

# Dr. G. RAJARAJAN, M. Sc., Ph. D.,

- ❖ Ph.D., Physics by March 2007 from Pondicherry University (**Central Univeristy**) as Full Time Scholar
- ❖ Research & Development Experience is 22 Years & 7 Months
- ❖ Teaching Experience is 18 Years & 1 Month
- ❖ Number of Ph.D's Produced Under Anna University - 6
- ❖ Number of Patents - 3
- ❖ Number of Publications in Peer Reviewed Journals - 50
  - Highest Impact Factor - 6.165
- ❖ Serving as Editorial Board Member and Reviewer of many journals published by Elsevier, Springer, RSC & other journals with maximum impact factor of 8.8
- ❖ Journal Publication Citations:
  - Google Scholar - 511 & h Index - 12
  - Scopus - 358 & h Index - 11
- ❖ Research Papers Presented in Conferences
  - In International Conferences - 12
  - In National Conferences - 72
- ❖ Ph.D. Thesis Examiner for Indian Universities.
- ❖ Research Areas - Crystal Growth, Dye-Sensitized Solar Cells, Thin Films, Nanomaterials, and Acoustics
- ❖ Member of International & National Professional and Scientific Associations
- ❖ Acted as Coordinator for Accreditation (NAAC & NBA) and Affiliation of Institutions. Good in NIRF Ranking Work with In-Depth Expertise.
- ❖ Organizing Secretary / Convener / Coordinator / Steering Committee Member for Organizing International / National Level Conference / Seminar / Workshop
- ❖ International Congress Chair for ICES 2022 - International Congress on Embedded Systems 2022, 11<sup>th</sup> & 12<sup>th</sup> August 2022 at Hong Kong
  - <https://intcongress.com/international-congress-on-embedded-systems-2022/>
- ❖ International Technical Committee Member for the Conferences/Symposiums Organized by various Professional/Scientific Associations across the World.
  - <https://intcongress.com/committee/> & <http://icsmr.org/> & <http://icfcm.org/>

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## Dr. G. RAJARAJAN, M. Sc. Ph.D.,

Dr. G. Rajarajan was born in an academic family in Namakkal District, Tamil Nadu, India. He had his school education at Government Schools and got his *B.Sc. Degree* from *Kandaswami Kandars' College, University of Madras*, and *M.Sc. Degree* from *Jamal Mohamed College, Bharathidasan University*. He started his research career as a full-time scholar in the field of *Acoustics* and was awarded *Ph.D. Degree* by *Pondicherry University (Central University)* in the year *March 2007*. He is having a total experience of *22 years & 7 months* in *Research & Development* and *Teaching*. His teaching career spans over *18 years & 1 month* in leading Educational Institutions. He served as *Head, Department of Physics, Department of Science & Humanities, Dean (Research & Development), IQAC In-Charge and Research Coordinator* and. He performed as *Coordinator for Accreditations & Ranking (NAAC, NBA & NIRF)* and *Affiliation* of Institutions. He assimilated excellent in-depth skills & familiarity in executing **NAAC Accreditation & NIRF Ranking** work.

He actively engaged in research activities as a recognized research supervisor by Anna University and Dravidian University. His research areas of interest include *Crystal Growth, Dye-Sensitized Solar Cells, Thin Films, Nanomaterials, and Acoustics*. Under his guidance, *six Research Scholars received their Ph. D. Degree from Anna University and two research scholars pursuing their research work in the field of crystal growth & nanomaterials*. He *published more than 48 research papers in International/National journals and presented 12 papers in International Conferences & 72 papers in National Conferences. Serving as Editorial Board Member & Reviewer of many National/International Journals and active Reviewer for many high impact factor International Journals published by Elsevier, Springer, RSC, and Taylor & Francis Publications. Filed/Received 3 Patents in the field of Crystal Growth. Authored one book entitled Engineering Physics I.*

He is a member of the following professional associations: Life Member of Indian Society for Technical Education (*ISTE*), Life Member of Ultrasonic Society of India (*USI*), Founding Member of Indian Magnetic Resonance Society (*IMRS*), Member of International Association of Advanced Materials (*IAAM*) and recognized as Senior Member in South Asia Institute of Science and Engineering (*SAISE*). Recognized Member at *Asian Council of Science Editors*. He serving as *Conference Chair, Technical Committee Member & Reviewer* for *International & National Conferences* Organized by various *Professional/Scientific Associations* across the World. He convened and organized many Conferences, Workshops, and Symposia and delivered invited talks in National Conference and Symposia. He is also serving as a question paper setter for many Autonomous Colleges. He served as *Public Relations Officer (PRO)* and *Social Media Activity In-Charge*.

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# Dr. G. RAJARAJAN




Professor of Physics & Director,  
Valluvar College of Science and Management,  
Puthambur, Karur - 639 003,  
Tamil Nadu, India.

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E- Mail: [grajarajan@yahoo.com](mailto:grajarajan@yahoo.com) & [rajarajangopal@vcsm.ac.in](mailto:rajarajangopal@vcsm.ac.in)

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## EDUCATIONAL QUALIFICATION: *M. Sc. Ph. D.*


 **Ph.D. Physics**, School of Physics, Pondicherry University  
(Central University), Puducherry - 605 014, India.

 Title of the Thesis "**Ultrasonic Relaxation Studies in Aqueous  
and Non-Aqueous Systems**" [Mode of Research: **Full Time**]

 <http://hdl.handle.net/10603/763> Year: **March 2007**

 **M. Sc. Physics**, Jamal Mohamed College, Bharathidasan University,  
Tiruchirappalli - 620 020, India.

 Percentage of Marks: **72.1** Year: **1999**

 **B. Sc. Physics**, Kandaswami Kandars' College, University of Madras,  
Paramathi Velur - 638 182, Namakkal District, India.

 Percentage of Marks: **63.6** Year: **1996**

## TEACHING, ADMINISTRATIVE & RESEARCH EXPERIENCE:

**Total Experience : 22 Years & 7 Months**

**Teaching Experience : 18 Years & 1 Month**

**Research Experience : 22 Years & 7 Months**

## **ACADEMIC & ADMINISTRATIVE RESPONSIBILITIES HELD:**

- ✓ **Head of the Department - Physics and Science & Humanities**
- ✓ **NAAC :: Self Study Report (SSR) Coordinator & IQAC in-charge**
- ✓ **In-depth Expertise in NIRF Work**
- ✓ **Ph.D. Thesis Examiner for Indian Universities.**
- ✓ **Question Paper Setter for Universities and Autonomous Colleges**
- ✓ **Research Coordinator @ HITS and PGP Educational Institutions**
- ✓ Department **NBA** Coordinator.
- ✓ Anna University **Affiliation Work** Coordinator
- ✓ **Public Relations Officer (PRO) @ Selvam Educational Institutions and Vidhya Mandhir Institute of Technology**
- ✓ Organizing **Secretary / Convener / Coordinator / Steering Committee Member** for Organizing International / National Level Conference / Seminar / Workshop
- ✓ **Conference Chair, Technical Committee Member for International Conferences** Organized by various Professional/Scientific Associations across the World. [\[http://icsmr.org/\]](http://icsmr.org/) & [\[http://icfcm.org/\]](http://icfcm.org/) & [\[https://intcongress.com/international-congress-on-embedded-systems-2022/\]](https://intcongress.com/international-congress-on-embedded-systems-2022/) & [\[https://intcongress.com/committee/\]](https://intcongress.com/committee/)
- ✓ Reviewed the Regulation/Curriculum for Research Programmes (Ph. D.) of **Jimma University, Ethiopia**
- ✓ Preparation of **Annual Report**, College Academic Calendar and Minutes of the Meeting for Institution's Governing Council
- ✓ University Examination Chief Superintendent & Examination Coordinator [Internal Examinations] @ **VCET**
- ✓ Time Table Coordinator, Class Advisor & Students' Mentor @ **VCET**
- ✓ Staff Coordinator for **Rotaract Club @ VCET**

