

## Raja Doraisingam Government Arts College

# (Affiliated to Alagappa University, Karaikudi) Sivagangai - 630561



## **FACULTY PROFILE**

1. Name : Dr. A. Dhanalakshmi

**2. Father's Name** : M. P. Alagarsamy

**3. Designation** : Guest Lecturer/Physics

4. Age & Date of Birth : 38 & 15.04.1984

**5. Gender** : Female

**6. Address for** : 1/41, Mukkudi, Ambalathadi Post

**Communication** Thiruppuvanam Via, Sivagangai Dist - 630 611

7. **Phone No** : +91-9842638690

8. Email- id : dhanalakshmialagarsamy@gmail.com

9. Educational Qualification : M.Sc., M.Phil., PhD.,

S.No.	Course	University/College	Year of Passing
1	Ph.D., (Physics)	Bharathiar University,	22 <sup>nd</sup> March 2018
		Coimbatore	
2	M.Phil., (Physics)	Alagappa University, Karaikudi	August 2008
3	M.Sc., (Physics)	Alagappa University, Karaikudi	April 2007
4	B.Sc., (Physics)	RDGA College, Sivagangai,	April 2004
		MKU	

10. Area of Specialization : Physics & Material Science

# 11. Experience: 14 Years 6 Months

S. NO	Name of Organization	Period		Year of	
	, , , , , , , , , , , , , , , , , , ,	From	То	Experience	
1	Raja Doraisingam Government Arts College, Sivagangai	02.07.2008	Till Date	14 Years 6 Months	

## 12. Publications:

S.No.	Title	Name of the Journal	ISSN / ISBN	Year
1.	Bio-protein fuctionalization of ZnO nanoparticles using chicken egg albumin and bovin serum albumin for enrichment bioactivity  A. Dhanalakshmi, B. Natarajan, D. Ragavan, A. Palanimurugan*	Materials Today: Proceedings	2214-7853	2022
2.	Synthesis and characterization of favored transition metal ions using Datura metel seed extracts and its better antimicrobial activity B. Sithi Asma, A. Palanimurugan, A. Dhanalakshmi, S. Thangadurai*	Materials Today: Proceedings	2214-7853	2022
3.	ZnO and Alkaline Earth Metal (Mg) doped ZnO nanoparticles for antibacterial activity, structural and thermal studies. G. Senthamilselvan, A. Palanimurugan, A. Dhanalakshmi and A. Cyril	Journal of Advanced Scientific Research, 13 (3), 190-193, 2022.	0976-9595	2022
4.	Potentially active metal of cobalt, copper and zinc complexes derived from Schiff base ligand of 3-ethoxy-2-hydroxy-benzaldehyde and aniline for their anticancer activity G. Senthamilselvan, B. Sithi Asma, A. Dhanalakshmi and A. Cyril	Journal of Advanced Scientific Research, 13 (2), 76-84, 2022.	0976-9595	2022
5.	Green synthesis of Cynodon Dactylon capped concentrations on ZnO nanoparticles for antibacterial activity, ROS/ML-DNA treatment and compilation of best controlling microbes by mathematical comparisons T. Meenatchi, A. Palanimurugan, A. Dhanalakshmi, V. Maheshkumar and B. Natarajan.	Chemical Physics Letters, 137429, 2020.	0009-2614	2020
6.	Perchlorate Contamination Assessment and Hypothyroidism in Rat Studies using water samples collected around Kovil Patti, Tuticorin District of Tamil Nadu, India, B. Karthikprabu, A. Palanimurugan, A. Dhanalakshmi, K. Kannan and S. Thangadurai	Microchemical Journal, 154, 104570, 1-7, 2020.	0026-265X	2020

