CURRICULUM VITAE

Dr. S.KARTHIKA RANI

Assistant Professor and Head Department of Physics Cardamom Planters' Association College Bodinayakanur-625531 Tamilnadu

E-mail: karthikaranisaravanan@gmail.com

Mobile: +91 8610390644



15–5-11S, Thendral Nagar Palani Chetti Patti Theni - 625531 Tamilnadu India.



Personal Details

Date of Birth : 21-07-1979

Gender & Marital Status : Female & Married

Community : BC
Nationality : Indian
Place of Birth : Dindigul

Educational Qualifications

Degree/	Main	University/Institute	Year of	Percentage /
Examination	Subject		Passing	Grade
10^{th}	State	St. Joseph's Girls Hr. Sec. School,	1994	89
	Board	Dindigul		
12 th	State	St. Joseph's Girls Hr. Sec. School,	1996	86
	Board	Dindigul		
Under	Physics	Sri Visalakshmi College for	1999	76
Graduate		Women, Udumalpet		
B.Sc.,				
Post Graduate	Physics	Fatima College, Madurai	2001	75

M.Sc.,				
B.Ed.,	Education	Mysore University	2002	85
P.G.D.C.A.,	Computer	Madurai Kamaraj University	2003	65
	Science			
M. Phil.,	Physics	Manonmium University,	2006	65
		Thirunelveli		
M.Ed.,	Education	Annamalai University	2015	88
		Chidambaram		
Ph.D.,	Physics	Annamalai University	2019	Highly
				Commanded

Fields of Research Interest

- ➤ Nano Science and nanotechnology
- Semiconductor Physics and oxides
- Photovoltaic (Renewable energy materials)
- Energy Storage
- > Photo Dye Degradation

Present Position

➤ Assistant Professor and Head, Department of Physics, Cardamom Planters' Association College, Bodinayakanur.

Professional Experience

➤ Around 10+ Years of teaching experience.

Positions Held:

➤ Acted as a **Resource person** and Organising Committee Member in the Young Student Scientist Programme (YSSP – 2022), Tamil Nadu state Council for Science and Technology conducted at Cardamom Planters; Association College, Bodinayakanur during 18th May , 2022 to 1st June, 2022.

Acted as a **Co - Convenor** of International Conference on Recent Trends on Solar Cells on 12th & 13th January 2022 conducted by Tamil Nadu state Council for Science and Technology and Department of Physics, Cardamom Planters' Association College, Bodinayakanur.

Papers Published in International / National Journals

- 1. Karthikarani.S and Suresh.G., "Green Synthesis, Characterization And Its Antibacterial Activity of Copper Oxide Nanoparticles Using Ocimum Sanctum Leaves And Piper Nigrum Extract" International Journal for Research in Applied Science & Engineering Technology., 5(12),411-419, (2017). "Recent Trends in Physics" UGC sponsored National Seminar, Jayaraj Annapackiam College for Women (Autonomous) Mar 23rd 24th, 2009.
- 2. Karthikarani.S and Suresh.G., "Green synthesis of copper oxide nanoparticles using Ocimum sanctum and Vitex negungo leaf extrct: The study of its photocatalytic dye degradation activity", International Journal Of Advance Engineering And Research Development., 5(01), 821-836, (2018).
- 3. Karthikarani. S and Karthiga. R., Hibiscus Rosasinesis Flower Extract Mediated Ni/ZnO nanoparticles for Visible Light Driven Photocatalytic Degradation of Roseaniline Dye as a Pollutant, Journal of Water and Environmental Nanotechnology 8 (3), 229-240.
- 4. Karthikarani.S and Pandimeena.T., Drug Delivery Application of 5-Fluorouracil Loaded α- Fe₂O₄ Nanoparticles by Using Hydrothermal method., Journal of Interdisciplinary Cycle Research 15 (3), 298-307.
- 5. Karthikarani.S. Structural optical properties of europium doped copper oxide nanoparticles by green synthesis method. Dogo Rangsang Research Journal 10 (Issue 05 N0.2 May 2020), 40 47.
- 6. Karthikarani.S. Karthiga.R., Plant mass Mediated Synthesis of metal Tungstate nanoparticles: A shot Review on its synthesis, Characterization, and Photocatalytic

Applications. Futuristic Trends in Renewable & Sustainable Energy. eISBN:978–93-6252–603-8 IIP Series, Volume 3, Book 2, part, 1 chapter 7.