## RESEARCH CREDENTIALS/IDENTITY:

- **Publons:** <https://publons.com/a/1369266>
- **Researcher ID:** <http://www.researcherid.com/rid/D-7731-2016>
- **Scopus:** <https://www.scopus.com/authid/detail.uri?authorId=55169230200>
- **Google Scholar:** [https://scholar.google.co.in/citations?user=tbNU\\_D8AAAAJ&hl=en&authuser=2](https://scholar.google.co.in/citations?user=tbNU_D8AAAAJ&hl=en&authuser=2)
- **UGC INFLIBNET VIDWAN:** <https://vidwan.inflibnet.ac.in/profile/61031>



**ORCID**

## RESEARCH SUPERVISOR:

- ✓ Recognized Research Supervisor by **Anna University**, Chennai, Tamil Nadu
- ✓ Recognized Research Supervisor by **Dravidian University**, Kuppam, Andhra Pradesh

## RESEARCH GUIDANCE AT DOCTORAL DEGREE LEVEL:

### Ph. D.:

Completed	:	<b>6</b>
Synopsis/Thesis Submitted	:	<b>0</b>
Research Work in Progress	:	<b>2</b>

## DOCTORAL DEGREE (Ph. D.) COMPLETED:

01. Effect of Metal Ion Dopants (Mg, Cu, W & Zr) on Structural, Optical and Photocatalytic Activities of SnO<sub>2</sub> Nanostructured Thin Films  
**Dr. S. Vadivel March 2016 [Anna University, Chennai]**  

02. Synthesis and Characterization of Nanocrystalline Metal Oxides Doped with TiO<sub>2</sub> for Dye Sensitized Solar Cell Applications  
**Dr. S. Ranjitha February 2017 [Anna University, Chennai]**  


03. Synthesis, Structure, Growth and Characterization of 2 - Amino 5 - Chloropyridine Derivative Crystals for Nonlinear Optical Applications

***Dr. T. Jayanalina May 2017 [Anna University, Chennai]***

04. Influence of Metal Ion Dopants (Fe, Ni & Ag) on Structural, Optical and Photocatalytic Activity of WO<sub>3</sub> Thin Films

***Dr. S. Ramkumar August 2017 [Anna University, Chennai]***



05. Effect of pH on Crystal Structure, Optical Property and Solid State Parameter Analysis of Amino Acid Doped NLO Crystals

***Dr. A. Jegatheesan May 2019 [Anna University, Chennai]***



06. Growth and Characterization of Urea and Thiourea Mixed NLO Crystals

***Dr. N. Senthilvelan May 2019 [Anna University, Chennai]***



## **RESEARCH GUIDANCE AT MASTERS DEGREE LEVEL:**

### **M. Phil.:**

Completed : 7

### **M. Sc. & B. E.:**

Completed : 25

## **RESEARCH FIELDS:**

- ❖ Growth and Characterization of Nonlinear Optical (**NLO**) Crystals by Slow Evaporation and Slow Cooling Techniques.
- ❖ Deposition and Characterization of Dye-Sensitized Solar Cells (**DSSC's**) and Magnetic Thin Film Materials by Electro Deposition, Chemical Bath Deposition, and Spin Coating Techniques.
- ❖ Synthesize and Characterization of Ferrites Materials.
- ❖ The Chemoreception Studies by Acoustic Relaxation and Volumetric Technique.
- ❖ The Fire Retardant Solutions for Textile Industry.

## **JOURNAL EDITOR & REVIEWER:**

## **EDITOR/EDITORIAL BOARD MEMBER & CONFERENCE CHAIR:**

- ✍ **International Congress Chair** for **ICES 2021** - **International Congress on Embedded Systems 2022**, 11<sup>th</sup> & 12<sup>th</sup> August 2022 at **Hong Kong**
- ✍ **Review Editor** of Editorial Board of **Frontiers - Optics and Photonics** – **Frontiers in Astronomy and Space Sciences**, **Frontiers in Materials and Frontiers in Physics**
- ✍ **Member** in the **Asian Council of Science Editors** (Membership No: **91.4517**).
- ✍ Serving as Editorial Board Member for **Material Science Research India**, Oriental Scientific Publishing Company, India.
- ✍ Serving as **Bentham Ambassador** for **Bentham Science Publishers**, a leading International Science, Technology, and Medical (STM) publisher
- ✍ Serving as Editorial Board Member for **International Journal of Physics**, Science and Education Publishing, USA.
- ✍ Serving as Editorial Board Member for **American Journal of Materials Science and Engineering**, Science and Education Publishing, USA.
- ✍ Serving as Editorial Board Member for **Physics and Materials Chemistry**, Science and Education Publishing, USA.
- ✍ Serving as Editorial Board Member for **International Journal of Advanced Engineering and Science**, Elite Hall Publications, Taiwan.
- ✍ Serving as Chief Editorial Board Member for **International Journal on Engineering Technology and Sciences**, SNR Group of Publications, India.
- ✍ Serving as Associate Editor for **Transactions on Engineering and Sciences**, Techscripts Publications, India.
- ✍ Serving as Editorial Board Member for **International Journal of Research in Sciences**, IASTER Publications, India.
- ✍ Serving as **Chief Associate Editor** for **Dr. BGR Publications**, India.

## **REVIEWER:**

- ✍ Recognized Research Paper Reviewer for the Journals of **Royal Society of Chemistry (RSC), United Kingdom :: JMC – A, JMC – C, EES, and DT.**
- ✍ Serving as Research Paper Reviewer for **Journal of Materials Science: Materials in Electronics**, Springer Publications, USA.
- ✍ Serving as Research Paper Reviewer for **Surfaces & Interfaces**, Elsevier Publications, The Netherlands.
- ✍ Serving as Research Paper Reviewer for **Applied Surface Science**, Elsevier Publications, The Netherlands.
- ✍ Serving as Research Paper Reviewer for **Department of Atomic Energy, Government of India Sponsored Annual “Solid State Physics Symposium”** from the year **2016 Onwards.**
- ✍ Serving as Research Paper Reviewer for **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, Elsevier Publications, The Netherlands.
- ✍ Serving as Research Paper Reviewer for **Materials Research Innovations**, Taylor & Francis Group, USA.
- ✍ Serving as Research Paper Reviewer for **Materials Science and Engineering: B**, Elsevier Publications, The Netherlands.
- ✍ Serving as Research Paper Reviewer for **Material Science Research India**, Materials Science Journal, India.
- ✍ Serving as Research Paper Reviewer for **International Journal of Physics**, Science and Education Publishing, USA.
- ✍ Serving as Research Paper Reviewer for **American Journal of Nanomaterials**, Science and Education Publishing, USA.
- ✍ Serving as Research Paper Reviewer for **American Journal of Materials Science and Engineering**, Science and Education Publishing, USA.