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7.	Electrochemical behavior, structural, morphological, Calf Thymus-DNA interaction and invitro antimicrobial studies of synthesized Schiff base transition metal complexes, A.	Heliyon, 5, e02039, 1-10, 2019.	2405-8440	2019
	Palanimurugan, <b>A. Dhanalakshmi</b> , P.Selvapandian and A. Kulandaisamy,			
8.	Efficacy of Saccharides biotemplate on Structural, Morphological, Optical and Antibacterial property of ZnO Nanoparticles. <b>A.Dhanalakshmi</b> , A.Palanimurugan and B.Natarajan	Materials Science and Engineering: C Materials for Biological Applications, 90, 95-103, 2018.	0928-4931 1873-0191	2018
9.	Structural and Optical Characterization of ZnO and Glucose Capped ZnO Nanoparticles. A. Dhanalakshmi, S. Thanikaikarasan, B. Natarajan, V. Ramadas, T. Mahalingam, Delfeena Eapen and P.J. Sebastian.	Journal of New Materials for Electrochemical Systems, 21, 001-005, 2018.	2292-1168	2018
10.	Influence of Mn dopant concentration on film thickness, structural, morphological, compositional and optical properties of zinc oxide thin films.  A.Dhanalakshmi, S.Thanikaikarasan and B.Natarajan	Journal of Materials Science: Materials in Electronics, 1-8, 2017.	1573-482X	2017
11.	Enhanced Antibacterial effect using carbohydrates biotemplate of ZnO nano thin films.  A.Dhanalakshmi, A.Palanimurugan and B.Natarajan	Carbohydrate Polymers, 168, 191-200, 2017.	0144-8617	2017
12.	Effect of Cobalt Incorporation on Structural, Morphological, Optical and Antibacterial Properties of Rod Shaped ZnO Nanoparticles.  A.Dhanalakshmi, B. Natarajan and V.Ramadas	Springer Proceedings in Physics, 189, 205-217, 2017.	0930-8989	2017
13.	Mathematical analysis for antibacterial activity of ZnO nanoparticles and nanostructured thin films on selected cattle pathogens.  A.Dhanalakshmi, V.Ramadas, S.Kalaiselvi and B. Natarajan	Roots International Journal of Multidisciplinary Researches, 3 (1), 34-41, 2016.	2349-8684	2016
14.	Structural, morphological, optical and antibacterial activity of rodshaped zinc oxide and manganesedoped zinc oxide nanoparticles.  A.Dhanalakshmi,  A.Palanimurugan and B.Natarajan	Pramana Journal of Physics, 87(57), 1-9, 2016.	0304-4289	2016
15.	Synthesis, Characterization and Determining the Antibacterial Effect of ZnO Nanopowder Against the Pathogenic Bacteria's. A.Dhanalakshmi, B.Natarajan, V.Ramadas and S.Thanikaikarasan.	International Journal of Scientific Research, 4(6), 1-4, 2015.	2277 - 8179	2015

16.	Influence of Concentration on	Progress in Nanotechnology and	2306 - 0026	2014
	Structural and Optical Characteristics of Nanocrystalline	Nanomaterials, 3(1), 13-18,		
	ZnO Thin Films Synthesized by	2014		
	Sol-Gel Dip Coating Method. C.			
	Amutha, <b>A. Dhanalakshmi,</b> B.			
	Lawrence, K. Kulathuraan, V.			
	Ramadas and B. Natarajan			
17.	Structural and optical	International Journal of Current		
	characterization of pvp/zno nanocomposites prepared by sol-	Research, 5(11), 3408-3413,	0975-833X	2013
	gel dip-coating method.	2013.		
	<b>A.Dhanalakshmi,</b> C.Amutha,			
	B.Lawrence, K.Kulathuraan,			
	V.Ramadas and B. Natarajan.			

# 13. Paper Presented in Conferences/ Seminar:

S.No.	Title	Institution	Date & Year
1	Recent Trends in Materials Science and Applications, ICRTMSA-2016	International Conference of paper entitled 'Effect of Cobalt incorporation on Structural, Morphological, Optical and Antibacterial properties of rod shaped ZnO Nanoparticles' - International Conference on Recent Trends in Materials Science and Applications, ICRTMSA-2016 (29th February 2016) at Jamaal Mohammed College, Trichy.	29.02.2016
2	Mathematical Science and Applications	National Conference on Mathematical Science and Applications (1 <sup>st</sup> October 2016) at Mangayarkarasi College of Arts and Science for Women, Madurai.	01.10.2016
3	New Vistas in Material Science	International Conference on NVMS-2019 at Seethalakshmi Achi College for Women, Sivagangai, Pallathur.	12.09.2019
4	Advanced Material and Nanotechnology	International Conference on ICAMN-2020 at Auxilium College of Arts and Science, Regunathapuram, Karambakkudi, Pudukkottai.	21.01.2020
5	Advanced Materials	International Conference on Advanced Materials-2022 at St.  Joseph's College (Autonomous),  Thiruchirappalli.	11.02.2022 & 12.02.2022

