

Staff Profile

Name: Dr.D. SIVAGAMI
Position: Guest Lecturer
Department: Physics
Email: dssivagami@gmail.com
Phone: 9585877126
Office Location: Namakkal



Education

- Degree: Ph.D

- University: Bharathiar University
- Year of Graduation: 2021

- Degree: M.Phil.,

- University: Periyar University
- Year of Graduation: 2015

- Degree: M.Tech.,

- University: Anna University
- Year of Graduation: 2010

- Degree: M.Sc.,

- University: Bharathidasan University
- Year of Graduation: 2008

Professional Experience

- Guest Lecturer (Jan'2023-Till Date), Department of Physics, N.K.R Government of Arts College for Women, Namakkal.
- Assistant Professor (Aug'2021-Jan'2023), Department of Physics, Hindustan College of Arts & Science, Coimbatore

- Research Scholar (July 2016-Apr'2021), PSG Institute of Advanced Studies, Coimbatore.
- Assistant Professor (Mar'2012-June 2016), Department of Physics, Rathinam Technical Campus.
- Assistant Professor (June 2010–Mar' 2012), Department of Physics, Shreenivasa Engineering College, Dharmapuri.

Research Interests

- Fabrication of Inorganic Solar Cells Device
- Synthesis of Carbon Quantum Dot / Graphene Nano-composites
- Synthesis of Metal Nano-composites
- Development of nanostructure on Glass Surface by Antireflection Coating and Etching Method

Publications

Journal Article Publication:

1. **D. Sivagami** and B. Geetha Priyadarshini, Role of Carbon Quantum Dots for the Improved Photo-Absorption Performance of $\text{Cu}_2\text{CoSnS}_4$ Superstrate Solar Cell Device, Material Advances 2022,3, 2405-2416
2. **D. Sivagami**, Kallol Mohanta K and B. Geetha Priyadarshini, Quaternary chalcogenide/carbon composites for energy applications, Actual Problems of Solid State Physics, Proceedings of the IX International Scientific Conference, 2021, 1, 244-250.
3. **D. Sivagami** and B. Geetha Priyadarshini, Composition Dependent Structural, Morphological, Optical and Electrical Properties of CdS: Co Window Layer Grown by Chemical Bath Deposition. Materials Science for Energy Technologies, 2020, 3, 709-718.
4. **D. Sivagami**, S. Thangamani, Kallol Mohanta, K. Mohanapriya, B. Geetha Priyadarshini, A Novel Synthesis of $\text{Cu}_2\text{CoSnS}_4$ - Carbon Quantum Dots (CCTS:CQD) Nano-composite Potential Light Absorber for Hybrid Photovoltaics, NanoTechnology, 2020, 31, 235401.
5. **D. Sivagami** and B. Geetha Priyadarshini, “Alkali Hydrothermal Etching Induces Nano-Structuring on Glass Surfaces with Improved Light Trapping,” International Conference on Precision, Meso, Micro and Nano Engineering (COPEN), 2019.
6. **D. Sivagami** and B. Geetha Priyadarshini, Origin of Thickness-Dependent Surface Currents in Nano-Structured CdS Thin Films Prepared by Chemical Bath Deposition, Advanced Science Engineering and Medicine, 2019, 11, 571–581.
7. **D. Sivagami** and B. Geetha Priyadarshini, Enhancing the Optical Behavior of Glass Surface by Creation of Microstructures in Single Step Hydrothermal Wet Etching, ChemistrySelect, 2018, 3, 11494–11504.

8. M. Righeira Carnegie, A. Sherine, **D. Sivagami**, S. Sakthivel, Anti-reflection Coatings with Enhanced Abrasion and Scratch Resistance Properties, Sol-Gel Science and Technology, 2016, 78, 176-186.

Conferences and Paper Presentations

1. **D. Sivagami**, “The Oxide based Nanomaterials for Supercapacitor Applications”, International Conference on “Emerging Trends in Science and Technology” 5th May 2022, Hindusthan College of Arts & Science. (Oral)
2. T. Karthikeyan, R. Vishalashi, N. Suresh and **D. Sivagami**, “Advanced CT Scanners for Better Imaging of the Heart”, 5th May 2022, Hindusthan College of Arts & Science. (Oral)
3. **D. Sivagami** and B. Geetha Priyadarshini, “Role of Carbon Nanostructure in Chalcogenides” in Two-day International Seminar on Sustainability issues in water and Energy-Nanotechnology Solutions,” 9 & 10th December 2019, PSG College of Technology, Coimbatore, (Poster).
4. **D. Sivagami** and B. Geetha Priyadarshini, “Optical, Morphological, Compositional and Vibrational Properties of Cadmium Sulphide Thin Films by CBD Technique for thin Film Solar Cell,” International Conference on Sustainable Energy Technologies (i- SET), 27 & 28th June 2018, Bharathidasan University, Trichy, (Oral).
5. **D. Sivagami** and B. Geetha Priyadarshini, “Comparison Studies on Morphology and Optical Properties of Thin Film CdS by Chemical Bath Deposition and Spin Coating Technique,” Material Research Society of India (MRSI), 14 & 16th February 2017, Bharathidasan University, Trichy, (Poster).
6. **D. Sivagami** and B. Geetha Priyadarshini, “Alkali Hydrothermal Etching Induces Nano-Structuring on Glass Surfaces with Improved Light Trapping,” International Conference on Precision, Meso, Micro and Nano Engineering (COPEN), 12 & 14th December 2019, IIT Indore, (Oral).
7. **D. Sivagami** and B. Geetha Priyadarshini, “Alkaline etching of Soda Lime Glass Surface for Improved Optical Performance,” National Conference on Advanced Materials (NCAM), 12 & 13th December 2017, PSG College of Technology, Coimbatore, (Poster).
8. **D. Sivagami** and B. Geetha Priyadarshini, “Enhanced Light Trapping in Hydrothermally Etched Glass Substrate using ultrapure water”, 4th International Conference on Nanoscience and Nanotechnology (ICONN), 9-11th August 2017, SRM University, Chennai, (Poster).
9. **D. Sivagami** “Nanorobotics used in Medical Field”, National seminar on ‘Advancements in Bioelectronics and Bio Sensors’ at Alagappa University Karaikudi on 2009, (Oral).
10. **D. Sivagami**, “Reduction of Global Warming Using Nanoparticles” Anna University Coimbatore on 2009, (Poster).

Awards and Honors

Best Poster Presentation

“Role of Carbon Nanostructure in Chalcogenides” in Two-day International Seminar on Sustainability issues in water and Energy- Nanotechnology Solutions,” 9 & 10th Dec’ 2019, PSG College of Technology, Coimbatore.

Courses Taught

UG-Physics

PG-Physics

Professional Memberships-Nil

Projects and Grants

Development of NiO nanoparticles for Supercapacitor Applications funded by Tamil Nadu State Council for Science and Technology (**TNSCST**) in 2022, Project Code: PS-459

Contact Information

Department of Physics, N.K.R Government of Arts College for Women, Namakkal.

- **Office Hours:** 10 am-4 pm

- **Office Phone:**

- **Email:** dssivagami@gmail.com

- **Website:**