 2005.

2. Synthesis and biocidal activity of mixed ligand complexes of cobalt(II) and iron(II) with citalopram and tramadol.
   Divakara T.R., Nagaraja Naik and Arun V.S.
   National conference on chemical sciences for industry and society, DOS inChemistry, Kuvempu University, pp67(41), 6-8 January 2006.

3. Synthesis and structural characterization of new metal complexes of citalopram.
   Divakara T.R., Nagaraja Naik and Arun V.S.
   National conference on chemical sciences for industry and society, DOS in Chemistry, Kuvempu University,pp70(42), 6-8 January 2006.

4. Synthesis, spectral characterization and Biological activities of cobalt(II) mixed ligand complexes by using curcumin and chalcone derivative.
   V. S. Arun, B. S. Shankara, **T. R. Divakara**, C. R. Gnanendra, Nagaraja Naik
   National conference on recent & emerging trends in mechanical engineering, Department of Mechanical Engineering, Sri Krishna Institute of Technology,
   p10, April 2013.

5. Synthesis, spectral studies and biological activities of citalopram cobalt metal complexes
   S. Swarna, T. R. Divakara, B.P. Jyothipriyadarshni, Y. Niroopa and Nagaraj Naik*National Conference on Applied Science and Humanities (NCASH-15)*, Department of Chemistry, K. S. School of Engineering& Management, P11, 5th May, 2015.

6. Synthesis of Bio Diesel from Neem oil comparison of the performance of n- hexane blended bio-diesel with un-blended bio-diesel in IC Engine, Swarna S, Swamy M.T. and Divakara T.R,*National conference on Impact of Science and Technology on Society and economy*, Vijayanagara Sri Krishnadevaraya University Bellary, 8th to 9th March 2017.

7. Synthesis Characterization of Nano-composite Polymers and its Photo Catalytical Applications, Shylaja K.R and Divakara T.R ,. *National conference on Current advances in Science and Technology*, KSIT , Bangalore, 10th to 12 May 2017.

Guided for Ph.D.

Sl.No.	Name	USN	awarded	University
1	Swarna S.	1ST15PGJ01	2021	VTU

Project Handled

Title	Agency	Grant amount	Year	Status
Development of Bio-Fuel Combustor	VTU	6.45 Lakhs	2012-13	Completed

Membership of Professional Bodies

Sl. No.	Membership Details	Membership No.
1	ISTE	LM-94815
2	Luminescence Society of India	LM-78