1. Name : **Dr. Reena Devi S.** 

2. Designation : Assistant Professor

3. Qualification : M.Sc., M.Phil., B.Ed., Ph.D

4. Mobile number : 9487967423

5. E-mail id : reenadevis@auxiliumcollege.edu.in

6. Teaching Experience : 13 years

7. Area of specialization : Material Science (Crystal Growth)

8. Research Experience and Guidance

**Ph. D:** INVESTIGATION ON THE GROWTH ASPECTS, STRUCTURAL AND NONLINEAR OPTICAL PROPERTIES OF 4-METHYLPYRIDINIUM DERIVATIVE CRYSTALS.

Guided M.Sc., Students: More than 13 no's

9. Projects Completed / Ongoing: Seed Money Rs. 100000/- for Research Proposal at

Auxilium College (Autonomous), Vellore

10. **No. of Papers Published** : 14

11. No. of Papers Presented in the National/ International/ Seminars/ Workshops/ Conferences

: 03

- 12. No. of Seminars/Workshops/Conferences organized: 05
  - 1. 13. No. of Books Published/Edited/Co-edited:
    - ➤ Text Book Advanced Practical Physics (For M.Sc., Students),

**ISBN** – 978-93-86890-71-9.

Publisher: Bharathi Book House, Vellore.

- ➤ Bharathidasan group of Schools Physics Text book proof reading.
- **E-Content Development**:

https://youtube.com/watch?v=pNezyCycY9s&feature=share7

- 14. Membership in professional bodies (Descriptive):
  - ➤ Life member- National Science Foundation Eco club
  - ➤ Scrutinizer for semester Question papers (UG and PG) at Sacred Heart College (Autonomous), Tirupattur.
  - > Served as a member in a board of study for designing syllabus for PG Physics, at Sacred Heart College (Autonomous), Tirupattur.

### 15. Responsibilities held:

- ➤ Department Coordinator for Innovative Inside.
- > Research Cell member
- > Tutor for PG students
- ➤ Mentor for PG students
- > External Examiner for question paper setting.
- ➤ Project Mentor under the category of Physical and Chemical sciences in Sacred Heart Young Innovator Award (SHYIA- 2023), Sacred Heart College (Autonomous), Tirupattur, 06<sup>th</sup> March 2023.
- Acted as a PG Physics association president at Sacred Heart college, Tirupattur from 2011-2013.
- ➤ Acted as a coordinator for DEEDS (Department of Extension Education), at Sacred Heart college, Tirupattur from 2009-2013.
- Acted as a coordinator for cultural in charge at Idhaya Arts and Science College for women, Pudhupalayam.
- Acted as a coordinator for sports day in charge at Idhaya Arts and Science College for women, Pudhupalayam.

# 16. Current Responsibilities

- > Research Cell member
- > Department coordinator for Innovative Inside
- > Tutor for PG students

#### > Mentor for PG students

### 17. Honors & awards received (Descriptive)

- ➤ Project Mentor under the category of Physical and Chemical sciences in Sacred Heart Young Innovator Award (SHYIA-2023), Sacred Heart College (Autonomous), Tirupattur, 06th March 2023.
- ➤ Delivered an invited talk on James web space telescope —A new vision of the Universe, Sacred Heart College (Autonomous), Tirupattur, 30th Aug 2022.
- ➤ Evaluator on 30th National children's science congress coordinated by science forum (TNSF) at Auxilium College, Vellore, 26th NOV, 2022.
- ➤ Guest of Honour on fancy dress competition at Stanford Park edify school, Vellore, 17th Dec 2022. 19. No. of Online Courses completed (Minimum of 4 Weeks) : 02

# 18. Any Other (Descriptive)

- ➤ Organizing Committee Member for National level Ignition Fiesta on Youth Environmental Stewardship (YES) organized by Auxilium Innovation and Incubation Centre and Research cell in collaboration with Xavier Board of Higher Education in India from 22<sup>nd</sup> -23<sup>rd</sup> February 2024.
- Organizing Coordinator for "science spectacles on conservation of energy" Auxilium College, Vellore, 10<sup>th</sup> December, 2021.
- ➤ Organizing Committee Member for National intellectual property awareness mission organized by Intellectual Property Office, India IPR at Auxilium College, Vellore 20<sup>th</sup> Feb 2023.

