

Curriculum Vitae

Name Dr. T.V. SUNDAR
Date of Birth 13th June 1973
Correspondence Address 17/2, Pandamangala Agraharam, Woraiyur,
Tiruchirappalli- 620001
Email and Contact number sunvag@gmail.com, sundarphy@nct.ac.in
Mob.: 9842721956

Academic Qualification

Degree	Year	Subject	University/Institution	% of Marks
B.Sc.	1993	Physics	St. Joseph's College (Autonomous), Bharathidasan University	77.64, First Class with Distinction
M.Sc.	1995	Physics	St. Joseph's College (Autonomous), Bharathidasan University	76.15, First Class
M.Phil.	1998	Physics	St. Joseph's College (Autonomous), Bharathidasan University	76.60, First Class
SLET	1997	Physics	Bharathidasan University	
Ph.D.	2008	Physics	Bharathidasan University	Commended
Visharad	1991	Hindi	Dakshina Bharat Hindi Prachar Sabha	

Ph.D thesis title X-ray Crystal and Molecular Structure Determination of Some
Biologically and Pharmacologically Important Compounds
Guide's Name Prof. Dr. V. Parthasarathi
Institution/ University Bharathidasan University
Year of Award 2008

Entry into Collegiate Service: June 1997

Current Position Associate Professor in Physics,
National College (Autonomous), Tiruchirappalli-620001

Employment History

Name of the College	Position
St. Joseph's College (Autonomous) Tiruchirappalli-2	Lecturer, 1997-2000
National College (Autonomous) Tiruchirappalli-1	Assistant Professor, 2000- 05 Assistant Professor (SS), 2005-10 Assistant Professor (SG), 2010-13 Associate Professor, 2013 – till date

Professional Recognition/ Award/ Certificate/ Fellowship received by the applicant

- National merit scholarship for the performance in S.S.L.C.
- Rev.Fr. Sewell medal for outstanding academic performance in PG Physics Course.
- Got Medal and Appreciation from the National College Management for 100% attendance in 2000-01.
- Represented college/university teachers (south zone) in the Final Round (one among the eight contestants) in the Department of Atomic Energy (DAE)'s Golden Jubilee science quiz held at Mumbai on August 1, 2004.
- Letter of appreciation from the editor of the Tamil magazine Kalaimagal for the research survey carried for the magazine -1999.

Research Publications

S.No.	Authors	Title of the paper	Name of the journal, volume, page and year
1.	T. V. Sundar, V. Parthasarathi, C. Alvarez-Rua, S. Garcia- Granda, A. Saxena, P. Pardasani and R.T. Pardasani.	[rac-5R,7R,8S] spiro {7-methoxycarbonyl-1-aza-3thia-bicyclo[3.3.0]octane-8,1'-acenaphthylene}-2'one.	Acta Cryst. E58 o1405-o1407 2002
2.	T. V. Sundar, V. Parthasarathi, C. Alvarez-Rua, S. Garcia- Granda, I. Sharma, R. T. Pardasani and R. C. Mehrotra.	(rac-2SR, 3RS, 5SR)-Spiro-[3-methoxycarbonyl-1-azabicyclo[3.3.0]-octane-2,1'-acenaphthalen-2'-one.	Acta Cryst. E59 o280-o282 2003