## **RESEARCH COLLABORATIONS:**

- ❖ Collaborative Research work is going on in the fields of **NLO Crystal, Dye-Sensitized Solar Cells (DSSC's), Thin Films** and **Ferrites** with
  - ✉ **Dr. Rajaram S Mane**, Director, Innovation & Incubation Cell, Swami Ramanand Teerth Marathwada University, Dnyanteerth Vishnupuri, Nanded – 431 606, Maharashtra, India.
  - ✉ **Dr. V. Aroulmoji**, Director, Centre for Research & Development, Mahendra Educational Institutions, Mallasamudram, Namakkal, Tamil Nadu, India.
  - ✉ **Dr. T. S. Gnanendra**, Professor, Centre for Research & Development, Mahendra Educational Institutions, Mallasamudram, Namakkal, Tamil Nadu, India.
  - ✉ **Dr. Thomas Mohr**, Department of Energy and Drive Systems, University of Applied Sciences, Ulm, Germany.

## **FUNDING RECEIVED FROM FUNDING AGENCIES:**

- ❖ An amount of **Rs. 20,000.00** received as grant from the **Tamil Nadu State Council for Science & Technology [TNSCST], Government of Tamil Nadu** under the **Popularization of Science Scheme** for Organizing an Orientation Programme for School Science Teachers during the Year 2011 - 2012 and the Orientation Programme was Organized during **June 21<sup>st</sup> & 22<sup>nd</sup> 2012**.

## **PATENTS FILED/RECEIVED:**

- ✉ The **Cambridge Crystallographic Data Centre (CCDC), United Kingdom** conferred the number for the Crystal **2 – Amino – 5 – Chloropyridine – Picolinic Acid**. The number conferred by CCDC is **CCDC1036880** with Dr. T. Jayanalina [**2014**].

- ✉ The **Cambridge Crystallographic Data Centre (CCDC), United Kingdom** conferred the number for the Crystal 2 – Amino – 5 – Chloropyridine – 4 – Tartaric Acid. The number conferred by CCDC is **CCDC996930** with Dr. T. Jayanalina and Dr. K. Sreevani [2014].
- ✉ The **Cambridge Crystallographic Data Centre (CCDC), United Kingdom** conferred the number for the Crystal 2 – Amino – 5 – Chloropyridinium Toluene – p – Sulphonate. The number conferred by CCDC is **CCDC996654** with Dr. T. Jayanalina and Dr. K. Sreevani [2014].

### **MEMBERSHIP IN PROFESSIONAL BODIES:**

- ❖ Senior Member in South Asia Institute of Science and Engineering [**SAISE**]
- ❖ Life member in Indian Society for Technical Education [**ISTE**]
- ❖ Founding Member in Indian Electron Magnetic Resonance Society [**IMRS**]
- ❖ Life member in Ultrasonic Society of India [**USI**]
- ❖ Member in International Association of Advanced Materials [**IAAM**]

### **RESEARCH PAPER PUBLICATION IN JOURNALS:**

#### **SUMMARY:**

**🌸 In International / National Journals : 50**

#### **📌 Google Scholar:**

❖ Citations : **511**

❖ h – Index : **12**

❖ i10 – Index : **15**

#### **📌 Scopus:**

❖ Citations : **358**

❖ h – Index : **11**

📌 Cumulative Impact Factor : 59.720

📌 Communicated & Under Review : 4

### **PUBLISHED IN SCIENCE CITATION / SCOPUS INDEXED JOURNALS:**

50. Ultrasonic Velocity and Absorption Studies in Aqueous Lithium Salts  
Journal of Pure & Applied Ultrasonics 43 (2022) \*\*\*\* - \*\*\*\*  
**G. Rajarajan**, K. Kumar, K. Selvaraju and P. Baskaran  
Impact Factor: \*\*\*\* & ISSN No.: 0957 – 4522 [Accepted for Publication]
49. An Investigation of Optical Constants, Solid State Parameters and NLO Properties of Glycine Sodium Iodide (GSI): A New Auspicious Semi Organic NLO Crystal for Optoelectronics Applications  
Journal of Materials Science: Materials in Electronics 29 (2018) 20225–20235  
**G. Rajarajan**, B. Neelaknataprasad, B. Ravi and S. Masilamani  
Impact Factor: 2.324 & ISSN No.: 0957 – 4522
48. Prominence of Using Betalain and Cubebin as Natural Dye Sensitizers for the Design of Eco-Friendly DSSC's  
International Journal Advanced Science and Engineering 4 (2018) 726 – 736  
**G. Rajarajan**, S. Ranjitha, V. Aroulmoji, R. Lavanya Dhevi and S. Gnanendra  
Impact Factor (SJIF): 5.183 & ISSN No.: 2349 – 5359 & 2454 – 9967
47. Growth and Characterization of Promising NLO Crystal for Potential Applications: Meta Nitroaniline  
Rasayan Journal of Chemistry 11 (2018) 915 – 928  
**G. Rajarajan**, K. Kumar, K. Selvaraju, P. Baskaran and N. Senthilvelan  
Impact Factor (SNIP): 0.651 & ISSN No.: 0974 – 1496 & 0976 – 0083

46. Synthesis and Fabrication of Dye Sensitized Solar Cells based on ZnO and TiO<sub>2</sub> Nano Composites  
International Journal Advanced Science and Engineering 4 (2017) 502 – 511  
**G. Rajarajan**, S. Ranjitha, V. Aroulmoji, V. Hariharan and P. M. Anbarasan  
Impact Factor (SJIF): 5.183 & ISSN No.: 2349 – 5359 & 2454 – 9967
45. Study of Drying Process of Paint by Dynamic Speckle with B/D Pixel Counting Technique  
Optics and Lasers in Engineering 98 (2017) 62 – 68  
**G. Rajarajan** and R. Balamurugan  
Impact Factor: 4.273 & ISSN No.: 0143 – 8166
44. A Comparative Study of Humidity Sensing and Photocatalytic Applications of Pure and Nickel (Ni) Doped WO<sub>3</sub> Thin Films  
Applied Physics A: Materials Science & Processing 123 (2017) 401  
**G. Rajarajan** and S. Ramkumar [DOI: 10.1007/s00339-017-0983-5]  
Impact Factor: 1.870 & ISSN No.: 0947 – 8396
43. An Investigation of SEM, Thermal and Mechanical Properties of Pure and Sodium Acetate Trihydrate Doped Thiourea Single Crystals  
International Journal of ChemTech Research 10 (2017) 1092 – 1099  
**G. Rajarajan**, B. Neelakantaprasad and B. Ravi  
Impact Factor (SNIP): 0.598 & ISSN No.: 0974 – 4290 & 2455 – 9555
42. Bulk Growth and Physical Properties of Nonlinear Optical Material: Thiourea Sulphamic Acid Crystal  
Rasayan Journal of Chemistry 10 (2017) 245 – 253  
**G. Rajarajan**, N. Senthilvelan, S. Sivakumar, J. Elanchenzhiyan and A. Jegatheesan  
Impact Factor (SNIP): 0.651 & ISSN No.: 0974 – 1496 & 0976 – 0083
41. Growth and Spectroscopic Characterization of Urea Sulphamic Acid Crystal: A Second-Order Nonlinear Material  
Rasayan Journal of Chemistry 10 (2017) 218 – 225

**G. Rajarajan**, N. Senthilvelan, A. Jegatheesan, S. Sivakumar and J. Elanchenzhiyan

Impact Factor (SNIP): **0.651** & ISSN No.: **0974 – 1496 & 0976 – 0083**

40. Enhanced Visible Light Photocatalytic Activity of Pristine and Silver (Ag) Doped WO<sub>3</sub> Nanostructured Thin Films  
Journal of Materials Science: Materials in Electronics 27 **(2016)**  
12185 – 12192