- ➤ Organizing Committee Member for state level intercollegiate paper presentation organized by Research Ethics, Publication and IPR at Auxilium College, Vellore, 20th Oct, 2022.
- ➤ Organizing Committee Member for the Orientation Programme on "Innovate to Venture" at Auxilium College, Vellore, 1<sup>st</sup> to 2<sup>nd</sup> December, 2021.
- ➤ Organizing Committee Member for the Young Innovators Day" (TNSF) at Auxilium College, Vellore, 1<sup>st</sup> to 2<sup>nd</sup> December, 2021.
- Organizing Committee Member for the Young Innovators Day" (TNSF) at Auxilium College, Vellore, 23th March, 2022
- ➤ Organizing Committee Member for the National webinar on Publish and Progress organized by IQAC, committee for research and Ethics, Publication and IPR &Library, at Auxilium College, Vellore, 26<sup>th</sup> August, 2023.

### **Publications in Journals**

- 1. **S. Reena Devi,** G. Kaviya, K.C. Dhurga Shree, R. Mary Jamila, P. Rekha, G. Rajasekar" Crystal growth, structural, optical, laser damage threshold and nonlinear optical properties of Piperazinium citrate single crystal **Journal of Optics,** ISSN 09728821, **Nov (2023).**
- S. Reena Devi, P.Rekha, R. Mohan Kumar, "Studies on growth, structural, thermal and nonlinear optical properties of 4-methylpyridinium 2, 4-dinitrophenolate single crystal"
  Journal of Optics, ISSN 09728821, Jan (2023) 1-10.
- 3. A. Sivakumar, S.Reena Devi S. Dhas, S. Sahaya Jude, R. Mohan Kumar, K. Bharathi, Kamala Dhas, S. A. Martin Britto "Switchable Phase Transformation (Orthorhombic Hexagonal) of Potassium Sulfate Single Crystal at Ambient Temperature by Shock Waves" Journal of Crystal Growth & Design, ISSN 15287505, (2020) 20 (11), 7111-7119.

- 4. A. Sivakumar, **S. Reena Devi**, J. Thirupathy, R. Mohan Kumar, and S.A. Martin Britto Dhas, "Effect of Shock Waves on Structural, Thermophysicaland Dielectric Properties of Glycine Phosphate (GPI) Crystal", **Journal of Electronic Materials**, ISSN 0361-5235, 48 (2019), 7216-7225.
- 5. I.M. Zahid, S. Kalaiyarasi, **S. Reena Devi,** S. Suresh, T. Ganesh, R. Mohan Kumar, 2017. "Crystal growth, spectral, thermal, optical and third order nonlinearity studies of optical material: 4-N, N-dimethylamino 4'-N'-methylstilbazolium 4-hydroxybenzenesulfonate", **Journal of Optics**, ISSN 09728821, 46 (2017), 456-464.
- 6. S, Kalaiyarasi, S. Reena Devi, R. Akilan, R. Mohan Kumar, G. Chakkaravarthi "4-Methylanilinium 3-carboxy-2-hydroxypropanoate" IUCr Data, ISSN: 2414-3146, 1 (2016), x161525.
- 7. S. Kalaiyarasi, I.M, Zahid, **S. Reena Devi**, R. Mohan Kumar, "Studies on the growth aspects, structural and third-order nonlinear optical properties of Piperidinium 3-carboxy-4-hydroxy benzenesulfonate single crystal", **Journal of Crystal Growth**, ISSN: 0022-0248 460 (2017) 105-111.
- 8. S. Suresh **S. Reena Devi,** B.M. Sornamurthy, M. Arivanandhan, R. Mohan Kumar, "Growth, Structural and Optical Studies of a novel Nonlinear Optical Material: p-Toluidinium L-Tartrate", **Optik**, ISSN 0030-4026. 185 (2019) 651-656.
- 9. **S. Reena Devi**, S. Suresh, S. Kalaiyarasi, M. NizamMohideen, R. Mohan Kumar, "Synthesis, growth, structural, thermal and third order nonlinear optical properties of novel organic 4-methylpyridinium 3-nitrophthalate single crystal", **Material Science-Poland**, ISSN: 2083-134X 1 (2018) 1-12.
- 10. **S. Reena Devi**, S. Suresh, G. Vinitha, R. Mohan Kumar, "Growth aspects, structural and nonlinear optical properties of conjugate structure: 4 methylpyridinium 2-carboxy-6-nitrobenzoate, **Journal of Optics**, ISSN 09728821, , 47 (2018) 516-526.