3. **T. V. Sundar**, V. Parthasarathi, S. Thamotharan and K. G. Sekar. Quinolinium dichromate, $[C_9H_7NH^+]_2 \cdot Cr_2O_7^{2-}$. Acta Cryst. E59 m327-m329 2003
4. **T. V. Sundar**, V. Parthasarathi, S. Garcia-Granda, A. Jain and R. T. Pardasani 2-(3-Ethyl-2,3,4,5-tetrahydro-4-oxo-2-thioxo-4-thiazolidin-5-ylidene)-1,2-dihydroacenaphthylen-1-one. Acta Cryst. E59 o1967-o1969 2003
5. **T. V. Sundar**, V. Parthasarathi, K. Sarkunam, M. Nallu, B. Walfort and H. Lang. 1-[(4-Chlorobenzoyl)methyl]-4-(*N,N*-dimethylamino) pyridinium bromide sesquihydrate and 1-[(4-bromobenzoyl)methyl]-4-(*N,N*-dimethylamino) pyridinium bromide sesquihydrate. Acta Cryst. C60 o464-o466 2004
6. **T. V. Sundar**, V. Parthasarathi, K. Sarkunam, M. Nallu, B. Walfort and H. Lang. 1-[(2,4-Dichlorobenzoyl)methyl]-4-(*N,N*-dimethylamino)pyridinium bromide. Acta Cryst. E60 o2345-o2346 2004
7. **T. V. Sundar**, V. Parthasarathi, K. Sarkunam, M. Nallu, B. Walfort and H. Lang. 1-[2-(Biphenyl-4-yl)-2-oxoethyl]-4-(*N,N*-dimethylamino)pyridinium bromide hemihydrate. Acta Cryst. E61 o889-o891 2005
8. **T. V. Sundar**, V. Parthasarathi, B. Walfort, H. Lang, P. Piplani and R. Malik. N-[4-(Pyrrolidin-1-ylcarbonylmethoxy) phenyl]acetamide Acta Cryst. E61 o2868-o2870 2005
9. **T. V. Sundar**, V. Parthasarathi, Michael Bolte, Raveendra K. Hunnur and Bharati Badami. Dimethyl 1-₄-[4,5-bis(methoxycarbonyl)-1,2,3-triazol-1-ylmethylcarbonyl] phenyl-1H-pyrazole-3,4-dicarboxylate Acta Cryst. E61 o3482-o3484 2005
10. **T. V. Sundar**, V. Parthasarathi, B. Sridhar, P. Venkatesan and M. Nallu. 2-Amino-1-(4-nitrobenzyl)pyridinium bromide Acta Cryst. E62 o74-o76 2006

- | | | | |
|-----|--|---|----------------------------------|
| 11. | T. V. Sundar , V. Parthasarathi, H. Lang, R. Malik and P. Piplani | 2-[4-(Acetamido)phenoxy]-N,N-dimethylacetamide: a potential anti-amnesic agent | Acta Cryst. E62 o443–o445 2006 |
| 12. | T. V. Sundar , V. Parthasarathi, B. Sridhar, P. Venkatesan and M. Nallu | 3-Amino-1-(4-nitrobenzyl)pyridinium bromide | Acta Cryst. E62 o482–o484 2006 |
| 13. | T. V. Sundar , V. Parthasarathi, Ranju Bansal, K. Ravikumar and B. Sridhar | 16-Cyano-13 α -(5-methyl-1,3,4-oxadiazol-2-yl)-13,16-seco-17-norandrost-4-en-3-one | Acta Cryst. E62 o1019–o1021 2006 |
| 14. | T. V. Sundar , V. Parthasarathi, K. Ravikumar, P. Venkatesan and M. Nallu | 4-Amino-1-(4-nitrobenzyl)pyridinium bromide | Acta Cryst. E62 o1118–o1120 2006 |
| 15. | T. V. Sundar , V. Parthasarathi, H. Lang, R. Malik and P. Piplani | N-[4-(Morpholinocarbonylmethoxy)phenyl]acetamide monohydrate: a potential anti-amnesic agent | Acta Cryst. E62 o1874–o1876 2006 |
| 16. | T. V. Sundar , V. Parthasarathi, Ranju Bansal, K. Ravikumar and B. Sridhar. | 16-[4-(3-Chloropropoxy)-3-methoxybenzylidene]-4-androstene-3,17-dione | Acta Cryst. E62 o2190–o2192 2006 |
| 17. | T. V. Sundar , V. Parthasarathi, Ranju Bansal and B. Sridhar | Dimethyl 4-[4-(benzoyloxy)phenyl]-2,6-dimethyl-1,4-dihydropyridine-3,5-dicarboxylate | Acta Cryst. E62 o3701–o3703 2006 |
| 18. | T. V. Sundar , V. Parthasarathi, Gaurav Narang, Ranju Bansal and B. Sridhar | Dimethyl 4-(4-isopropylcarbonyloxyphenyl)-2,6-dimethyl-1,4-dihydropyridine-3,5-dicarboxylate | Acta Cryst. E62 o4001–o4003 2006 |
| 19. | T. V. Sundar , V. Parthasarathi, Priyanka Jain, Ranju Bansal and K. Ravikumar | Dimethyl 4-[4-[2-(dimethylamino)ethoxy]phenyl]-2,6-dimethyl-1,4-dihydropyridine-3,5-dicarboxylate | Acta Cryst. E62 o4699–o4701 2006 |

