# PROFILE

Dr.G. Dhanalakshmi

## **Assistant Professor**

## **Physics**

## gdhansi82@gmail.com

#### **1. ACADEMIC QUALIFICATIONS**

## **Doctoral Research - Ph.D**



- University : University of Madras
  Title : Crystal structure, Molecular docking and Hirshfeld surface Analysis of some organic compounds
- > Year : 2022

## Master of Philosophy- M. Phil

$\triangleright$	University	: University of Madras
$\triangleright$	Title	: Synthesis And Characterization of Nanocrystalline
	Ni <sub>x</sub> Fe <sub>100-x</sub> alloy	
$\triangleright$	Year	: 2007

#### Post Graduation- M.Sc

$\triangleright$	University	: University of Madras
$\triangleright$	Degree	: Physics
$\triangleright$	Year	: 2004

### **Under Graduation- B.Sc**

University	: University of Madras
Degree	: Physics
Year	: 2002

#### 2. TEACHING EXPERIENCE

- Worked as Assistant Professor at Misrimal Navajee Munoth Jain Engineering College from September 2007 to April 2019.
- Worked as Assistant Professor at Madonna Arts and Science College for women from June 2019 to October 2020.
- Worked as Assistant Professor (E&C)at Mannar College from January 2021 to April 2021.
- Worked as Assistant Professor Physics (Regular- Adhoc) at Mannar Thirumalai Naicker College from June 2021 to September 2023.
- From Ocotber 2023 working as Assistant Professor Physics in Regular stream at Mannar Thirumalai Naicker College.

#### 3. AREA OF SPECIALIZATION

- Crystallography
- > Nanomaterials
- Computational Physics

#### 4. RESEARCH EXPERIENCE

Total Number of Publications in UGC Care/SCI/WoS Journal: 10

- > Total Number of Citations : 11
- ➢ h-index: 2
- Number of Papers under review: 2

#### 5. LIST OF PUBLICATIONS

- Crystal structures of 1-benzenesulfonyl-2-methyl-3-(4-nitrobenzoyl)-2,3-dihydro-1Hindole and 1-benzenesulfonyl-2-methyl-3-[(thiophen-2-yl)-carbonyl]-2,3-dihydro-1Hindole .ActaCryst. E73, 1555–1559, 2017.( UGC CARELIST- WEB OF SCIENCE INDEXED) https://doi.org/10.1107/S2056989017012804
- Crystal structure and Hirshfeld surface analysis of two imidazo[1,2-a]pyridine derivatives: N-tertbutyl-2-(4-methoxyphenyl)-5-methylimidazo-[1,2-a]pyridin-3-amine and N-tert-butyl-2-[4-(dimethylamino) phenyl]imidazo[1,2-a]pyridin-3-amine, ActaCryst.

(2018). E74, 1913–1918.( UGC CARELIST- WEB OF SCIENCE INDEXED) https://doi.org/10.1107/S2056989018016651

- Synthesis, Crystal Structure, Hirshfeld surface, Energy framework, and Molecular docking analysis of two novel carbazole derivatives, Asian Journal of Chemistry, Vol. 31, No. 12 3017-3028 (2019). (UGC CARELIST)<u>https://doi.org/10.14233/ajchem.2019.22430</u>
- N-(tert -Butyl)-2-(2-nitrophenyl)imidazo[1,2-a]pyridin-3-amine, IUCrData (2019). 4, x191477.(UGC CARELIST)<u>https://doi.org/10.1107/S2414314619014779</u>
- Synthesis, Crystal Structure, Hirshfeld Surface, Energy Framework and Molecular Docking Analysis of diacrylate, Journal of Advanced Scientific Research, 11(3),Suppl 7,2020,103-112 .(UGC CARELIST)<u>https://sciensage.info/index.php/JASR/article/view/1841</u>
- Identification of potential anti-cancer drug target by x-ray crystallography, Hirshfeldsurface, molecular docking and molecular dynamics simulation studies, Journal of Advanced Scientific Research, 12(1), Suppl 1 151-17, 2021. (UGC CARELIST )<a href="https://sciensage.info/index.php/JASR/article/view/1112">https://sciensage.info/index.php/JASR/article/view/1112</a>
- Synthesis, X-ray crystallography, Hirshfeld Surface, Energy Framework Analysis of two imidazole derivatives, Journal of Advanced Scientific Research, 12(1), 2,150-158, 2021. (UGC CARELIST )https://doi.org/10.55218/JASR.202112119
- Synthesis, Crystal Structure, Hirshfeld Surface, Energy Framework Analysis of a tetraphenyl benzene, Journal of Advanced Scientific Research, 12(1),Suppl 2,44-50, 2021.(UGC CARELIST)<u>https://doi.org/10.55218/JASR.s12021121sup217</u>
- Synthesis OfNanocrystalline Nickel-Iron Alloys-A Novel Chemical Reduction Method, Chemical Physics Impact, 6,100202, 2023. (UGC CARELIST-SCOPUS INDEXED)<u>https://doi.org/10.1016/j.chphi.2023.100202</u>
  - 10. Structural Elucidation, Hirshfeld Surface and Energy Framework Analysis of a

