CAUVERYCOLLEGE FOR WOMEN (AUTONOMOUS) STAFF PROFILE

PERSONAL INFORMATION

1. Name : Dr. R. MEKALA

2. Date of Birth : 24/10/1990

3. Address :

ant Professor,
d Department of Physics,
ry College for Women (Autonomous),
irappalli-620018.
l: mekala.phy@cauverycollege.ac.in
]

ACADEMIC INFORMATION

4. **Designation & Department**: Assistant Professor & Physics

5. Educational Qualification:

Degree	Grade/Class	University Rank	Year of passing	College / University
Ph.D.			2022	Presidency College, Chennai-600 005
M.Sc	First Class		2014	Bharathidasan University, Trichy-620 024
B.Sc.	Exemplary	1	2012	Cauvery College for Women, Trichy-620 018

6. Researcher ID:

Google Scholar ID	Scopus ID	Web of Science Researcher ID	Orcid ID	Vidwan ID	Mendeley	Publons
cKVTPK4A AAAJ	57195129101	AAC-9318- 2020	https://orcid.or g/0000-0003- 1617-0023	https://vidwan.infl ibnet.ac.in/profile/ 205993	https://www.mend eley.com/search/? page=1&query=m ekala&sortBy=rel evance	https://publons.co m/researcher/3362 198/mekala- rajasekar

7. Experience :

S. No.	Name of the Institution	Date of Joining	Years of Experience
1.	Cauvery College For women, Trichy-620 018	10/07/2019 to till date	02 Years 9 months

8. Area of Specialization : Nanomaterials9. Language Known : Tamil, English

10. Subject Taught

	1. Thermal Physics & Statistical Mechanics			
	2. Nuclear Physics			
	3. Microprocessor and 'C' Programming			
	4. Elements of Theoretical Physics			
	5. Optics and spectroscopy			
	6. Atomic and Molecular Physics			
Undergraduate Level	7. Material Science			
	8. Medical Physics			
	9. Applied physics-I			
	10. Applied physics-II			
	11. Skill Based Elective			
	12. Digital Computer Fundamentals			
	13. Cell Phone Servicing			
Post Graduate Level	1. Numerical Methods and C++ Programming			
	2. Solid State Physics			
	3. Nanophysics			

11. Research Supervision

		Thesis		
Degree	Tree University from where guide ship obtained	Completed(in numbers)	Year of Completion	Pursuing (in numbers)
M. Phil	-	-	-	-
Ph. D	-	-	-	-

12. Details of Publication

S.No.	Journal Name &	Year of	ISSN	Title of the Paper	Impact
	Volume, Page	Publication	Number		factor
1.	International Journal of Nanomaterials and Biostructures, Vol. 6 (1), p. 37	2016	2277-3851	Influence of Li, Ag dopants assisted sol-gel synthesis of sheet, ball like morphology of MgO nano structures and their optical properties	
2.	International Journal of Nanomaterials and Biostructures, Vol. 7 (1), p. 07	2017	2277-3851	Influence of Dysprosium doping on Structural, Morphological Properties and antibacterial activity of Zirconia Nanoparticles synthesized via Co- precipitation Process	
3.	International Journal of Nanomaterials and Biostructures, Vol. 7 (1), p. 12	2017	2277-3851	Morphological and Antibacterial Activities on Ceria doped ZrO ₂ nano powders synthesized using coprecipitation Method.	
4.	Optik, Vol. 145, p. 142	2017	0030-4026	Synthesis, characterization and antibacterial activity of sodium and boron doped zirconium oxide nanosphere by a liquid phase method.	2.443
5.	Journal of Inorganic and Organometallic Polymers and Materials,Vol. 27, p. 1950.	2017	1574-1443	Effect of various ionic surfactants mediated ZrO ₂ nanostructures and their structural, morphological and optical properties under UV irradiation.	3.543
6.	Journal of Alloys and Compounds, Vol. 741,	2018	0925-8388	Effect of pure and REM: (Nd, Ce)-doped Dy ₂ O ₃ NPs via hydrothermal	

	p. 1055.			method and their magnetic, optical, electrochemical, antibacterial and photocatalytic activities.	5.316
7.	Materials Today Proceedings, Vol. 5, p. 8843	2018	2214-7853	Characterization and Antibacterial property of Rare Earth (Dy and Ce) doping on ZrO ₂ nanoparticles Prepared by Co-precipitation Method.	
8.	Materials Today Proceedings, Vol. 5, p. 8803	2018	2214-7853	Studies on structural, morphological, optical and antibacterial activity of pure and Cu-doped MgO nanoparticles synthesized by co-precipitation method	
9.	Optical Materials, Vol. 122, p. 111718	2021	0925-3467	Aqueous and organic media assisted Ce:ZrO ₂ nanoparticles by precipitation and its structural, morphological, optical, and catalytic activities	3.08