20. **T. V. Sundar**, V. Parthasarathi, Ranju Bansal, Petra Zoufalá and H. Lang Dimethyl4-[4-(2-methoxy-2-oxoethoxy)phenyl]-2,6-dimethyl-1,4-dihydropyridine-3,5- dicarboxylate Acta Cryst. E62 o4963-o4965 2006
21. Ravindra R Kamble, Dhareesh B Biradar, Gangadhar Y Meti, Tasneem Taj, Tegginamath Gireesh, Imthiyaz Ahmed M Khazi, **Sundar T Vaidyanathan**, Raju Mohandoss, Balasubramanian Sridhar and Viraraghav Parthasarathi An efficient synthesis, X-ray and spectral characterization of biphenyl derivatives J. Chem. Sci. Vol. 123, No. 4, 393-401 July 2011
22. R. Pardasani, S. Singh, J. George, R. Joshi and T. V. Sundar Transformation of benzo[b]thiophene-2, 3-diones to functionalised diaryldisulfides Letters in Organic Chemistry, **Volume 10, Year 2013, Pages 358-363**
23. N. Sharmila, **T. V. Sundar**, A. Yasodha, A. Puratchikody and B. Sridhar Crystal structure of 4-amino-1-(4-methylbenzyl) pyridinium bromide Acta Cryst. E70, o1293–o1294 2014
24. N. Sharmila, **T. V. Sundar**, G. Satish, A. Ilangoan and P. Venkatesan Two new isatin derivatives: 1-benzyl-4,5,6-trimethoxyindoline-2,3-dione and 1-benzyl-5-fluoroindoline-2,3-dione Acta Cryst. C71, 975–978 2015
25. N. Sharmila, **T. V. Sundar**, G. Satish and P. Venkatesan 1-Benzyl-5-methylindoline-2,3-dione IUCrData 1, x160381 2016
26. N. Sharmila, **T. V. Sundar**, G. Sathish and P. Venkatesan Crystal and geometry-optimized structure, and Hirshfeld surface analysis of 1-(2-bromoethyl)-indoline-2,3-dione Acta Cryst. E72, 1569–1573 2016

27. N. Sharmila,
T. V. Sundar,
P. Sakthivel and
P. Venkatesan Ethyl 2,2-dimethyl-4-oxo-6-phenyl-
3,4-dihydro-2H-pyran-5-
carboxylate IUCrData
1,
x161924
2016
28. N. Sharmila,
T. V. Sundar,
P. Sakthivel and
P. Venkatesan Ethyl 6-(4-chlorophenyl)-2,2-
dimethyl-4-oxo-3,4-dihydro-
2Hpyran-
5-carboxylate IUCrData
2,
x170034
2017
29. P. Jaikumar,
T. V. Sundar,
N. Sharmila,
T. Balakrishnan and
K. Ramamurthi Hydrogen-bonding patterns in
bis(cytosinium) tartarate
monohydrate IUCrData
2,
x170448
2017
30. G. Vinotha and **T. V. Sundar** Drug likeness prediction using
structure based molecular
descriptors and support vector
machines Materials Today:
Proceedings,
Volume 18, Year
2019,
Pages 1658-1669
31. G. Vinotha, **T. V. Sundar**,
D. Amuthalakshmi
and M. Vivek. Two new molecular preprocessing
schemes for machine learning and
their evaluation using some DT
algorithms AIP Conference
Proceedings,
Volume 2117,
Year 2019
32. G. Vinotha, **T. V. Sundar** and N.
Sharmila 13-Benzyl-4,11-dihydroxy-1,8-
diphenyl-2,9-dithia-13-azadispiro-
[4.1.4.3]tetradecan-6-one IUCr Data,
6,
x210210,
2021
- 33 K. Meena, K. Menaka,
T.V. Sundar and
K.R. Subramanian A statistical method for
verification of rareness
in DNA sequences Online Journal of
Bioinformatics
10 (1)
74-81
2009
- 34 K. Meena, K. Menaka,
T.V. Sundar and
K.R. Subramanian Mathematical Lensing
of DNA Repeat
sequences International Journal of
Computational Intelligence
in Bioinformatics
Vol. 3 No. 3
257 - 265
2010
- 35 K. Meena, K. Menaka,
T.V. Sundar and
K.R. Subramanian Neural Network Models
with Cognitive Inputs
for the
Detection of Rare
Events in DNA Repeat
Sequences Advances in Computational
Sciences and Technology
Volume 6, Number 1
33-45
2013

