

**SRI SANKARA ARTS & SCIENCE COLLEGE**  
**ENATHUR, KANCHIPURAM**  
**STAFF PROFILE**  
**DEPARTMENT OF PHYSICS**



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|----|--|--|
| 1. | <b>Name of the Staff</b>                   | <b>Dr. R. RAJ KUMAR</b>  |
| 2. | <b>Designation</b>                         | <b>Assistant Professor</b>   |
| 3. | <b>Date of Joining</b>                     | <b>04.07.2022</b>  |
| 4. | <b>Mobile Number</b>                       | <b>9841499146</b>  |
| 5. | <b>E-Mail ID</b>                           | <a href="mailto:rrajkumar2390@gmail.com"><u>rrajkumar2390@gmail.com</u></a>              |
| 6. | <b>Nationality</b>                         | <b>INDIAN</b>  |
| 7. | <b>Academic Qualification</b>              | <b>M.Sc., Ph.D.,</b>   |
| 8. | <b>Field of Specialization</b>             | <b>Material Science</b>  |
| 9. | <b>Ph.D Thesis Title</b>                   | <b>SYNTHESIS, GROWTH AND CHARACTERISATION OF PIPERAZINIUM FAMILY NLO SINGLE CRYSTALS</b> |
|    | <b>Awarding University, Year of Award.</b> | <b>UNIVRSITY OF MADRAS, APRIL 2021</b>   |

**10. Work Experience (in chronological order):**

| S.No. | Name of the Institution                                     | Designation         | Period                          |
|-------|---|---------------------|---------------------------------|
| 1     | Sri Sankara Arts & Science College<br>Enathur, Kanchipuram. | Assistant Professor | 4-July 2022 to<br>till date.    |
| 2     | St. Joseph's College (Arts & Science), Kouv<br>Chennai-128. | Assistant Professor | 19-June 2019 to<br>30-June-2022 |
| 3     | Kumaran Polytechic College, Minjur,<br>Chennai-203.         | Lecture             | 8-July 2012 to<br>31July 2013.  |

**11. Other Academic and Administrative Responsibilities:**

| S.No. | Name of the Institution/Committee                           | Position               | Period                          |
|-------|---|------------------------|---------------------------------|
| 1     | St. Joseph's College (Arts & Science), Kouv<br>Chennai-128. | Placement Coordinator  | 19-June 2019 to<br>30-June-2022 |
| 2     | St. Joseph's College (Arts & Science), Kouv<br>Chennai-128. | Department Contributor | 19-June 2019 to<br>30-June 2022 |

**12. Publications:**

| S.No. | Title  | Journal   | Pages                 |
|-------|--|---|-----------------------|
| 1     | Growth, Optical, Mechanical, Dielectric and Thermal properties of Piperazinium Succinate Single Crystal for NLO optical applications                         | Journal Functional Materials and Bio molecules.     | 2(1)-2018 pp<br>18-24 |
| 2     | Optical, mechanical, dielectric and thermal properties of piperazinium benzoate single crystal for nonlinear applications.                                   | Journal of Optics, Optical Society of India         | 2017                  |
| 3     | Thermal, mechanical, optical and dielectric properties of piperazinium hydrogen phosphite monohydrate NLO single crystal                                     | Journal of Applied Physics A                        | 382                   |
| 4     | Piperazine-1,4-dium bis (4-nitrobenzoate) dihydrate  | IUCr Data (2017) : Structure Reports Online         | 2, x171291            |
| 5     | Structure, crystal growth and characterization of piperazinium bis(4-nitrobenzoate) dihydrate crystal for nonlinear optics and optical limiting applications | Journal of Molecular Structure 1179 (2019) 108-117. | 108-117.              |
| 6     | Synthesis, growth, frontier molecular orbitals, fracture mechanics and non linear optical studies of L-serine methyl ester hydrochloride single crystal      | AIP Conference Proceedings                          | 2100 (2019)<br>020043 |

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|---|---|---|---|
| 7 | Growth and characterisation of Benzimidazolium Saliciate: NLO property from a centrosymmetric crystal | Advances in Optical Technologies.                               | Volume 2015, Article ID 206325, 9 pages               |
| 8 | Piperazinium Hydrogen Phosphite Monohydrate NLO Single Crystal For Optical Limiting Applications      | Studies in Indian Place Names<br><i>UGC Care Listed Journal</i> | <i>ISSN: 2394-3114</i><br><i>Vol-40-Issue 20-2020</i> |

