

Faculty Profile

1. **Name :** G. Swetha
2. **Designation:** Assistant Professor of Physics
3. **Department:** Physics
4. **Age & DOB :** 27 & 09.06.1994
5. **Date of first appointment :** 02.12.2020
6. **Educational Qualification:**



| Degree / Diploma / Certificate | Subject | Name Of The Institution | Year Of Passing | Remarks |
|--------------------------------|---------|---|-----------------|---|
| B.Sc | Physics | ADM College for Women (A), Nagapattinam | 2015 | Distinction |
| M.Sc | Physics | ADM College for Women (A), Nagapattinam | 2017 | Distinction - Autonomous 2 nd Rank |
| Ph.D | Physics | D.G Government Arts College for Women, Mayiladuthurai | 2020 | Submitted |

7. Academic/Teaching Experience

| S. NO. | INSTITUTION | FROM – TO |
|--------|---|-------------------------|
| 1. | ADM College for Women (A), Nagapattinam | 02.12.2020 to Till date |

8. **Area of specialization:** Crystal Growth, Material Science and Biomedical applications
9. **Area of Research Interest:** Crystal Growth, Material Science and Biomedical applications

10. Papers Presentation

| S. NO. | NAME OF THE PAPER | ORGANIZED BY | DATE |
|--------|---|--|----------------------|
| 1. | Thermoanalytical and Calorimetric of the three polymorphs phase behavior of (E)-4-Fluoro-2[(Phenylimino) Methyl]Phenol Single crystal and Biomedical applications | international E- Conference on advancements in Materials science and technology, organized by the Sathyabama Institute of Science and Technology, Chennai. | Nov -23 to 25, 2020, |

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| 2. | Synthesis, Crystal Structure and Physical Properties of Three Polymorphs of (E)-4-Fluoro-2-[(Phenylimino)Methyl]Phenol and DSC Studies of the Phase Transition Kinetics” | National conference on synthesis and characterization of novel materials” organized by the Muthurangam Government Arts college, (Autonomous), Vellore | July 6 and 7, 2020 |
| 3. | Synthesis and characterization of (E)-4-Bromo-2[(Phenylimino) Methyl] Phenol and Biomedical Applications | International Conference on Natural Therapeutics (ICNT) 2020, D G Government Arts College, Mayiladuthurai. | Feb 6 th , 2020 |
| 4. | Synthesis and characterization of (E)-4-Bromo-2[(Phenylimino) Methyl] Phenol and Biomedical Applications” on Participation in “Materials Modeling using Quantum Espresso – Theory and Practice for beginner (QE19)”, | UGC Sponsored National level workshop on Government Arts College for Women, Kumbakonam | July 29 th and 30 th , 2019. |
| 5. | Identification of new Schiff base organic phase change crystal for thermochromic application”, | 5 th International Conference on Nano Science and Nano Technology (ICCON-2019), SRM Institute of Science and Technology, Chennai. | Jan 28 th - 30 th , 2019, |
| 6. | Thermal analysis of novel Schiff based phase change material | International Workshop on Materials Technology and Application on held at VIT, Vellore | Oct 11 th and 12 th , 2018, |
| 7. | Crystal growth and crystal structure of phase change material” | International Conference on Molecular structure of Nano and biomaterials (ICMSNBM-2018), Arignar Anna Government Arts College, Cheyyar. | Sep 28 th and 29 th , 2018 |
| 8. | Spectral properties of (E)-4-Bromo-2[(Phenylimino) Methyl] Phenol an organic crystal for thermochromic application - A Phase change crystal | National Conference on Recent Advances in Spectroscopy of Advanced Materials, on held at Bishop Moore College, Mavelikara, Kerala. | Sep 25 th - 26 th , 2018 |
| 9. | Designing the Phase change material with mechanical, microstructure and crystallography data | 1 st National Conference on Recent Advancements in Nanotechnology on National Institute of Technology (NIT), Puducherry. | Sep 19 th & 20 th , 2018 |