Benzene Sulfonamide Derivative, Indian Journal of Natural Sciences, 14, 78, 56080-

56089,2023. (UGC CARE LIST - WEB OF SCIENCE INDEXED)

https://tnsroindia.org.in/journals.html

11. Silica Coating of Nickel-Iron Nanocomposite by Chemical Reduction Method, Journal of Molecular and Engineering Materials, (Accepted) (UGC CARE LIST - WEB OF SCIENCE INDEXED) <u>https://doi.org/10.1142/S2251237324400197</u>

#### 8. LIST OFCONFERENCES /WORKSHOPS PARTICIPATED / PRESENTED

S.No	Conference, Seminar, Workshop and Webinarl nternational /National	Name Of The Institution	Title	Date
1	National Conference	Easwari Engineering College	4 <sup>th</sup> National Conference on Materials for Modern world (NCMMW – 2018)	14/9/2017
2	International Conference	Department of crystallography and BioPhysics, University of Madras	International Symposium on crystallography and advanced materials (ISCAM 2018)	26/03/201 8 to 27/3/2018
3	National Conference	Easwari Engineering College	5 <sup>th</sup> National Conference on Materials for Modern world (NCMMW – 2018)	18/9/2018 to 19/9/2018
4	International Conference	SSN College of Engineering	International Conference on Mathematical Methods, Modeling and Simulation in Chemical Sciences	6/12/2018 – 8/12/2018.

5	International	The New College	Recent advancement in	21.1.2020
	Conference		materials science	
			(NewPhy2020)	
6	International	Mannar Thirumalai	International Conference	22.12.2021
	Conference	Naicker College	on Frontiers in Chemistry	
			and Material Science	
			(ICFCMS-21)	
7	International	SSN College of	International Conference	10.1.2022 to
	Conference	Engineering	in crystal growth and	12.1.2022.
			techniques	
8	National Conference	Karpagam	Advanced materials	5/5/2022
		Academy of	and its applications	to6/5/5 2022
		Higher Education		
9	International workshop	Global Institute	Academic Writing-Ethical	18/6/2022 -
		of statistical	issues	20/6/2022
		solutions		
10	National workshop		Sustainable Materials	22/07/2022
		SRM Institute of	Advances and	, - , -
		Science and	Applications	
		Technology		
11	International	MannarThirumalai	Recent Advancement in	11.01.2023
	Conference	Naicker College	material science and its	to 12.1.2023
			applications	
12	International	SeethalakshmiRa	"Materials Science and	7/2/2023 –
	Conference	maswami	Applications" (ICMSA'23)	8/2/2023
		College,		
		Tiruchirappalli		
13	National workshop	SSN College of	National Virtual	12-4-2023 to