### 13. Awards / Distinction :

| S.No. | Name of the Award   | Venue  | Period                |
|-------|---|--|-----------------------|
| 1     | <b>Second prize</b> (Oral Presentation) in the UCG sponsored <i>National Conference On Smart Material</i> organized.  | PG and Research Department of Physics, Sacred Heart College, Tirupattur, Vellore District  | 11-12 September 2017. |
| 2     | <b>First prize</b> (Oral Presentation) in the <i>International conference on Physics of Advanced Materials and Molecules</i> (ICPAMM - 2020).                   | Department of Physics, Dr. Ambedkar Government Arts College Viyasarpadi, Chennai-39.       | 30-31 January 2020.   |
| 3     | <b>Best oral presentation award</b> in the International Virtual Conference on " <i>Innovative Strategies In Chemical Science And Technologies</i> (ISCST2020). | Department of Chemistry Bhaktavatsalam memorial college for women, Chennai - 80            | 27 - 28 June 2020.    |
| 4     | <b>Best PPT Presentation</b> in National Web Conference on <i>Synthesis and Characterization of Novel Materials</i> .   | PG & Research Department of Physics , Muthurangam Govt. Arts College (A) Vellore - 632 002 | 6 - 7 July 2020.      |
| 5     | <b>Best Achiever Award.</b>   | St. Joseph's College (Arts & Science), Kouvr, Chennai-128.                                 | 2021-22               |
| 6     | <b>Outstanding Performer Award.</b>   | St. Joseph's College (Arts & Science), Kouvr, Chennai-128.                                 | 2021-22               |
| 7     | <b>Excellency Award.</b>  | St. Joseph's College (Arts & Science), Kouvr, Chennai-128.                                 | 2021-22               |

### 14. Membership in Professional Bodies: NIL

| S.No. | Name of the Membership | Venue | Period |
|-------|------------------------|-------|--------|
| -     | -                      | -     | -      |
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|       |                        |       |        |

**15. Seminars Conferences organized /Participation:**

| S.No. | Program Attended   | Place  | Organized/<br>Participated | Period                |
|-------|--|--|----------------------------|-----------------------|
| 1     | National conference on Advance Materials Science.                            | Jerusalem College of Engineering, Chennai - 600 100.   | Participated               | 22nd July 2015        |
| 2     | Second International Conference on Material Science and Technology.          | ST. Thomas College, Palai, Kerela-686574.  | Participated               | 05-08 June 2016       |
| 3     | National Conference on Crystal Growth and Applications.                      | National college, Trichy, Tamilnadu  | Participated               | 18-19 October, 2010   |
| 4     | National conference on smart materials.                                      | of Physics, Sacred Heart College, Tirupattur, Vellore.   | Participated               | 1 -12 September, 2017 |
| 5     | International conference on Nanoscience and Nanotechnology.                  | Department of Physics & Nanotechnology, SRM University, Kattankulathur - 603 203.                            | Participated               | 09 -11 August 2017.   |
| 6     | International Conference on Recent Innovations in Multidisciplinary Studies. | St. Joseph's College (Arts & Science), Kouvr, Chennai-128.   | Organized                  | 4th March 2020.       |
| 7     | International Webinar on Recent Trends in Physics.                           | Department of Physics with Computer Applications, St. Joseph's College (Arts & Science), Kouvr, Chennai-128. | Organized                  | 12th June 2020.       |
| 8     | Fiber Lasers Technology and its Emerging Applications Webinar.               | Department of Physics with Computer Applications, St. Joseph's College (Arts & Science), Kouvr, Chennai-128. | Organized                  | 28th June 2021.       |
| 9     | Webinar on Raman Spectroscopy and its Applications.                          | Department of Physics with Computer Applications, St. Joseph's College (Arts & Science), Kouvr, Chennai-128. | Organized                  | 27th October 2021.    |

**16. Participated as Resource Person: NIL**

| S.No. | Program | Venue | Period |
|-------|---------|-------|--------|
|       |         |       |        |
|       |         |       |        |
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**17. Workshop & Training Programmes:**

| S.No. | Programe  | Venue  | Period   |
|-------|---|--|--|
| 1     | Faculty Development Program on Nanomaterials for Energy Harvesting and Biomedical Applications.                 | Godavari Institute of Engineering and Technology (Autonomous), Rajamahendravaram, Andhra Pradesh, INDIA  | 18 <sup>th</sup> to 22 <sup>nd</sup> May 2022.           |
| 2     | Online Faculty Development program on “ <b>Virtual Learning platform for Experimental Science</b> ”             | APC Mahalamsi College for Women, Thoothukudi-628002.   | 22 <sup>nd</sup> July 2020                               |
| 3     | Three days Faculty Development program on Advanced Materials for Energy, Environment & Healthcare Applications. | VIT University Chennai, Supported by IAS - Bangalore, INSA – New Delhi, NAS – Allahabad.   | June 29-30 & July 1 <sup>st</sup> 2020.                  |
| 4     | Faculty Development Program on “ <b>Role of Chemistry in COVID-19</b> ”   | Department of Chemistry, School of Basic Sciences, Vels Institute of Science, Technology and Advanced Studies, Pallavaram.                           | 13 <sup>th</sup> May 2020                                |
| 5     | Faculty Development Program on “ <b>Molecules and Beyond the Molecules</b> ”                                    | Department of Humanities and Basic Sciences, Godavari Institute Of Engineering And Technology (Autonomous), Rajamahendravaram, Andhra Pradesh, INDIA | 15 <sup>th</sup> June 2020 to 19 <sup>th</sup> June 2020 |

**18. Projects Completed: NIL**

| S.No. | Name of the Projects | Period | Grant Received/Status |
|-------|----------------------|--------|-----------------------|
|       |                      |        |                       |
|       |                      |        |                       |
|       |                      |        |                       |

**19. Any other Details: NIL**