- 11. **S. Reena Devi**, B. Valarmathi, R. Mohan Kumar, "Growth Aspects, Structural and Optical Properties of 2-aminopyridinium 2,4- dinitrophenolate Single Crystal", **Mechanics**, **Materials Science & Engineering**, ISSN 2412-5954, 3 (2017) 9.
- 12. **S. Reena Devi**, R. Akilan, R. Mohan Kumar, T. Ganesha, G. Chakkaravarthi, "2-Aminopyridinium 2,4-dinitrophenolate",**IUCr Data**, ISSN: 2414-3146 **9** (2016) 161489.
- 13. **S. Reena Devi,**S. Kalaiyarasi, R. Akilan, R. Mohan Kumar, G. Chakkaravarthi, "4-Methylpyridinium 2-carboxy-6-nitrobenzoate", **IUCr Data**, ISSN: 2414-3146 **1** (2016) 161803.
- 14. **S. Reena Devi,** S. Kalaiyarasi, I.M Zahid, R.Mohan Kumar, "Studies on the growth aspects, structural, thermal, dielectric and third order nonlinear optical properties of solution grown 4-methylpyridinium p-nitrophenolate single crystal". **Journal of crystal Growth**, ISSN: 0022-0248. 454 (2016) 139.

## **Publications in Proceedings**

- 1. Presented paper on 21<sup>st</sup> National seminar on Crystal Growth and its Application at National College, Tiruchirapalli, 6-8<sup>th</sup> March 2017.
- 2. Presented paper on International Conference on Material Processing and Applications at Center for Crystal Growth, School of Advanced sciences, VIT University, Vellore, 14-16<sup>th</sup> Dec 2016.
- 3. Presented paper on National seminar on Current, Past and Future Scenario in Applied Sciences at Tamil Nadu Open University, Chennai, 29<sup>th</sup> July 2016.

#### FDP's/ Seminars/ Workshops/Webinars

- 1. Participated in the webinar on "Implementation of NEP 2020 at HEIs– Pathways and Challenges" organized by Internal Quality Assurance Cell (IQAC), SR University, Warangal, India 29<sup>th</sup> Feb 2024.
- 2. Participated in the international virtual conference in the International virtual conference on "Emerging technologies in Material science" (ICETM)) organized by PG & Research

- center of Physics in collaboration with consultancy cell, in collaboration with consultancy cell, Jayaraj Annapackiyam college for women, Periyakulam, Theni District on 22<sup>nd</sup> Feb 2024.
- 3. Participated in the international conference in Functional Nano materials and Nano devices (ICFN2023) organized by Allied Health sciences, Chettinad Academy of Research and education, Kelambakkam, 26<sup>th</sup> September 2023.
- 4. National intellectual property awareness mission organized by Intellectual Property Office, India IPR at Auxilium College, Vellore 16<sup>th</sup> Sep 2023.
- 5. Participated One-week National FDP under DBT Star Status Scheme on "Development of materials characterization techniques and their future prospects" organized by Sri G.V.G. Visalakshi college for women, Udumalapet, 18<sup>th</sup> dec to 22<sup>nd</sup> dec 2023.
- 6. National Webinar on "Applications of Physics in Medicine" jointly organized by PG & Research Department of Physics, Auxilium College (Autonomous), Vellore and Department of Physics, Little Flower Degree College, Hyderabad on 22 August 2023.
- 7. National webinar on Publish and Progress organized by IQAC, committee for research and Ethics, Publication and IPR &Library, at Auxilium College, Vellore, 26<sup>th</sup> August, 2023.
- 8. National webinar series on Astrophysics, Exoplanets –Distinct Worlds from solar the Solar system, Division of Physical Sciences, Karunya Institute of Technology and Sciences, Coimbatore, 4<sup>th</sup> August 2023.
- 9. One-week Faculty Development Program on "Polymer Composites For Engineering Applications (PCEA-2023)" (blended-mode), B.M.S. College of Engineering, Bengaluru 22-26<sup>th</sup> May 2023.
- 10. National Virtual Workshop on Machine Learning: An Ice Breaker Between Materials Research and Data Science SSN Research Centre, Indian Association for Crystal Growth (IACG), Chennai & Anand Memorial Trust, Hyderabad, 12-13 April 2023.
- 11. International virtual conference on Recent trends in Physics, Jayaraj Annapackiam College for Women, Theni, 16-17<sup>th</sup> March 2023.
- 12. International Faculty Development Program on Foremost Frontiers of Material Science, Sathyabama Institute of Science and Technology, 12-20<sup>th</sup> Sep 2022.