**G. Rajarajan** and S. Ramkumar

Impact Factor: **2.324** & ISSN No.: **0957 – 4522**

39. Structural, Magnetic and Electrical Transport Properties of Sm<sub>0.43</sub>Nd<sub>0.10</sub>Sr<sub>0.47</sub>MnO<sub>3</sub> Thin Film by DC-Magnetron Sputtering  
Journal of Materials Science: Materials in Electronics 27 **(2016)**  
5114 – 5120

**G. Rajarajan**, S. Ramkumar and H. K. Singh

Impact Factor: **2.324** & ISSN No.: **0957 – 4522**

38. Effect of Fe Doping on Structural, Optical and Photocatalytic Activity of WO<sub>3</sub> Nanostructured Thin Films  
Journal of Materials Science: Materials in Electronics 27 **(2016)**  
1847 – 1853

**G. Rajarajan** and S. Ramkumar

Impact Factor: **2.324** & ISSN No.: **0957 – 4522**

37. Synthesis, Growth, Structural, Spectral, Thermal and Dielectric Studies of a New Organic Salt Crystal: 2-Amino-5-Chloropyridinium Pyridine-2-Carboxylate Monohydrate  
Digest Journal of Nanomaterials and Biostructures 10 **(2015)** 1139 – 1151

**G. Rajarajan**, T. Jayanalina and K. Boopathi

Impact Factor: **0.785** & ISSN No.: **1842 – 3582**

36. Single Step Synthesis and Characterization of Nanocrystalline Cobalt Ferrite by Auto-Combustion Method  
Materials Today: Proceedings 2 **(2015)** 3605 – 3609

- G. Rajarajan**, T. Shanmugavel, S. Gokul Raj, G. Rameshkumar and G. Boopathi  
Impact Factor: \*\*\*\* & ISSN No.: **2214-7853**
35. Effect of W Doping on Structural, Optical and Photocatalytic Activity of SnO<sub>2</sub> Nanostructure Thin Films  
Journal of Materials Science: Materials in Electronics 26 **(2015)** 7127 - 7133  
**G. Rajarajan** and S. Vadivel  
Impact Factor: **2.324** & ISSN No.: **0957 - 4522**
34. Influence of Cu Doping on Structural, Optical and Photocatalytic Activity of SnO<sub>2</sub> Nanostructure Thin Films  
Journal of Materials Science: Materials in Electronics 26 **(2015)** 5863 - 5870  
**G. Rajarajan** and S. Vadivel  
Impact Factor: **2.324** & ISSN No.: **0957 - 4522**
33. Structural and Optical Properties of Purpurin for Dye-sensitized Solar Cells  
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 149 **(2015)** 997 - 1008  
**G. Rajarajan**, S. Ranjitha, T. S. Gnanendra, P. M. Anbarasan and V. Aroulmoji  
Impact Factor: **3.232** & ISSN No.: **1386 - 1425**
32. Combustion Synthesis and Structural Analysis of Nanocrystalline Nickel Ferrite at Low Temperature Regime  
AIP Conference Proceedings 1665 **(2015)** 050182  
**G. Rajarajan**, T. Shanmugavel, S. Gokul Raj, G. Ramesh Kumar and G. Boopathi  
Impact Factor: **0.20** & ISSN No.: **0094 - 243X** & **1551 - 7616**
31. Optical and Dielectric Properties of Glycine Fumarate NLO Single Crystal  
International Journal of ChemTech Research 8 **(2015)** 572 - 578  
**G. Rajarajan** and A. Jegatheesan

Impact Factor (SNIP): **0.598** & ISSN No.: **0974 – 4290 & 2455 – 9555**

30. Synthesis, Growth, Structural, Optical and Thermal Properties of a New Organic Nonlinear Optical Crystal: 2-Amino 5-Chloropyridinium-L-Tartarate

Journal of Crystal Growth 426 **(2015)** 9 – 14

**G. Rajarajan**, T. Jayanalina, K. Boopathi and K. Sreevani

Impact Factor: **1.632** & ISSN No.: **0022 – 0248**

29. A Study of L-Asparagine Doped ADP Single Crystals

Journal of Chemical and Pharmaceutical Research 7 **(2015)** 2173 – 2179

**G. Rajarajan**, A. Jegatheesan, B. Ravi and B. Neelakantaprasad

Impact Factor (SJR): **0.35** & ISSN No.: **0975 – 7384**

28. Effect of Mg Doping on Structural, Optical and Photocatalytic Activity of SnO<sub>2</sub> Nanostructure Thin Films

Journal of Materials Science: Materials in Electronics 26 **(2015)** 3155 – 3162

**G. Rajarajan** and S. Vadivel

Impact Factor: **2.324** & ISSN No.: **0957 – 4522**

27. Influence of Mg<sup>2+</sup> Dopant on Structural, Optical and Mechanical Properties of Potassium Acid Phthalate (KAP) Single Crystals

Journal of Optoelectronics and Advanced Materials 17 **(2015)** 205 - 210

**G. Rajarajan**, V. Niraimathi, V. Aroulmoji and P. M. Anbarasan

Impact Factor: **0.631** & ISSN No.: **1454 – 4164**

26. Cost Effective Preparation and Characterization of Nanocrystalline Nickel Ferrites (NiFe<sub>2</sub>O<sub>4</sub>) in Low Temperature Regime

Journal of King Saud University – Science 27 **(2015)** 176 - 181

**G. Rajarajan**, T. Shanmugavel, S. Gokul Raj, G. Rameshkumar and D. Saravanan

Impact Factor: **3.819** & ISSN No.: **1018 – 3647**

25. DFT and TD-DFT Study on Geometries, Electronic Structures and Electronic Absorption of Some Metal Free Dye Sensitizers for Dye Sensitized Solar Cells  
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 135 (2015) 1066 - 1073  
**G. Rajarajan**, S. Ranjitha, R. Samson Ravindran, M. Muller, T. Mohr, P. M. Anbarasan and V. Aroulmoji  
Impact Factor: **3.232** & ISSN No.: **1386 – 1425**
24. Effect of Pd<sup>2+</sup> Doped on the Growth, Optical, Mechanical and Dielectric Properties of KAP Single Crystal  
American Journal of Materials Science and Engineering 2 (2014) 36-41  
**G. Rajarajan**, Viji Niraimathi and V. Aroulmoji  
Impact Factor (SJIF): **4.068** & ISSN No.: **2333 – 4665 & 2333 - 4673**
23. Growth and Characterization of Promising Nonlinear Optical GFTA Single Crystal  
Rasayan Journal of Chemistry 7 (2014) 353 - 358  
**G. Rajarajan**, A. Jegatheesan, B. Neelakantaprasad and B. Ravi  
Impact Factor (SNIP): **0.651** & ISSN No.: **0974 – 1496 & 0976 – 0083**
22. Synthesis and Structural Analysis of Nanocrystalline MnFe<sub>2</sub>O<sub>4</sub>  
Physics Procedia 54 (2014) 159 – 163  
**G. Rajarajan**, T. Shanmugavel, S. Gokul Raj and G. Rameshkumar  
Impact Factor: **0.78** & ISSN No.: **1875 – 3892**
21. Growth and Physio-Chemical Investigation on Cobalt Sulfamate Single Crystal  
International Journal of ChemTech Research 6 (2014) 5692 – 5697  
**G. Rajarajan**, N. Senthilvelan and S. Sivakumar  
Impact Factor (SNIP): **0.598** & ISSN No.: **0974 – 4290 & 2455 – 9555**
20. Study on Growth and Optical, Scintillation Properties of Thallium Doped Cesium Iodide-Scintillator Crystal  
Oriental Journal of Chemistry 30 (2014) 581 – 586



