# Raja Doraisingam Government Arts College Sivagangai-630561 FACULTY PROFILE

#### **Department:**

1.	Name	: S.Mahalakshmi
2.	Father's / Husband's Name	: Dr.P. Selvaraj
3.	Designation	: Assistant Professor
4.	Age and Date of Birth	: 34 yrs, 10/05/1981
5.	Gender	: Female
6.	Address for Communication	: No – 423-24 A, Royal Garden,
		7 <sup>th</sup> Street, Karupayurani,
		Madurai – 625 020.
	Phone No :	94871 33086

Email – id : mahaphysics05@gmail.com

7. Educational Qualification :

S.No.	Course	University/College	Year of Passing
1.	B. Sc.	N. M. S. S. V. N. College, Madurai.	2001
2.	M. Sc.	School of Physics, Madurai Kamaraj Universiy, Madurai.	2003
3.	M. Phil	School of Physics,MaduraiKamarajMadurai.	2004
4.	Ph. D	School of Physics,MaduraiKamarajMadurai.	2019

8. Area of Specialization: Non-Linear Optics

#### 9. Experience :



S.No.	Name of Organization	From	То	Year of Experience
1.	School of Physics, Madurai Kamaraj Univeristy	2006	2007	1 yr
2.	Saraswathi Narayanan College, Perungudi, Madurai	2007	2009	2yrs 3 mmonths
3.	Raja Doraisingam Government Arts College, Sivagangai	2009	Till date	14 yrs

#### **10. Publications :**

S.No.	Title	Name of the Journal	ISSN / ISBN	Year
1.	Photoacoustic Spectroscopy as an NDT tool for thin films	NDT.net	Vol. 9, No. 06	June 2004.
2.	The effect of Dielectric function on a laser dressed donor impurity in an Inverse Quantum well	Journal of Computational and Theoretical Nanoscience	Vol. 7, No. 6	June 2010.
3.	Optical and Structural studies of BaTiO <sub>3</sub> and SrTiO <sub>3</sub>	Journal of Nano Science and Nano Technology	Vol. 2, Issue 6, Pp. 735-738, ISSN 2279-0381	Feb. 2014.
4.	Preparation of meta-stable phases of barium titanate by sol-hydrothermal method	AIP advances	Vol. 5, issue 11, 117119	Nov. 2015
5.	Misidentification of hexagonal phase as barium carbonate during chemical synthesis of barium titanate nanopowders	Materials Today: Proceedings	https://doi.org/ 10.1016/j.matp r.2019.06.713	2020
6.	Influence of tin(IV) doping on structural and optical properties of rhombohedral barium titanate (BaTiO3)	Materials Today: Proceedings	https://doi.org/ 10.1016/j.matp r.2019.05.302	2021

7.	One step solvothermal synthesis and	Materials	https://doi.org/	2021
	characterization of rGO/NiO	Today:	10.1016/j.matp	
	nanocomposites	Proceedings	r.2019.06.004	
8	Enriched second-harmonic generation	Journal of	https://doi.org	2022
	in meta-phase barium titanate nanostructures synthesized by sol-gel		/10.1016/j.jallc	
	hydrothermal method	Compound	om.2022.16817	
			1	
9	10 - Heavy metal oxide glasses and	https://www	https://doi.org	2022
	their optoelectronic applications	.sciencedirec	/10.1016/B978	
	(infrared transmission, luminescence,	t.com/scienc	-0-323-85824-	
	nonlinear optical susceptibilities, etc.)	e/book/9780	3.00012-9	
		323858243		

### **11. Paper Presented in Conferences/ Seminar** :

S.No.	Title	Institution	Date & Year
1.			
1.	State Level Seminar on "Solar Energy Applications"	P. G. and Research Department of Physics, The Madura College	24 <sup>th</sup> December 2009.
2.	Regional Conference on Photoacoustics in Condensed Matter Physics and NDT(PAC- 2004)	School of Physics, Madurai Kamaraj University	March 8 & 9,2004.
3.	"National Seminar on Frontier in Nanomaterials and Biosensors (NSFNMB 10)"	Department of Bioelectronics and Biosensors, Alagappa University, Karaikudi	4 <sup>th</sup> -5 <sup>th</sup> March 2010.
4.	International Conference on Nano Science and Nano technology.	Coimbatore Institute of Technology, Coimbatore jointly with Centre for Research and Advanced studies of IPN- Mexico	6 <sup>th</sup> -8 <sup>th</sup> July, 2011
5.	International Conference on Advanced Materials (ICAM	PSG College of Technology, Coimbatore.	2011

	2011),		
6.	International Conference on Advanced Materials, Processing and Devices (AMPD-2013)	Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Madurai.	15-16 July, 2013
7.	International Conference on	PG & Research Department	14 <sup>th</sup> & 15 <sup>th</sup>
	Nano Electronic Science &	of Electronics, Sri Vasavi	Feb-2014
	Technology (ICNEST 2014)	College, Erode, Tamilnadu	
8.	National Seminar on X-ray	School of Physics, Madurai	29 <sup>th</sup>
	Crystallography (NSXC-2014)	Kamaraj University, Madurai	september-1 <sup>st</sup>
			October 2014
9.	International Conference on	Madurai Kamaraj University,	11-12
	Advanced Functional	Madurai	December-
	Materials for Energy,		2017
	Environment and Biomedical		
	Applications AFMEEB-2017		
10.	National Symposium on	MRSI Trichy Chapter &	14-16 <sup>th</sup>
	Advances in Functional and	Centre for High Pressure	February-
	Exotic Materials	Research, Bharathidasan	2018
		University, Tiruchirapalli.	
11.	International Conference on	Department of Physics, The	7-8 January
	Exploring Nanostructures for	Gandhigram Rural Institute,	2019.
	Enhanced Power Conversion	Gandhigram	
	Efficiency of Solar Cells		
	(ICENES-2019)		
12.	International Conference on	University of Jaffna, Sri	6-8 <sup>th</sup>
	Advanced Materials for Clean	Lanka	February-
	Energy & Health Applications		2019
	(AMCEHA-2019)		