## 14. Seminar / Conference / workshop / Attended:

S.No.	Institution	Date & Year
1	International Conference of paper entitled 'Fabrication and	2013
	Characterization of PVP/ZnO nanocomposites prepared by Sol-gel	
	Dip-Coating method'- International Conference of Thin films and	
	Applications (ICTFA) - 2013, Sastra University, Thanjavur.	
2	National Seminar on 'Emerging Trends in Materials Synthesis and	2013
	Characterization' (ETMSC 2013) at National College, Trichy.	
3	National Seminar on 'Role of nuclear energy for sustainable future	05.02.2016
	development and environmental safety' (5th February 2016) at Raja	
	Doraisingam Govt. Arts College, Organized by Department of	
	Physics, Sivagangai.	
4	National science academies lecture workshop on Emerging Trends in	03.01.2017 &
	Material Science (3 & 4 <sup>th</sup> January 2017) at Raja Doraisingam Govt.	04.01.2017
	Arts College, Organized by Department of Physics, Sivagangai.	
5	National Seminar on Highlights of Physics in Current Scenario (10 <sup>th</sup>	10.03.2020
	March 2020) at Raja Doraisingam Government Arts College,	
	Organized by Department of Physics Sivagangai.	
6	National Seminar on Materials for energy Applications (24 & 25 <sup>th</sup>	24.03.2022 &
	March 2022) at Raja Doraisingam Government Arts College,	25.03.2022
	Organized by Department of Physics, Sivagangai.	

### 15. Details of Research Projects:

Title	Sponsoring Agency	Amount	Responsibility
-	-	-	-

16. Ph.D Guidance/Supervisorship:

Name of scholar	Course	Area of research	Status
-	-	-	-

### 17. Seminar/ Conference/ Workshop Organised:

S.No.	Topic	Institution	Date
1.	Highlights of Physics in Current Scenario	RDGA College, Sivagangai, Tamilnadu, India	10.03.2020
2.	Materials for Energy Applications	RDGA College, Sivagangai, Tamilnadu, India	24 & 25 <sup>th</sup> March 2022

#### 18. webinar Attended

Sl.No	Topic And Organizing Institution	Date
1	Webinar - 01 Series on 'The Crystal Field Theory' in Chemistry, Raja	07.08.2020
2	Doraisingam Government Arts College, Sivagangai.  Webinar - 02 Series on 'Environment and Development', Raja	13.08.2020
	Doraisingam Government Arts College, Sivagangai.	13.00.2020
3	Webinar on Polymer and their applications (21st August. 2020) at	21.09.2020
	Raja Doraisingam Government Arts College, Organized by Department of Chemistry, Sivagangai.	
4	Webinar on Chemistry Behind Rocket (24th August. 2020) at Raja	24.09.2020
	Doraisingam Government Arts College, Organized by Department	
	of Chemistry, Sivagangai.	
5	Webinar on Principles of Mahatma Gandhi (2 <sup>nd</sup> October. 2020) at	02.10.2020
	Raja Doraisingam Government Arts College, Organized by	
	Department of Chemistry, Sivagangai.	
6	National webinar on 'Solving challenging problems in chemistry	14.06.2021
	using computational chemistry and machine learning', The	
	American College, Madurai.	

### 19. Orientation/Refresher/FDP/STP/MOOCs Attended

Sl.No	Name of the Programme	University	From	То
-	-	-	-	-

#### **20.** Resource Person:

Sl.No.	Topic	Delivered at	Period
-	-	-	-

### **21.** Members in Organization's : Nil

#### 22. Other Positions/Achievements:

- ✓ Editor/Reviewer in Universal Wiser/Elsevier Publishers
- ✓ Outstanding contribution in Reviewing awarded September 2018 from Materials Letters in Elsevier Publishers
- ✓ Certificate of Reviewing awarded August 2019 (1 Review) from Journal of Photochemistry & Photobiology B: Biology in Elsevier Publisher.

23/01/23

(Signature)