**G. Rajarajan** and B. Ravi

Impact Factor: **0.680** & ISSN No.: **0970 – 020X**

19. Optical and Conductivity Analysis of Thiourea Single Crystals  
Rasayan Journal of Chemistry 7 (**2014**) 287 – 294  
**G. Rajarajan**, B. Ravi, A. Jegatheesan, B. Neelakantaprasad and C. Sadeeshkumar  
Impact Factor (**SNIP**): **0.651** & ISSN No.: **0974 – 1496 & 0976 – 0083**
18. An Investigation of SEM, Dielectric and NLO Properties of Thiourea Potassium Chloride (TPC) Single Crystals  
Rasayan Journal of Chemistry 7 (**2014**) 269 – 272  
**G. Rajarajan**, B. Neelakantaprasad, T. Jayanalina, D. Marimuthu, J. Senthilkumar, C. Sadeeshkumar and A. Jegatheesan  
Impact Factor (**SNIP**): **0.651** & ISSN No.: **0974 – 1496 & 0976 – 0083**
17. Structural and Optical Properties of Bismuth Sulfide Nanoparticles  
International Journal of Science and Research, ETPTA – 2014 (**2014**) 9 - 12  
**G. Rajarajan**, S. Ranjitha, S. Vadivel, J. Marimuthu and S. Natarajan  
Impact Factor (**SJR**): **6.391** & ISSN No.: **2319 – 7064**
16. Mobile Learning – Knowledge in Hand  
International Journal of Mathematical Sciences and Engineering 3 (**2014**) 39 - 43  
**G. Rajarajan**, B. Ravi, A. Jegatheesan, B. Neelakantaprasad and C. Sadeeshkumar  
Impact Factor: **\*\*\*\*** & ISSN No.: **2278 – 1447**
15. Tailoring the Structural and Magnetic Properties and of Nickel Ferrite by Auto Combustion Method  
Procedia Materials Science 6 (**2014**) 1725 - 1730  
**G. Rajarajan**, T. Shanmugavel, S. Gokul Raj and G. Ramesh Kumar  
Impact Factor: **\*\*\*\*** & ISSN No.: **2211 – 8128**

14. An Investigation of SEM, Dielectric and NLO Properties of Thiourea Mono Potassium Phosphate (TMPP) Single Crystals  
Rasayan Journal of Chemistry 7 (2014) 190 – 194  
**G. Rajarajan**, B. Neelakantaprasad, J. Senthilkumar, D. Marimuthu, C. Sadeeshkumar, B. Ravi and A. Jegatheesan  
Impact Factor (SNIP): 0.651 & ISSN No.: 0974 – 1496 & 0976 – 0083
13. An investigation of SEM, Dielectric and NLO Properties of Thiourea Potassium Iodide (TPI) Single Crystals  
Rasayan Journal of Chemistry 7 (2014) 143 – 146  
**G. Rajarajan**, B. Neelakantaprasad, D. Marimuthu, J. Senthilkumar, A. Jegatheesan, and B. Ravi  
Impact Factor (SNIP): 0.651 & ISSN No.: 0974 – 1496 & 0976 – 0083
12. Rapid Phase Synthesis of Nano Crystalline Cobalt Ferrite  
AIP Conference Proceedings 1591 (2014) 496 – 498  
**G. Rajarajan**, T. Shanmugavel, S. Gokul Raj and G. Ramesh Kumar  
Impact Factor: 0.20 & ISSN No.: 0094 – 243X & 1551 – 7616
11. Growth and Characterization of a Nonlinear Optical Crystal: Bis-L-Alanine Barium Chloride  
Chemical Science Review and Letters 2 (2014) 575 – 579  
**G. Rajarajan** and T. Jayanalina  
Impact Factor (SJIF): 4.014 & ISSN No.: 2278 – 6783
10. Structural and Spectral Properties of 1, 2-dihydroxy-9,10-anthraquinone Dye Sensitizer for Solar Cell Applications  
Acta Physica Polonica A 126 (2014) 833 – 839  
**G. Rajarajan**, S. Ranjitha, V. Aroulmoji, T. Mohr and P. M. Anbarasan  
Impact Factor: 0.590 & ISSN No.: 0587 – 4246
09. Studies on the Growth and Characterization of a New Semi-Organic L-Asparagine Potassium Di-Hydrogen Phosphate Crystals  
**G. Rajarajan**, B. Neelakantaprasad, A. Jegatheesan, J. Murugan and V. Aroulmoji  
Asian Journal of Chemistry 26 (2014) 176 - 178

Impact Factor: **0.355** & ISSN No.: **0970 – 7077**

08. Spectral Diffraction and Optical Studies of Succinic-Acetic Acid Single Crystals

Rasayan Journal of Chemistry 6 (**2013**) 334 – 341

**G. Rajarajan**, B. Ravi, A. Jegatheesan, B. Neelakantaprasad and C. Sadeeshkumar

Impact Factor (SNIP): **0.651** & ISSN No.: **0974 – 1496 & 0976 – 0083**

07. Ultrasonic and EPR Studies in Water-Glycerine Mixtures with  $MnSO_4$  &  $VOSO_4$

**G. Rajarajan**

Elixir Chemical Physics 56A (**2013**) 13602 – 13606

Impact Factor: **0.454** & ISSN No.: **2229 – 712X**

06. Thermal, Mechanical and Optical Studies of NaBr – Added L – Alanine Crystal

**G. Rajarajan**, T. Jayanalina, S. Parthiban and S. C. Mojumdar

Journal of Thermal Analysis and Calorimetry 112 (**2013**) 1025 - 1030

Impact Factor: **2.731** & ISSN No.: **1388 – 6150**

05. (6'R\*,7'R\*)-7' - (1,3,-Diphenyl - 1H-pyrazol-4-yl) - 1,2,5',6',7',7a',3",4" - octahydro - 1'H,2"H-dispiro [acenaphthylene - 1,5'-pyrrolo[1,2-c][1,3]thiazole-6',3"-[1]benzopyran]-2,4"- dione

**G. Rajarajan**, J. Murugan, J. Haribabu, B. S. R. Reddy and S. Murugavel  
*Acta Crystallographica E* 69 (**2013**) o493

Impact Factor: **0.347** & ISSN No.: **1600 – 5368**

04. FTIR, XRD, SEM Investigations of Ammonium Dihydrogen Phosphate (ADP) Single Crystal

**G. Rajarajan**, A. Jegatheesan, B. Neelakantaprasad and J. Murugan

International Journal of Computer Applications 53 (**2012**) 15 – 18

Impact Factor: **0.752** & ISSN No.: **0975 – 8887**

03. Synthesis and Characterization of L-Alanine Sodium Bromide: A New Semi Organic Nonlinear Optical Material

**G. Rajarajan** and T. Jayanalina

International Journal of Computer Applications 49 (2012) 33 – 38

Impact Factor: 0.752 & ISSN No.: 0975 – 8887

02. Ultrasonic Velocity Studies in Aqueous Lithium Salts

**G. Rajarajan**, P. Revathy and T. K. Nambinaraynan

Indian Journal of Physics 77B (2003) 677-680

Impact Factor: 1.407 & ISSN No.: 0973 – 1458

01. Acoustical Relaxation Studies in Aqueous Solutions of Sodium Taurocholate

**G. Rajarajan**, G. Ravichandran and T. K. Nambinarayanan

Journal of Molecular Liquids 102 (2003) 267-276

Impact Factor: 5.065 & ISSN No.: 0167 – 7322

#### **RESEARCH PAPERS PRESENTED IN CONFERENCES:**

##### **SUMMARY:**

❖ In International Conferences	:	12
❖ In National Conferences	:	72

##### **IN INTERNATIONAL CONFERENCE / SYMPOSIUM:**

12. Effect of Thiourea on Growth, Structural, Optical and NLO Properties of Ammonium Dihydrogen Phosphate Crystals  
International Conference on Advances & Challenges in Interdisciplinary Engineering and Management 2017, **Vidyaa Vikas College of Engineering and Technology**, Tiruchengode [2017]
11. Photovoltaic Properties Anthraquinone Dyes Using ZnO and ZnO with TiO<sub>2</sub> Nanoparticles for Dye-Sensitized Solar Cell  
International Conference on Energy, Environment, and Engineering, **Coimbatore Institute of Technology**, Coimbatore [2016]
10. Synthesis and Characterization of ZrO<sub>2</sub> and TiO<sub>2</sub>-ZrO<sub>2</sub> Mixed Electrode for Efficient Dye-Sensitized Solar Cell Photovoltaic Properties