- 36 N.Sharmila, **T.V. Sundar**,
G.Sathish and P.Venkatesan
CRYSTALSTRUCTURE, ENERGY MINIMIZATION ANDGEOMETRY OPTIMIZATION STUDIESOF 5-BROMO-1-ETHYL-INDOLINE-2,3-DIONE
International Journal of Latest Research in Engineering and Technology (IJLRET)ISSN: 2454-5031, **Volume , Year 2016, Pages 87-90**
- 37 G. Vinotha, **T. V. Sundar**,
D. Ashok
A Comparative Analysis of the Energy Optimized Structure of 2-Methyl Pyridinium Picrate with Its Polymorphs
International Journal of Engineering Research & Technology (IJERT)ISSN: 2278-0181, **Volume NCCTAM – 2017 (Volume 5 – Issue 15) , Year 2017, Pages 30-**
- 38 N. Sharmila, **T. V. Sundar**,
G. Sathish and P. Venkatesan
Crystal Structure, Energy Minimization and Geometry Optimization Studies of (2R, 3R)-Ethyl 2,3-Dimethyl-4-Oxo-6-Phenyl-3,4-Dihydro-2H-Pyran-5-Carboxylate
International Conference on Recent Trends in Material Science and its Applications (ICRM-2017), **Volume , Year 2017, Pages 53-55**
- 39 M.A. Lilly Grace, **T.V. Sundar** and N.P. Rajesh
FTIR and SHG studies on STS doped KDP Crystal
International Conference on Materials, Emerging Devices and Energy Efficient Technologies (MEETCON'17), ISBN:13978-81-927227-0-2, **Volume , Year 2017 Pages 29-31**
- 40 M Jeevarathinam, **T.V.Sundar**, G. Vinotha and R. Subbiremanian
The Effectiveness of Normalized Molecular descriptors in Predicting the Druglikeness of Molecules
Journal of Emerging Technologies and Innovative Research (JETIR) (ISSN-2349-5162), **Volume 5, Year 2018, Pages 1054-59**

- 41 R.Subbiramanian, **T.V. Sundar**, G. Vinotha and B.Jeevarathinam
 Prediction of Druglike Behaviour of Molecules Using Structure Based Molecular Descriptors and Support Vector Machine.* (In Tamil)
 Science and Technology Research Journal, (Research Journal in Tamil), **Volume** Sep.-Oct. 2018, **Year** 2018, **Pages** 46-57
- 42 **T.V. Sundar**, K. Menaka and G. Vinotha
 Artificial Intelligence Suggested Repositionable Therapeutics for Managing COVID-19: An Investigation with Machine Learning Algorithms and Molecular Structures
<https://doi.org/10.21203/rs.3.rs-40988/v1>
- 43 **T.V.Sundar**
 Enhancing the Learning and Living Skills of Students of Rural and Semi-Urban Background at the College Level - A collective Approach
 Proceedings of the NAAC Sponsored National Workshop on Measures for providing Quality Education in Colleges with Students of Rural and Semi-urban Background, February 16-17, 2008, **46**. Internal Quality Assurance Cell (IQAC), National College, Tiruchirappalli-1,
- 44 **T.V. Sundar** and K. Menaka
 A Software Utility for the Quantitative Comparison of Molecular Conformations
 Proceedings of the National Conference on Perspectives in Lasers and Spectroscopy (NCPLAS 2009), September 24-25, 2009, **41**. P.G. Department of Physics, Women's Christian College, Chennai – 600006 DAE, CSIR & Indian Spectro Physics Association (ISPA) Sponsored.
- 45 **T.V. Sundar** and K. Menaka
 Objective Evaluation in C. I. Assessments - Significance and Effective Implementation Strategies
 Proceedings of the UGC sponsored State Level Seminar on Examination Reforms. March 12, 2010.

h-index **6** **i10 index** **3** **Total citations** **127**

Source: Google Scholar – July 2024

Publications access online: <https://vidwan.inflibnet.ac.in/profile/153840>

Vidwan Score: 9.2/10

Books/ Reports/Chapters/General articles etc.

S. No	Title	Author's Name	Publisher	Year of Publication
1.	Fortified Information Encryption with Biological Sequence Data	K. Meena, K. Menaka, and T.V. Sundar	EXCEL INDIA PUBLISHER ISBN: 978-93-80697-51-2	2010
2.	Distinctive Practices in Higher Educational Institutions - A Resplendent Insignia that Ensures Branding and Satisfaction	T.V. Sundar	V.H.N.Senthikumara Nadar College (Autonomous), Virudhunagar, Tamilnadu, INDIA. ISBN: 978-81-951746-4-5.	2023

Research guidance

Ph.D.	: Awarded	:	2
M.Phil.	: Awarded	:	23
M.Sc. Dissertation	: Awarded	:	38

Seminars/ Conferences/Workshops

S. No.	Names of all the authors	Title of the paper	Name of the Seminar/Conference/Symposium, proceedings/book/volume, year and page	Organizer & Place	Sponsor
1.	T.V. Sundar, V. Parthasarithi and	Crystal and molecular structure determination of N-ethyl-1'-5-dehydro-1'-[2-thioxo-	33 rd National Seminar on Crystallography, January 8-10, 2004, P79, 184.	National Chemical Laboratory, Pune	NCL, INSA, ICA and Pune Univ.