- 13. One Day International Webinar on Advanced Functional Materials, Gonzaga College of Arts and Science for Women, Krishnagiri, Tamil Nadu, India, 28<sup>th</sup> Sep 2022.
- 14. National conference on Advanced materials and applications with ISPA at Auxilium college, vellore, 13-14<sup>th</sup> October 2022.
- 15. A Two-Week Online Faculty Development Programme" and Training on "LibreOffice suite Writer, Calc & Impress, organized by, Auxilium College (Autonomous), Vellore in association with Spoken Tutorial, IIT Bombay (funded by the NMEICT, MoE, Govt. of India) 26th may to 10th June 2022.
- 16. National level intercollegiate online FDP on outcome base education organized by IQAC at Auxilium college, vellore, 22-27 Nov 2021.
- 17. National Level Webinar on Nonlinear Dynamical Systems and its Applications, Theivanai Ammal College for Women, Villupuram on 17<sup>th</sup> May 2021.
- 18. National level FDP on Research Trends in Physics and Electronics at Little Flower Degree College, Hyderabad 27<sup>th</sup>Jan 2021 to 1st Feb 2021.
- 19. Three days International Online FDP on "Recent Trends in Atomic and Molecular Physics" (AMP 2020) at Mepco Schlenk Engineering College, Sivakasi 14-16<sup>th</sup> Oct, 2020.
- 20. International seminar on Nonlinear Physics, SSN college of Engineering, 5th June 2021.
- 21. International E-conference on Advanced Material Science and Gaphene Nanotechnology at United Research Forum, London 25-26<sup>th</sup> Nov 2020.
- 22. National Level Webinar on Smart Materials and its Bio Medical applications at Marudhar Kesari Jain College for Women, Vaniyambadi, 24<sup>th</sup> Nov 2020.
- 23. Three days International Online FDP on "Recent Trends in Atomic and Molecular Physics" (AMP 2020) at Mepco Schlenk Engineering College, Sivakasi 14-16<sup>th</sup> Oct, 2020.
- 24. 22<sup>nd</sup> National seminar on Crystal growth and applications at Sacred Heart College, Tiruupattur, 29-31<sup>st</sup> Jan 2018.
- 25. International Conference on Recent Trends in Applied science and Technology at Anna University Chennai, 8-9<sup>th</sup> Sep 2017.

- 26. Twenty Sixth National Seminar on Crystal Growth and Epitaxy at Anna University Chennai, 14-15<sup>th</sup> March 2016
- 27. National Conference on Advanced Materials Science at Jerusalem College of Engineering, Chennai, 22<sup>nd</sup> July 2015.
- 28. Workshop on Powder X-ray Diffraction Data Analysis at SRM University, Chennai, 3-4<sup>th</sup> July 2015.
- 29. CSIR sponsored multidisciplinary Workshop on 'The role and importance of Nano Materials in Energy and Environmental sectors' at Sacred Heart College, Tirupattur, 28<sup>th</sup> Feb 2013.
- 30. UGC sponsored state level seminar on "Recent trends in Material science" at Sacred Heart College, Tiruupattur, 10-11<sup>th</sup> Sept 2009.
- 31. NACC Sponsored National level Workshop on 'Enhancing Quality of Higher Education Institutions Through IQAC' at Sacred Heart College, Tiruupattur, 9-10<sup>th</sup> Sept 2011.