- International Conference on Recent Trends on Materials Science and Applications, **Jamal Mohamed College**, Tiruchirappalli **[2016]**
09. Improving the Photocatalytic Efficiency of ZnO Films Through Double Doping (Sn + Mg) Deposited Using a Nebulizer Spray Technique  
International Conference on Solid State Science and Technology **[ICSST – 2015]** Langkawi, Malaysia **[December 2015]**
08. Photovoltaic Properties of Natural Dye-Sensitized Solar Cell  
International Conference on Green Technology for Environmental Pollution and Control, **National Institute of Technology**, Tiruchirappalli **[2014]**
07. Growth and Characterization of NLO Crystal – Meta Nitroaniline  
International Conference on Recent Advances in Physics, **Sri Vidya Mandir Arts & Science College**, Uthangarai **[2013]**
06. Growth & Characterization of a Non-Linear Optical (NLO) Crystal: L – Alanine Barium Chloride  
International Conference on Recent Trends in Advanced Materials, **VIT University**, Vellore **[2012]**
05. Growth and Characterization of Nonlinear optical crystal: L – Alanine Sodium Bromide  
International Conference on Recent trends in Advanced Materials, **VIT University**, Vellore **[2011]**
04. Equilibrium Kinetic and Thermodynamic Studies on the Adsorption of Anthraquinone Dye Reactive Blue 4 by Activated Charcoal  
International Conference on Opportunities and Challenges in Biotechnology & Environment Science, **Vellalar College for Women**, Erode **[2007]**

03. Structural and Thermal Studies on Mg Substituted Copper Ferrites  
International Conference on Nanomaterial & its Applications,  
**National Institute of Technology**, Tiruchirappalli [2007]
02. Thermal and Phase Transition Studies on Copper Ferrites  
International Conference on Nanomaterial & its Applications,  
**National Institute of Technology**, Tiruchirappalli [2007]
01. Ultrasonic and EPR Studies in Water-Glycerine Mixtures with  $MnSO_4$  &  
 $VOSO_4$   
4<sup>th</sup> Asia Pacific EPR/ESR Symposium, **Indian Institute of Science (IISc)**,  
Bengaluru [2004]

#### **IN NATIONAL CONFERENCE / SYMPOSIUM / SEMINAR:**

72. Photovoltaic Properties of Natural Photo Sensitizer for Dye-Sensitized Solar  
Cell Applications  
National Conference on Advances in Materials Science and Nonlinear  
Systems, **K.S.R College of Engineering**, Tiruchengode [2016]
71. Synthesis, Crystal Growth, Spectral, Optical and Thermal  
Characterization of a New Molecular Charge Transfer Complex Crystal:  
2-Amino-5-Chloropyridinium-P-Toluenesulphonate  
National Conference on Advances in Materials Science and Nonlinear  
Systems, **K.S.R College of Engineering**, Tiruchengode [2016]
70. Growth and Characterization of Sodium Thiourea Chloride (STC) – A New  
Promising Semiorganic NLO Crystal for Optoelectronics Applications  
National Conference on Advances in Materials Science and Nonlinear  
Systems, **K.S.R College of Engineering**, Tiruchengode [2016]

69. Growth and Characterization of a New Organic Nonlinear Optical Crystal: 2-Amino 5-Chloropyridinium-L-Tartarate  
National Conference on Emerging Trends in Materials and Methods, **K.S.R College of Arts & Science for Women**, Tiruchengode **[2015]**
68. Synthesis, Growth, Structural, Optical and Thermal Properties of a New Organic Nonlinear Optical Crystal: 2-Amino-5-Chloropyridinium-L-Tartarate  
National Conference on Recent Advance Materials, **VIT University**, Vellore **[2015]**
67. Structural and Optical Properties of Bismuth Sulfide Nano Particles  
National Conference on Emerging Trends in Plasma Technology and its Applications, **Sri Vasavi College**, Erode **[2014]**
66. Structural and Optical Properties of Purpurin for Dye-Sensitized Solar Cells  
Recent Advances in New and Renewable Energy, **Periyar University**, Salem **[2014]**
65. Optical Properties of Natural Dye Sensitizers for the Applications of Dye-Sensitized Solar Cell  
National Conference on Advanced Materials 2014, **Sri Vidya Mandir Arts & Science College**, Uthangarai **[2014]**
64. Growth and Characterization of Succinic Acid Doped Urea Thiourea Succinic NLO Crystal  
National Conference on Advanced Materials 2014, **Sri Vidya Mandir Arts & Science College**, Uthangarai **[2014]**
63. Growth and Characterization of Urea Thiourea Nonlinear Optical Crystal  
National Conference on Advanced Materials 2014, **Sri Vidya Mandir Arts & Science College**, Uthangarai **[2014]**

62. Synthesize and Characterization of Copper Nano-Particles by Co-Precipitation Method  
National Conference on Advanced Materials 2014, **Sri Vidya Mandir Arts & Science College**, Uthangarai [2014]
61. Inventions and Innovations at the College Education  
National Seminar on Exploring Innovative Solution for Enhancing Educational Experiences', **Shree Amirtha College of Education** [2014]
60. Consequence of Pioneering Curriculum in Complying Societal Trends  
National Seminar on Exploring Innovative Solution for Enhancing Educational Experiences', **Shree Amirtha College of Education** [2014]
59. Innovation in Teaching and Learning Progression  
National Seminar on Exploring Innovative Solution for Enhancing Educational Experiences', **Shree Amirtha College of Education** [2014]
58. DFT and TD-DFT studies on Photo Sensitizers in Dye-Sensitized Solar Cells  
National conference on Recent Trends on Science and Technology, **Velalar College of Engineering and Technology**, Erode [2013]
57. The Role of Dielectric Materials in Power Electronics  
National Level Conference on Recent Trends in Control Systems and Power Electronics, **Vivekanandha Institute of Engineering and Technology for Women**, Elayampalayam [2012]
56. Growth and characterization of Magnetic Iron Oxide Nanoparticles  
National Level Conference on Nanomaterials, **Karunya University**, Coimbatore [2012]