- R.T. Pardasani 4-thiazolidinone]-acenaphthylene-2'-one
2. **T.V. Sundar, V. Parthasarthi, Ranjubansal and B. Sridhar** Derivatives of 1,4-dihydropyridines- Search for Structure Activity Relationships 36th National Seminar on Crystallography, January 22-24, 2007, **P57**. Department of Crystallography and Biophysics, Univ. of Madras, Chennai-25. MU
 3. **T.V. Sundar and V. Parthasarthi** Structural and Conformational Features of Some Potential Anti-amnesic Compounds National Seminar on Recent Advances in Materials Science (RAMS-2008), February 15-16, 2008, **C12, 36**. Organized by the Department of Physics, Cauvery College for Women, Tiruchirappalli-18. College Management
 4. **T.V. Sundar** Enhancing the Learning and Living Skills of Students of Rural and Semi-Urban Background at the College Level - A collective Approach National Workshop on Measures for providing Quality Education in Colleges with Students of Rural and Semi-urban Background, February 16-17, 2008, **46**. Internal Quality Assurance Cell (IQAC), National College, Tiruchirappalli-1, NAAC
 5. **T.V. Sundar and V. Parthasarthi** A Statistical Approach for Correlating Structure Function Relationships of Non-linear Optical Materials National Seminar on Crystal Growth of Laser and Non-linear Optical Materials (NSCGOM - 2008) September 25-26, 2008, **OP28**. PG & Research Dept. of Physics, National College, Tiruchirappalli-1 U.G.C.
 6. **T.V. Sundar** Adaptation of Six Sigma Strategies in National Conference on Quality Enhancement and Sustenance in Higher Educational Institutions IQAC of St. Joseph's College (Autonomous), NAAC

		Higher Education	(HEIs) through Six Sigma (6σ) Quality Strategy	Tiruchirappalli -2	
			October 23-24, 2008, 89 .		
7.	T.V. Sundar and R.Nagarajan	Analysis of the Molecular Structures of Some 1,4-dihydropyridine Derivatives for Possible Nanomedical Applications	National conference on Recent trends in Crystal Growth, Thin films and Nano-structured materials (CRYSTAL-NANO-2009) August 5-6, 2009, 89 .	Department of Physics, Aditanar College of Arts and Science, Tiruchendur-628216	U.G.C.
8.	T.V. Sundar and K. Menaka	A Software Utility for the Quantitative Comparison of Molecular Conformations	National Conference on Perspectives in Lasers and Spectroscopy (NCPLAS 2009), September 24-25, 2009, 41 .	P.G. Department of Physics, Women's Christian College, Chennai – 600006	DAE, CSIR & Indian Spectro Physics Association (ISPA)
9.	T.V. Sundar and K. Menaka	Objective Evaluation in C. I. Assessments - Significance and Effective Implementation Strategies	State Level Seminar on Examination Reforms. March 12, 2010.	Jamal Mohamed College (Autonomous), Tiruchirappalli -20	U.G.C.
10	K. Meena, K. Menaka, and T.V. Sundar	Fortified Information Encryption with Biological Sequence Data	National conference on Applications of Data Mining on National Security August 30-31, 2010, 76-81 . Conference Proceedings ISBN: 978-93-80697-51-2	Sri Chandrasekhar endra Saraswathi Viswa Mahavidyalaya , Enathur, Kanchipuram	DST
11	N. Sharmila, R. Subramanian and	Search on the Crystalline Features of Acrylamide-A Nano	State Level Technical Seminar on Recent Advancements in Nanotechnology August 5-6, 2011, 14-17 .	PG & Research Dept. of Physics, Government Arts College,	UGC, TANSCH E and TNSCST