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| 10. | Thermal Analysis and Heat Capacity of Novel Schiff Base Soft Single Crystal (E) -4- Bromo -2 [(Phenylimino) Methyl] Phenol” | National Conference on Recent Trends in Physics of Materials (NCRTPM - 2018), Pachaiyappa’s College Chennai 600 030, Tamilnadu. | Feb 09 th , 10 th 2018 |
| 11. | Crystal Growth, Crystal Structure, Phase Transition and Optical Properties of 5FSA | National Symposium and 29 th Annual General Meeting of MRSI on Advances in Functional and Exotic Materials on conducted by MRSI collaborated with Bharathidasan university (BARD), Tiruchirappalli. | Feb 14 th , 16 th 2018 |
| 12. | Synthesis and temperature-induced structural phase transition in Schiff based soft materials | National Symposium and 29 th Annual general meeting of MRSI on Advances in Functional and Exotic Materials, on Feb conducted by MRSI collaborated with Bharathidasan university (BARD), Tiruchirappalli, and got Best proposal student’s award 2018. | 14 th , 16 th , 2018 |
| 13. | Synthesis and temperature-induced structural phase transition in Schiff based soft materials | National Symposium and 29 th Annual general meeting of MRSI on Advances in Functional and Exotic Materials, on conducted by MRSI collaborated with Bharathidasan university (BARD), Tiruchirappalli, and got <i>Best proposal student’s award 2018</i> . | Feb 14 th , 16 th , 2018 |
| 14. | Structural phase transition in the soft material crystal-thermal and XRD studies” | International Conference on Recent Advances in Applied Physics (ICRAAP)-2017 Annamalai University, Chidambaram. | Sep 21 st , 22 nd , 2017 |

11. Papers Publications

| No | Article | Name of the Journal | Year |
|----|--|---|------|
| 1. | Consecutive phase transition in the new polymorphic crystal 4F2PMP, acritical study of thermal stress in the crystal structure with DSC and VT-PXRD analysis | Materials Today: Proceedings, , Vol 47, Pg NO: A1–A, ISSN No 2214-7853 | 2021 |
| 2. | Synthesis, Thermal and Antimicrobial Activity of Novel Organic Single Crystal of (E)-4-Bromo-2-[(phenylimino)methyl]phenol Compound,. | Asian Journal of Chemistry; Vol. 32, No. 11, 2887-2892, https://doi.org/10.14233/ajchem.2020.22872 | 2020 |
| 3. | An analysis of thermal decomposition of (E)-4-Iodo-2-[(Phenylimino)Methyl]Phenol crystal compared to Thermogravimetry (TG), and Fourier transform infrared (FTIR) techniques, | <i>International Journal of Pharmaceutical Research</i> , pp:2400-2405. ISSN No 0975-2366 | 2020 |
| 4. | Synthesis and characterized optical, thermal and mechanical properties of (e)-4-methyl-2-(n-phenylcarboximidoyl) phenol compound and application for protein estimation, antimicrobial activity, | <i>International Journal of Advanced Research in Engineering and Technology (IJARET)</i> , 11(9), pp. 116-125. | 2020 |
| 5. | (E)-Iodo-2-[(phenylimino) methyl] phenol | <i>IUCr Data</i> (2019).1,×190788 | 2019 |
| 6. | (E)-4-Methyl-2-(N-phenylcarboximido-yl)phenol, | <i>IUCrData</i> (2018). 3, x180464. | 2018 |
| 7. | (E)-Fluoro-2-[(phenylimino) methyl] phenol | <i>IUCrData</i> (2017).1,×171671. | 2017 |
| 8. | Determination of Protein Concentration and Antimicrobial Activity of (E)-4-Methyl-2-(N-Phenylcarboximidoyl)Phenol Compound, | Proteus Journal, Vol 11, Issue 8 2020, doi.org/10.37896/pj11.08/006 | 2020 |
| 9. | Crystal Growth And Characterizations of Organic Schiff Based Crystal Of (E)-4-chloro-2[(phenylimino) Methyl] Phenol For Pharmaceutical Application, | The International Journal of Analytical and Experimental Modal Analysis, Vol XII, Issue IV, April/2020, doi:18.0002.IJAEMA.2020.V1 2I3.200001.0156574. | 2020 |