55. Acoustic Studies on Aqueous Sugar Solutions  
National Symposium on Acoustics, **Acoustical Society of India & KSR Institute for Engineering and Technology**, Tiruchengode [2012]
54. Acoustical Absorption Studies in Aqueous Lithium Salts  
National Symposium on Acoustics, **Acoustical Society of India & KSR Institute for Engineering and Technology**, Tiruchengode [2012]
53. An Investigation on Structural, Optical and Mechanical Properties of a Novel Semi Organic Nonlinear Optical Crystal - L-Alanine Sodium Bromide  
National Conference on Recent Trends in Materials Science, **K S R College of Technology**, Tiruchengode [2012]
52. Spintronic Materials: A New Era in Spin-Based Materials  
National Conference on Advanced Research in Physics - A Few Perspectives, **Jamal Mohamed College**, Tiruchirappalli [2012]
51. Crystal Growth: A Brief Review on Growing Mechanisms  
National Conference on Advanced Research in Physics - A Few Perspectives, **Jamal Mohamed College**, Tiruchirappalli [2012]
50. Preparation and Magnetic Studies of Dilute Magnetic Semiconductors  
National Conference on Advanced Nanomaterials, Centre for Nanoscience and Nanotechnology, **Periyar University**, Salem [2012]
49. XRD, FTIR, Thermal Characterization Studies on Potassium Bromide (KBr) Single Crystal  
National Conference on Advanced Nanomaterials, Centre for Nanoscience and Nanotechnology, **Periyar University**, Salem [2012]
48. Growth and Characterization Studies on Ammonium Dihydrogen Phosphate (ADP) Single Crystal

- National Conference on Advanced Nanomaterials, Centre for Nanoscience and Nanotechnology, **Periyar University**, Salem **[2012]**
47. Growth and Characterization of NLO Thiourea – Succinic Acid Single Crystals  
National Conference on Advanced Nanomaterials, Centre for Nanoscience and Nanotechnology, **Periyar University**, Salem **[2012]**
46. Synthesis and Magnetic Studies of Dilute Magnetic Semiconductors  
National Conference on Recent Trends in Nanoscience and Technology, **Vivekanandha College of Arts and Sciences for Women (Autonomous)**, Elayampalayam, Tiruchengode **[2012]**
45. Growth and Characterization Studies on Potassium Bromide (KBr) Single Crystal  
National Conference on Recent Trends in Nanoscience and Technology, **Vivekanandha College of Arts and Sciences for Women (Autonomous)**, Elayampalayam, Tiruchengode **[2012]**
44. FTIR, XRD, SEM Investigations of Ammonium Dihydrogen Phosphate (ADP) Single Crystal  
National Conference on Recent Trends in Nanoscience and Technology, **Vivekanandha College of Arts and Sciences for Women (Autonomous)**, Elayampalayam, Tiruchengode **[2012]**
43. Growth and Characterization of Novel Nonlinear Optical Thiourea–Succinic Acid Single Crystals  
National Conference on Recent Trends in Nanoscience and Technology, **Vivekanandha College of Arts and Sciences for Women (Autonomous)**, Elayampalayam, Tiruchengode **[2012]**
42. Need of Research Activities for Undergraduate Students

- 14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
41. Multilayered Structures Based on Amorphous Silicon Nitrides  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
40. Mobile Learning: The Next Generation of Learning  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
39. Mobile Learning: A Future Approach  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
38. Imparting Quality Technical Education on Teaching-Learning Paradigm  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
37. Rural Entrepreneurship  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
36. Developing a Model Learning Technology using Mobile Devices by Open  
Source Software  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
35. Need of Research Activities for Undergraduate Students  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**
34. Employable Engineering Skills Required by Engineering Graduates in  
India  
14<sup>th</sup> State Level ISTE Convention, **Mahendra Engineering College**,  
Mallasamudram **[2011]**

33. Growth and Characterization of NLO Crystal L-Alanine HBr Single Crystal  
National Conference on Recent Trends in Materials Science,  
**K S R College of Technology**, Tiruchengode [2011]
32. Growth and Characterization of Bis-(Thiourea) Barium Single Crystals  
National Level Conference on Recent Advances in Crystal Growth and  
Nano Sciences, **Kongu Engineering College**, Perundurai [2010]
31. Growth and Characterization of Sodium Substituted Lithium Para  
Nitrophenolate Single Crystals  
National Level Conference on Recent Advances in Crystal Growth and  
Nano Sciences, **Kongu Engineering College**, Perundurai [2010]
30. Growth and Characterization of L – Asparagine Potassium Dihydrogen  
Phosphate  
National Conference on Recent Trends in Spectroscopy and Electronics,  
**Muthayammal Arts and Science College**, Rasipuram [2010]
29. Growth and Characterization of Thiourea Single Crystals  
National Conference on Recent Trends in Spectroscopy and Electronics,  
**Muthayammal Arts and Science College**, Rasipuram [2010]
28. FTIR, XRD and Non-Linear Efficiency Study on Glycine Potassium  
Dihydrogen Crystals  
National Conference on Recent Trends in Spectroscopy and Electronics,  
**Muthayammal Arts and Science College**, Rasipuram [2010]
27. Emergence of Nanowires Field: A Comprehensive Review  
National Conference on Multifunctional Nanomaterials and  
Nanocomposites, **Bharathiar University, Coimbatore** [2010]
26. Growth of Nanowires by Electrodeposition Method: A Review


- National Conference on Recent Trends in Crystal Growth, Thin Films, and Nano-Structured Materials, **Aditanar College of Arts and Science**, Tiruchendur **[2009]**
25. A Comprehensive Review on Nanowires and its Applications  
National Conference on Recent Trends in Crystal Growth, Thin Films, and Nano-Structured Materials, **Aditanar College of Arts and Science**, Tiruchendur **[2009]**
24. FTIR and XRD Investigations of BTCC Crystals Doped Glycine  
National Conference on Recent Trends in Crystal Growth, Thin Films and Nano-Structured Materials, **Aditanar College of Arts and Science**, Tiruchendur **[2009]**
23. Growth and Characterization of Pure and Cadmium Doped L-Alanine Single Crystals  
National Conference on Recent Trends in Crystal Growth, Thin Films, and Nano-Structured Materials, **Aditanar College of Arts and Science**, Tiruchendur **[2009]**
22. FTIR, XRD and Non-Linear Efficiency Study on L-Arginine Doped Crystals  
National Conference on Recent Trends in Crystal Growth, Thin Films, and Nano-Structured Materials, **Aditanar College of Arts and Science**, Tiruchendur **[2009]**
21. Vertical Organic Nanowire Arrays  
National Conference on Recent Trends in Innovative Technologies, **Velalar College of Engineering and Technology**, Erode **[2009]**
20. Electrodeposition Nanowires: A Technology for the Future  
National Conference on Recent Trends in Innovative Technologies, **Velalar College of Engineering and Technology**, Erode **[2009]**

19. Nanowires: Properties, Synthesis, and Applications – A Review  
National Conference on Recent Trends in Innovative Technologies,  
**Velalar College of Engineering and Technology**, Erode **[2009]**
18. Growth and Characterization of Bis(Thiourea) Cadmium Chloride Single Crystals Doped With Glycine  
National Level Conference on Emerging Trends in the Research Field of Physics, **Erode Arts College**, Erode **[2009]**
17. Growth and Characterization of L-Arginine added Thiourea Single Crystals  
National Level Conference on Emerging Trends in the Research Field of Physics, **Erode Arts College**, Erode **[2009]**
16. Acoustical Studies in Water-Ethanol Mixtures with Amino Acids  
National Conference on Subtle World of Physics, **Vivekananda College of Arts and Sciences for Women**, Tiruchengode **[2006]**
15. Ultrasonic Studies on Nickel Chloride in Non – Aqueous Solutions  
National Conference on Ultrasonics, **Holy Cross College**, Tiruchirappalli **[2005]**
14. Ultrasonic Studies on Ammonium Ferrous Sulphate in Non – Aqueous Solutions  
National Conference on Ultrasonics, **Holy Cross College**, Tiruchirappalli **[2005]**
13. Acoustical Studies in Water – Methanol Mixtures With Amino Acids  
National Conference on Ultrasonics, **Holy Cross College**, Tiruchirappalli **[2005]**