	T.V. Sundar	filtration Material		Tiruvannamalai-606 603	
12	M. Saravanan and T.V. Sundar	Numerical Characterization of Alu Repetitive Sequences	National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2012), 15-17 March 15-17, 38 .	PG & Research Dept. of Physics, National College, Tiruchirappalli -1	U.G.C.
13	K.Suresh and T.V. Sundar	Mathematical and Statistical Characterization of Genomic data	National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2012), 15-17 March 15-17, 38 .	PG & Research Dept. of Physics, National College, Tiruchirappalli -1	U.G.C.
14	G. Vijayarasan and T.V. Sundar	Numerical Characterization Techniques for Viral Data present in Human Genome	National Seminar on Recent Trends in Crystal Growth and Nano Materials (NSCGNM-2012), March 15-17, 2012, 38 .	PG & Research Dept. of Physics, National College, Tiruchirappalli -1	U.G.C.
15	J. Pradeep kumar, K. Sumathi, N. Sharmila and T.V. Sundar	Virtual Screening of Potential Drug Analogs with their Geometrical Descriptors	5 th National Symposium cum Workshop on Recent Trends in Structural bioinformatics and Computer Aided Drug Design (SBCADD-2013), February 19-22, 2013, P18, 35	Dept. of Bioinformatics, Alagappa University, Karaikudi-4	DBT, DST & Schrodinger GmbH, USA
16	J. Pradeep kumar, K. Sumathi and T.V. Sundar	Regression Analysis of Crystal Structure Descriptors	National Seminar on recent Trends in Crystal Growth & Nanomaterials (NSCGNM-2013), March 13-15, 2013, 89 .	PG & Research Dept. of Physics, National College, Tiruchirappalli -1	U.G.C.
17	N. Sharmila, T.V. Sundar ,	Crystal Structure Analysis of a Pyridinium	National Seminar on recent Trends in Crystal Growth & Nanomaterials (NSCGNM-2013),	PG & Research Dept. of Physics, National	U.G.C.

- | | | | | | |
|----|---|--|--|--|--|
| | A. Yasodha and A. Puratchikodi | Derivative ($C_{13}H_{15}N_2Br$) | March 13-15, 2013, 93 . | College, Tiruchirappalli -1 | |
| 18 | N. Sharmila, T.V. Sundar and P. Venkatesan | Crystal Structure of 3-N-diphenyl acrylamide ($C_{15}H_{13}NO$). | National Seminar on Recent Advances in Physics (NSRAP-2014) March 7-8, 2014, 36 . | Dept. of Physics, Presidency College (Autonomous), Chennai-5 | TNSCHE, SCIENCE City Chennai-25 & UGC Autonomy Grant. PU |
| 19 | N.Sharmila, T.V. Sundar , G.Satish, A.Ilangovan and P.Venkatesan | Crystal Structure Analysis of 1-benzyl-4,5,6-trimethoxy-1H-indole-2,3-dione ($C_{18}H_{17}NO_5$) | National Symposium on X-ray Diffraction and Recent Advances in Crystallography (XDRAC-2015), February 27-28, 2015, B14 . | Department of Physics, School of Sciences, Periyar University, Salem-636 011 | |
| 20 | N. Sharmila, T.V. Sundar , G.Sathish and P.Venkatesan | Crystal Structure, Energy Minimization and Geometry Optimization Studies of 5-bromo-1-ethyl-indoline-2,3-dione | International Seminar On Materials Science and Applications (ISMSA-2016) , November 25, 2016.
<i>International Journal of Latest Research in Engineering and Technology (IJLRET)</i>
ISSN: 2454-5031
www.ijlret.com PP.87-90 | Dept. of Physics Mother Teresa Women's University Kodaikanal – 624 102 | MTU |
| 21 | G. Vinotha, T.V. Sundar and D. Ashok | A Comparative Analysis of the Energy Optimized Structure of 2-methyl pyridinium picrate with its Polymorphs | National Conference on Current Trends in Advanced Materials (NCCTAM – 2017), February 23-24, 2017.
<i>International Journal of Engineering Research & Technology (IJERT)</i>
ISSN: 2278-0181 | Dept. of Physics, Hindustan University, Padur, Chennai 603 103. | CSIR |

Published by,
www.ijert.org
NCCTAM – 2017

- 22 K. Kesavan, T.V. Sundar, M. Thangaselvi and G. Vinotha A Comparative Analysis of the Energy Optimized Structure of Ethyl Maltol with its Polymorphs
- 21st National Seminar on Crystal Growth & Applications (XXI NSCG – 2017), 6-8 March, 2017
- PG & Research Dept. of Physics, National College, Tiruchirappalli
- U.G.C. & IACG
- 1

Projects

1. **X-ray Crystal and Molecular Structure Determination of Some Biologically Important Small Molecules.** [2002-04] - UGC sponsored grant Rs. 22000/-.
2. **Single Crystal X-Ray Diffraction Studies of Some Potential Cardiovascular Drugs with 1,4-Dihydropyridine Moiety.** [2009-11] – UGC sponsored grant Rs. 1,99,000/-.