Participated in Conferences/Seminars/Workshops

- 1. National Conference on Gravitate Applications in Nanotechnology (GAIN'16), "Green Synthesis Of Copper Oxide NPs Using Holy Basil".
- 2. International conference on challenges in biotechnology and chemical engineering, (ICBC- December 4th 5th, 2016), Annamalai university, Chidambaram, "Green synthesis of CuO NPs using Indian Borage leaf extraction and study their photocatalytic activity".
- 3. International conference on nanomaterials and molecular research (December 9-10, 2016), St. Joseph's College of Arts and Science, Cuddalore, "Green synthesis of CuO Nanoparticles using Aloe Vera leaf extraction and study their photocatalytic Activity".
- 4. National Seminar on recent advances in chemical and environmental research (RACE January 20th 21st, 2017), Annamalai university, Chidambaram, "Green synthesis of CuO NPs using Piper Betal leaf extraction and study of their photocatalytic and antibacterial activities".
- 5. International Conference on Recent Trends in Synthetic Methods and Material Chemistry, Annamalai University, Chidambaram, (February 2nd & 3rd, 2018), A Green approach for the synthesis of copper oxide nanoparticles using aqueous leaf extract of Ocimum sanctum and its photocatalytic degradation of Rhodamine B dye.
- 6. National Workshop on Recent Developments in Science and Engineering Material (NWRDSEM- 1 MARCH, 2017) Engineering Physics Section, Faculty of Engineering and Technology, Annamalai University, Chidambaram.
- 7. International conference on Expanding Frontiers in Chemistry (EFC 23), PG Department of Chemistry, Arul Anandar College, Karumathur, Madurai, (February 15th & 16th, 2023), Structural properties and Photocatalytic degradation

efficiency of CuO and europium doped copper oxide nanoparticles by green

synthesis method.

8. First international Conference on Environmental Issues in Business and Road map

for Innovative Solutions (ICEIB - 2022), Department of Commerce, Government

Arts College for women, Nilakottai on 2nd May 2022, Green synthesis of CuO NPs

from Piper nigrum Powder extract and its photo catalytic activity against

Methylene Blue Dye.

9. International Conference on recent Trends in Solar Cells (ICRTSC'2023).

Department of Physics, Cardamom Planters' Association College, Bodinayakanur,

Fabrication of Copper Oxide Nanoparticles Using Aegle Marmelas extract for

Photodegradation on 12th and 13 January 2023.

10. One day State - level Technical Workshop on Intellectual Property Rights (IPR),

Tamil Nadu State Council for Science and Technology, Chennai, Technology

Information, Forecasting and Assessment Council and Cardamom Planters'

Association College, Bodinayakanur on 22nd February 2023.

11. SERB - Sponsored International Conference on Recent Advancements in materials

Science and Technology (ICRAMST'24) organized by karpagam Academy of

Higher Education, Coimbatore, Tamilnadu on 29th and 30th January 2024. Green

synthesis, Characterization and photocatalytic Activities of Co Doped Akaganeite

using Azadiaachia Indica leaf extract under Visible light.

Declaration

I can do the job with great sense of responsibility and always try to make a positive

contribution and efforts to prove myself as an asset to the organization.

Place: Theni

yours faithfully,

Date:

(Dr. S. KARTHIKARANI)

Assistant Professor and Head Department of Physics Cardamom Planters' Association College Bodinayakanur