S.No.	Institution	Date & Year
1.	"Opportunities and National Facilities in Condensed Matter Physics" conducted by the School of Physics under the Departmental Research Support by University Grants Commission.	17-18 March, 2003
2.	"Recent Trends in Condensed Matter Physics" (RTCMP-2010-State Level ) at School of Physics under UGC-DRS-Phase III Programme.	15-16, February, 2010
3.	International Conference and Workshop on New materials and Devices for Photovoltaic Applications" (ICWNMDP-2011) organized by the Department of Materials Science, School of Chemistry, Madurai Kamaraj University, Madurai.	10-12 <sup>th</sup> February 2011,
4.	Attended orientation course conducted by TANSHE and UGC Academic Staff college University of Madras	09.07.2009 to 05.08.2009.
5.	Attended refresher course conducted by Academic Staff college, Madurai Kamaraj University	10.11.2010 to 30.11.2010
6.	Attended NSS Refresher Course conducted by Academic Staff College, Madurai Kamaraj University	27.01.2015 to 16.02.2015.
7.	Refresher Course, UGC – Sponsored Refresher course conducted by Academic Staff College, Madurai Kamaraj University, Madurai.	18.12.2018 to 07.01.2019
8.	A two day Science Academie's Lecture Workshop on Emerging Trends in Material Science, Department of Physics, Raja Doraisingam Govt. Arts College, Sivagangai.	3-4 <sup>th</sup> January 2017
9.	Solar Cells, Materials and Modelling, MHRD Scheme: Global Initiative for Academic Networks (GIAN), Dept. of Materials Science, School of Chemistry, Madurai Kamaraj University, Madurai.	May 29-June 10, 2017.
10.	One day International Conference on Recent trends in Materials Science and Application held at Sri Meenakshi Govt. Arts College for Women, Madurai	6 <sup>th</sup> January 2017

# 12. Seminar / Conference / workshop / Attended:

11	MRSI Trichy Chapter & Centre for High Pressure Research,	held on14th-	
	Bharathidasan University, Tiruchirappalli-62004	16th, February	
		2018.	
12	Department of Physics, The Gandhigram Rural Institute (Deemed	held on January	
	to be Universit), MHRD,Gandhigram-624302,	7-8, 2019.	
13	Western Norway, University of Applied Sciences & University of	held on	
	Jaffna, Sri Lanka,	February 6-	
		8,2019	

#### **13. Details of Research Projects** :

Title	Sponsoring Agency	Amount	Responsibility
Search for Novel Non- Linear Optical materials	UGC-Minor Research Project	Rs. 3, 05, 000/-	
SEARCH FOR NOVEL METHOD TO SYNTHESIZE ZINC TITANATE FOR DYE SENSITIZED SOLAR CELL APPLICATION	TANSCHE Sponsored Students project Scheme 2021-2022	Rs. 7500/-	

# 14. Ph.D Guidance/Supervisorship: ------

Name of scholar	Course	Area of research	Status

# 15. Seminar/ Conference/ Workshop Organised: ------

S. No.	Торіс	Institution	Date
1	National Science day	PG & Research Department of Physics,	22nd february
	(Acted as organising	Raja Doraisingam Govt. Arts College,	2018
	committee member)	Sivagangai	
2	National Science day	PG & Research Department of	27.02.2020

	(Acted as organising	Physics, Raja Doraisingam Govt. Arts	
	committee member)	College, Sivagangai	
3	Physics Alumni sponsored one day national seminar on "High lights of Physics in current scenario" (Acted as organising committee member)	PG & Research Department of Physics, Raja Doraisingam Govt. Arts College, Sivagangai	10th march 2020
4	Webninar (Acted as Program co- ordinator)	PG & Research Department of Physics, Raja Doraisingam Govt. Arts College, Sivagangai	12.08.2020
5	Advanced Physics Quiz Programme-5 (Acted as Program co-ordinator)	PG & Research Department of Physics, Raja Doraisingam Govt. Arts College, Sivagangai	14.06.2020
6	TANSCHE sponsored two day National Seminar on "Materials for Energy Applications" (Acted as Program co- ordinator)	PG & Research Department of Physics, Raja Doraisingam Govt. Arts College, Sivagangai	24.03.2022, 25.03.2022

### 15. Resource Person: ------

Sl.No.	Торіс	Delivered at	Period
1.	Non-Linear Vs Linear Optics	VVV College for	July-2019
		Women,	
		Virudhunagar	
2.	Nano Materials	Dept. of Physics,	Dec-2018
		Govt. Arts College	
		for Women,	
		Sivagangai	
3.	Thermodynamics ( for School	R. D Govt. Arts	Mar-2019
	teachers training programme)	College,	
		Sivagangai	

16. Members in Organization's : -----

### **17. Other Achievements: ----- Has cleared SET examinations**

(Signature)