In project-1, structural investigations of some acenaphthylene derivatives were made and their molecular interactions have been studied. The selective oxidant characteristic of quinolinium dichromate was also investigated for its molecular packing characteristics. The results were published.

In project-2, some cardiovascular drug analogs containing 1,4-Dihydropyridine moiety were investigated for conformational similarities, hydrogen bonding interactions and substitutional effects. The reason for widely reported shallow -boat conformation of 1,4-DHP ring was also investigated and found to be the preferential conformation to impart molecular stability in this sort of crystals. The results were published.

Membership in professional bodies and engagements

- Life Member, Indian Crystallographic Association (ICA) since 2001.
- Served as a reviewer for a research article published by Bentham Science publisher.

Membership in Academic bodies

- Dean of Sciences, Member, Internal Quality Assurance Cell (IQAC), National College, (2022-24)
- Vice President, Physics Association (2008-09) and (2021-22)
- Member in the Bharathidasan University Inspection Committee for starting M.Sc. Physics course at Kunthavai Nachiyar Government (W) Arts College, Thanjavur

- Subject Expert, Board of Studies in Physics, Government Arts College for Women (Autonomous), Pudukkottai, TN (2017-19), University Representative.
- Member in the Selection Committee for the appointment of Assistant Professor in Urumu Dhanalakshmi College, Tiruchirappalli-19
- Member (Subject Expert), Board of Studies in Physics (PG) of Bharathidasan University (2015-18)
- Member, Syllabus committee for framing the syllabus of the Add-on course: Certificate/Diploma/Advanced Diploma in Fabrication Technology of Bharathidasan University,
- Member, Board of Studies in Physics, Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli -2 (2011)
- Member, Internal Quality Assurance Cell (IQAC), National College (2007-16)
- Coordinator, Career Guidance and Placement Cell, National College (2007-17).
- Member, Career Guidance and Placement Cell, National College (2004-07)
- Coordinator, Attendance Committee, National College (2004-08)
- Member, Audio Visual Education Committee, National College (2003-07)

Seminar/ Conferences/ Workshops organized

- Organized a workshop for the M.Phil. scholars on 19/10/2013 with the theme Good Research Practices.
- Organized a workshop for the M.Phil. scholars on 11/10/2014 entitled “Research Methodology”
- Organized Golden Jubilee Endowment Lecture on 05/03/2015.
- Organized a workshop for the M.Phil. scholars on 19/09/2015 with the theme “Research Skills”
- Organized a workshop for the M.Phil. scholars on 01/10/2016 in the topic “Technology Assisted Research”
- Organized a Special Interdisciplinary Workshop on BIOINFORMATICS AND CHEMOINFORMATICS TOOLS FOR MOLECULAR ANALYSIS (BCTMA-2019) on 08.03.2019.
- Convened the two-day inter-departmental linkage lecture program “Molecular Census”, jointly organized by PG and Research Department Physics and PG and Research Department of Zoology of National College during 18/11/21 and 19/11/21.
- Organized a Faculty Development Program (FDP) on the use and applications of 32-bit Microcontrollers for the staff of Physics and Computer Science on 08.12.21
- Organized a Student Skill Enrichment Program on Embedded Systems and IoT during 09.12.21 & 10.12.21

Invited Talks

- Delivered a special lecture on Crystallography, in the UGC sponsored Lecture Series, held at the Department of Physics of Jamal Mohammed College, Tiruchirappalli-20 on 02.02.2012.
- Gave a lecture to the Core Group students of National College on the topic Molecular World on 12/10/2012
- Acted as a resource person in the U.G.C. sponsored one day seminar ESCTACIES IN QUANTUM, CRYSTAL AND NEUTRINO PHYSICS held at Seethalakshmi Ramaswami College (Autonomous), Tiruchirappalli-2 held on 20th January 2016 and spoke on the Role of X-ray Crystallography in Medicine.
- Gave a lecture to the Core Group students of National College on the topic Physics and Everyday Life on 07.01.2013
- Delivered a lecture to the Core Group students of National College on the topic Four Forces: Sustainers of this Universe on 14/03/2014.
- Gave a lecture to the Core Group students of National College on the topic Crystallography and Drug Design on 12/10/2014.
- Gave a lecture to the Core Group students of National College on the topic Crystallography in Drug Design on 27.01.2017.
- Delivered a talk entitled “X-ray Crystallography- an Ineludable tool in Materials Science” at Government Arts College for Women (Autonomous), Pudukkottai, organized by the Physics Department of the College on 08/2/2019.
- Spoke on the topic “Crystallography and Structure based drug design endeavors in the fight against COVID-19” on 02/03/2021 at Science day celebration, organized by the Physics Department, National College.
- Delivered a lecture on the Use of molecular visualization tools for drug repurposing route in the Molecular Census workshop jointly organized by PG and Research Department Physics and PG and Research Department of Zoology of National College during 18/11/21