13. Details of Papers Presented:

Date	Organizer	Name of the seminar	Paper Name
28-02-2015	PG and Research Department of Physics, Pachaiyappa's College, Chennai.	National conference on Recent Trends in Physics and Materials (NCRTPM-2015).	P-type and N-type semiconductor metal oxide nanomaterials synthesized by the facile solvothermal process. -Poster Presentation
06-06-2016 to 08-06-2016	PG and Research Department of Physics, St. Thomas College, Palai, Kerala.	2 nd International conference on Materials Science and Technology (ICMST-2016).	Synthesis and antibacterial activity of Baddeleyite and rare earth metal doped Baddeleyite by wet chemical method. -Poster Presentation
5-02-2017 to 17-02-2017	Department of Chemistry, SRM University, Chennai.	International conference on Recent Advances in Material Chemistry (ICRAMC-2017).	Preparation, characterization and antibacterial property of rare earth (Dy and Ce) doping on ZrO ₂ nanoparticles prepared by coprecipitation method.

			-Poster Presentation
21-02-2017 to 23-02-2017	Department of Physics, National Institute of Technology, Tiruchirappalli.	International conference on Membrane Technology and its applications (MEMSEP-2017).	Synthesis and study of electrochemical properties of cationic surfactant assisted ZrO ₂ nanoparticles. -Poster Presentation
08-03-2017 to 10-03-2017	Department of Physics, Centre for Materials for Electronics Technology, Pune.	International conference on Advanced Rechargeable Batteries and Allied Materials (ICARBM-2017).	A simple route utilizing surfactant-assisted templating coprecipitation process for synthesis of Baddeleyite nanoparticles. -Poster Presentation
09-08-2017 to 11-08-2017	Department of Physics, SRM University, Kattankulathur, Chennai,	International conference on Nanoscience and Nanotechnology (ICONN- 2017).	A study on the effect of simple homogeneous precipitation over nanosize dysprosium oxide and its properties. -Poster Presentation

14. Details of Seminars / Conferences / Workshops Attended:

Date	Organizer	Title of the Conference / Seminar / Workshop	LEVEL International / National / Regional / State Level	Торіс
29-01-2015 to 30-01-2015	Department of Physics, Hindustan University, Chennai	NCAMA 2015	National Conference	Advanced Materials and its Applications
02-09-2016 to 03-09-2016	Department of Physics, SRM University, Ramapuram Campus, Chennai	Problem Solving Approach	Two Days Workshop	Materials Characterization Techniques [Problem Solving Approach]
05-01-2017 to 07-01-2017	Department of Chemistry, Sathyabama University, Chennai, in association with CSIR –	WIIM-2017	Three Days Workshop	Interpretation of Instrumental Methods (WIIM-2017)" (UV, TGA, DSC, BET Surface area,

28-08-2021	National Metallurgical Laboratory Madras Centre and Kunash Instruments Pvt. Ltd., Micromeritics. PG & Research Department of Physics, Pachaiyappa's College, Chennai	-	National Webinar	Particle Size Distribution, Zeta Potential Measurements, Contact Angle Measurements) Optical Quality Crystals for Device Fabrication
27-09-2021 to 01-10-2021	PG & Research Department of Physics, Holy Cross College (Autonomous), Tiruchirappalli	-	Five Days International Faculty Development Program	Virtual Workshop on Advanced Characterization Techniques and Computational Modeling
04-10-2021	PG & Research Department of Physics & B. Voc Electronic Circuit Designer and Electrician, Seethalakshmi Ramaswami College (Autonomous), Tiruchirappalli	-	National Webinar	Opportunities and Approaches to Pursue National and International Fellowship
20-10-2021 to 30-10-2021	Department of Physics, Sathyabama Institute of Science and Technology, Chennai	-	Two Days International Faculty Development Program	Pursuit of Excellence in Research and Advanced Technology
29-10-2021 to 02-11-2021	Department of Physics, B. S. Abdur Rahman Crescent Institute of Science and Technology, Chennai	-	State Level Online Workshop	Fundamental Aspects of Quantum Mechanics

15. Details of Seminars / Conferences / Workshops Organized

Date	Title	National / International	Topic
			-

16. Details of Orientation / Refresher Course Attended :

Date	Title of the Course	Organizer
20-09-2021	Energy Management and Audit	Department of Energy and
to 24-09-2021		Environment, National Institute of
2.09 2021		Technology, Tiruchirappalli

17. Details of Study Materials / Books written and published

S.No	Book Title	ISBN Number	Publisher	Year	Mode

18. Details of Chairing as Resource Person

Date	Title of the Seminar/Conference	Session Chaired

19. Administrative Positions held in the College

Nature of Position	Year

20. Details of in charge / Participation in Extracurricular Activities

(NSS, NCC, Sports, Games, Voluntary Association and Cultural Activities) :

Nature of Activity	Period of In charge
Extra-Curricular Activities (Competition Incharge)	2019-2021 (02 Years)
Placement Incharge	2021-2022 (01 Year)

- 21. Details of Participation in Consultancy, Training, Development etc. : --
- 22. Details of Membership in Academic Bodies/ Board of Studies : --
- 23. Details of Membership of Professional Bodies : --
- 24. Countries visited academically : --
- 25. Any other information if any : --