14	International workshop	Engineering Madurai Kamaraj University	Workshop on Machine Learning: An Ice Breaker Between Materials Research and Data Science Solar Water splitting and Artifical Photosynthesis (SWAP) -2023	13-04-2023 05-06-2023 to 07-06- 2023
15.	International Conference	Saveetha School of Engineering	Functional Materials and its Application Aspects	7.9.2023 to 8.9.2023
16.	State-level Technical Workshop	MannarThirumal aiNaicker College	Intellectual Property Rights	16.10.2023 to 17.10.2023
17.	National Conference	Crescent Institute of Science and Technology	National Conference on Functional Materials for Sustainable Energy and Information Technology	27.11.2023 to 28.11.2023
18.	International Conference	The American College	International Conference on Advances in Chemistry (ICAC-2023)	4.12.2023 to 5.12.2023
19	International Conference	Seethalakshmi Ramaswami College, Tiruchirappalli	2 <sup>nd</sup> International Virtual Conference on Materials Science and Applications" (ICMSA'24)	1.2.2024 to 2.2.2024

## 9. LIST OF FDP /WORKSHOPS/WEBINARS PARTICIPATED

S.No Title of the Programme			
1.	Growth, Characterisation of NLO materials and Spectroscopic Studies	Mohamed Sathak AJ College of Engineering	10.6.21 to 12.6.21
2.	Astronomical Studies	Jamal Mohamed College	7.2.2022 to 8.2.2022
3.	INTELLECTUAL PROPERTY RIGHTS	Jamal Mohamed College	9.2.2022
4.	Enhancing Quality by unearthing innovative practices –EQUIP 2022	MannarThirumalaiNaicker College	18.4.2022 to 24.4.2022
5.	Education 4.0 for sustainable Economic Development	MannarThirumalaiNaicker College	27.4.2022
6.	Recent trends in applied Physics	Easwari Engineering College	25.7.2022 to 30.7.2022
7.	Current scenario in advanced materials research and Nanotechnology	RajapalayamRajus College	14.11.22 to 18.11.2022
8.	Dynamics of Research Publications	MannarThirumalaiNaicker College	15.9.2022 to 16.9.2022

9.	Insights of National Educational Policy (NEP 2020)	MannarThirumalaiNaicker College	18.3.2023
10.	Quantum Computing using Indigenous Quantum Simulator QSim	IIT Roorkee and Centre for Development of Advanced Computing Hyderabad	6.5.2023 to 28.5.2023
11.	Recent Trends in Science and Technology	Mohamed SathakA.J.College of Engineering	17.7.2023 to 21.7.2023
12.	Impact of Quantum dots on Engineering	SRM Madurai College for Engineering and Technology	23.10.2023
13.	Recent Advancement in Smart Materials for Sustainable Energy applications	Sathyabama Institute of Science and Technology	20.10.2023 to 25.10.2023
14	Essentials of Report Writing using MS Word	UGC - Malaviya Mission Teacher Training Centre, Madurai Kamaraj University	24.02.2024.
15	Research and Development	UGC - Malaviya Mission Teacher Training Centre, Madurai Kamaraj University	2.03.2024.
15	Sustainable Nanomaterials Engineering for Environmental Applications	Centre for Nanotechnology, Indian Institute of Technology, Guwahati	22.4.2024 to 26.4.2024

## **10. OTHER ACTIVITIES**

S.No	Title	Place	STUDENTS	Date
			FROM	
1.	Faculty	MannarThirumalai	V.V.Vanniaperumal	12.10.2022 TO
	And Student	Naicker College	College For Women	17.10.2022
	Exchange	(Autonomous)		
	Programme			
2.	Faculty	V.V.Vanniaperumal College For	V.V.Vanniaperumal	21.2.2023
	And Student	Women	College For Women	
	Exchange			
	Programme			

## **11.CONFERENCES / SEMINARS / WORKSHOPS ORGANIZED**

S.No	Level	Title	Role Played	Date	Funding
1.	National	National Mathematics Day &Science day Celebration	Co-ordinator	21.12.2022 & 22.12.2022	and Indira Gandhi Centre for

## 12. OTHER RESPONSIBILITIES IN INSTITUTION

- Criterion 1 Member
- > Library Stock Verification Member
- Furniture Stock Verification Member