Refresher/Online Courses Completed

- Attended UGC Sponsored Orientation Course Conducted by UGC Academic staff college, Bharathidasn University, Tiruchirappalli -23 during 03.10.2001 to 1.11.2001.
- Attended UGC Sponsored Refresher Course in Physics Conducted by “UGC Academic staff college, Bharathidasn University, Tiruchirappalli -23 during 10.12.2002 to 30.12.2002 (A Grade).

- Attended UGC Sponsored Refresher Course in Need Based (Interdisciplinary) Course in Educational Technology Conducted by “UGC Academic staff college, Bharathidasn University, Tiruchirappalli -23 during 01.06.2006 to 21.06.2006 (A Grade).
- Attended UGC Sponsored Refresher Course in Physics Conducted by “UGC Academic staff college, Bharathidasn University, Tiruchirappalli -23 during 04.03.2008 to 24.03.2008 (A Grade).
- Completed the course “Advanced course on special theory of relativity” conducted by the Centre for continuing education, IIT Kanpur during January 26 to May 19, 2020.
- Participated in the 7 Day National Level Online Faculty Development Program on ChatGPT & AI Tools for Educators, in-line with OBE organized by St Joseph's College (Autonomous), Irinjalakuda in association with The Kerala State Higher Education Council from 19 July to 26 July 2023 and has successfully completed all the tasks, assignments and assessments of this online FDP and secured A grade.

University assignments

- Board of Studies in Physics, Government Arts College for Women(Autonomous), Pudukkottai, TN (2018-19) -University Representative.
- Member in the Inspection Committee for starting M.Sc. Physics course at Kunthavai Nachiyar Government (W) Arts College, Thanjavur -Subject Expert in 2017
- Member in the Selection Committee for the appointment of Assistant Professor in Urumu Dhanalakshmi College, Tiruchirappalli-19 in 2016 as Subject Expert
- Member, Board of Studies in Physics (PG) of Bharathidasan University (2015-18)
- Expert member for feedback Autonomy revision- Theivanai Ammal College, Villupuram (2014-15)
- Syllabus committee for framing the syllabus of the Add-on course: Certificate/Diploma/Advanced Diploma in Fabrication Technology of Bharathidasan University – As Member (2010-11)
- Board of Studies in Physics, Department of Physics, St. Joseph’s College (Autonomous), Tiruchirappalli -2. As Member (2011-12)
- Examiner in UG/ PG valuations, M.Phil./ Ph.D. viva-voce examiner, Ph.D. Thesis adjudicator and Ph.D. Doctoral Committee member.

College campus responsibilities

- Coordinator, Diploma in fabrication engineering course, 2008-09
- Convener NET Coaching, 2015-16
- Convener NET Coaching (online), 2020-21
- Conducted and acted as resource person, NET coaching online, 2022-23
- Conducted and acted as resource person, NET coaching online, 2023-24
- Placement Coordinator, convened and organized over 200 placement events during 2007-08 to 2016-17.
- Incharge, Audio-Visual Educational Committee, 2003-04, 2004-05

- Member, Audio-Visual Educational Committee, 2005-07
- Member, Attendance Committee, (Computerized Attendance), 2004-08
- Vice-President, Physics Association, 2003-04, 2008-09 and 2021-22
- Member IQAC during 2007-16 and 2022-24.
- Member, Academic Council, 2022-24
- Dean of Sciences, 2022-24

Other Information

Research area is concerned with the structural determination and analysis of molecules of Biological and Pharmaceutical importance by using X-Ray Crystallography Techniques. Also interested in the studies of compounds with medicinal significance using Cheminformatics, Data Mining, AI and Machine Learning tools.

Interested and profusely use open source ICT tools in teaching and student assignments.

Declaration

I do hereby declare that the information given in the Curriculum Vitae is true to the best of my knowledge.

T.V. SUNDAR