12. Application of Conducting Polymer: A Review  
National Seminar on Recent Advances in Conducting Polymer,  
**Ramakrishna Mission Vidyalyaya College of Arts and Science,**  
Coimbatore **[2005]**
11. Ultrasonic Studies in DMF + THF Binary Mixtures  
National Seminar on Emerging Trends in Molecular Physics,  
**Annamalai University [2004]**
10. Ultrasonic Relaxation Studies in CuSO<sub>4</sub> with Water-Dioxan Mixtures  
National Seminar on Emerging Trends in Molecular Physics,  
**Annamalai University [2004]**
09. Ultrasonic Absorption Studies in Aqueous Lithium Salts  
National Seminar on Emerging Trends in Molecular Physics,  
**Annamalai University [2004]**
08. FTIR & XRD Analysis of Gallstones  
National Seminar on Chemical Physics, **Annamalai University [2003]**
07. Dielectric Studies of Carboxylic Acids in Aprotic Solvents  
National Seminar on Chemical Physics, **Annamalai University [2003]**
06. Dielectric and Microwave Studies of Carboxylic Acids in Dioxan  
National Seminar on Chemical Physics, **Annamalai University [2003]**
05. Ultrasonic Velocity Studies in Aqueous Lithium Salts  
National Seminar on Chemical Physics, **Annamalai University [2003]**
04. Dielectric and Spectroscopic Investigation on the Limestone Samples  
of Tamil Nadu  
National Symposium on Atomic Molecular, Structure, Interactions and  
Laser Spectroscopy, **Banaras Hindu University, Varanasi [2002]**

03. Ultrasonic Studies on Paramagnetic Ions in Water-Glycerine Mixtures  
XI - National Symposium on Ultrasonics, **Sri Krishnadevaraya University**, Anantapur [2002]
02. Acoustic Relaxation Studies in Aqueous-Glycerine Mixtures with Paramagnetic Ions  
X - National Symposium on Ultrasonics, **Osmania University**, Hyderabad [2001]
01. Acoustic Relaxation Studies in Some Amino Acids  
X - National Symposium on Ultrasonics, **Osmania University**, Hyderabad [2001]

#### **BOOKS AUTHORED:**

-  **Engineering Physics I** First Edition **July 2011**, KKS Publishers, Chennai  
*[As per Anna University Syllabus]*

#### **RESEARCH PROPOSALS READY BE SUBMITTED TO FUNDING AGENCIES:**

- ❖ Research proposal is ready in the field of **Dye- Sensitized Solar Cells** entitled "**Rare Earth Metal Oxides/Natural Dyes Doped TiO<sub>2</sub> Composites for Dye Sensitized Solar Cells**" with **Science & Engineering Research Board (DST-SERB)**, **New Delhi** under **Core Research Grant (CRG) Scheme** by **Next Proposal Call**. The budget requested for the Research Proposal is **Rs. Twenty Six Lakh**.
- ❖ Research proposal is ready in the field of **Non-Linear Optical Crystals** entitled "**Investigation on Growth and Characterization of Metallic Boro Phthalate Family NLO Single Crystals for Deep UV and Laser Applications**" to **Council of Scientific and Industrial Research (CSIR)**, **New Delhi**. The intended Research Proposal budget is **Rs. Twenty Three Lakh**.
- ❖ Research proposal is ready in the field of **Ferrites** entitled



"Development of Magnetic Nano Carriers in the Form of Rare Earth Doped Spinel Ferrites for Medical Applications" to Science and Engineering Research Board (DST-SERB), New Delhi. The intended Research Proposal budget is Rs. Thirty Five Lakh.

#### **AWARDS AND RECOGNITIONS:**

01. Won the Best Paper Award in **X – National Symposium on Ultrasonics** held at Department of Physics, Osmania University, Hyderabad during **March 15<sup>th</sup> & 16<sup>th</sup> 2001** for the paper entitled "**Acoustic Relaxation Studies in Aqueous - Glycerine Mixtures with Paramagnetic Ions**"
02. Won the Best Paper Award in **National Conference on Recent Trends in Spectroscopy and Electronics** held at Department of Physics Muthayammal Arts and Science College, Rasipuram during **5<sup>th</sup> & 6<sup>th</sup> February 2010** for the paper entitled "**Growth and Characterization of L – Asparagine Potassium Dihydrogen Phosphate**"
03. Won the Best Paper Award in **14<sup>th</sup> ISTE State Level Convention** held at Mahendra Engineering College, Mallsamudram, Namakkal District during **29<sup>th</sup> & 30<sup>th</sup> December 2011** for the paper entitled "**Mobile Learning: A Future Approach**"

#### **INVITED TALK / GUEST LECTURE DELIVERED:**

01. Performed the role as an **ADJUDICATOR** for the **17<sup>th</sup> NCSC District Level Children's Science Congress** organized by the **Tamil Nadu Science Forum [TNSF] Salem Chapter** and **Vinayaka Mission's Kirupananda Variyar Engineering College**, Periya Seeragapadi – 636 308, Salem District **4<sup>th</sup> November 2009**

02. Delivered an Invited Talk on “**Spintronic Materials**” during the **AICTE Sponsored Staff Development Programme [SDP]** on “**Visualization of SSS Materials**” organized by **Vivekanandha Institute of Engineering and Technology for Women**, Tiruchengode – 637 205, Namakkal District **27<sup>th</sup> May 2011**
03. Delivered an Invited Talk on “**Recent Advances in Material Sciences and Spectroscopy**” during the **Guest Lecture** organized by Department of Physics and Chemistry, **Mahendra Arts and Science College**, Kallipatti – 637 501, Namakkal District **31<sup>st</sup> August 2012**
04. Delivered an Invited Talk on “**Research for Future: Problems, Adaptation, and Survival**” during **UGC Sponsored National Seminar on NMR Applications in Food Science** organized by the Department of Physics, **Devanga Arts College**, Aruppukottai – 626 101 **8<sup>th</sup> March 2013**
05. Delivered an Invited Talk on “**Research Proposals and Funding Agencies: An Insight**” at **Sri Shanmugha College of Engineering and Technology**, Sankari – 637 304, Tamil Nadu **4<sup>th</sup> February 2019**

**CONFERENCE / SEMINAR / SYMPOSIUM / WORKSHOP ORGANIZED:**

01. **SCIHUM’06** – A State Level Technical Symposium on “**Nurture Nature for Our Future**” on **28<sup>th</sup> February 2006** as **Convener** at Velalar College of Engineering and Technology, Erode – 638 012.
02. 3<sup>rd</sup> National Conference on “**Telecommunication in Health Care Engineering**” on **26<sup>th</sup> March 2011** as **Convener** at the Department of Science & Humanities [Physics], Velalar College of Engineering and Technology, Erode – 638 012.

03. **RDAMA'11** – One Day State Level Seminar on “**Recent Development in Advanced Materials and its Applications**” on **12<sup>th</sup> August 2011** as **Convener** organized by Department of Physics, Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
04. **MATTE'11** – National Level Workshop on “**MATLAB: A Tool for Engineers**” on **16<sup>th</sup> & 17<sup>th</sup> September 2011** as **Convener** organized by Department of Physics & ECE, Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
05. **14<sup>th</sup> ISTE State Level Convention** on **29<sup>th</sup> & 30<sup>th</sup> December 2011** as **Organizing Secretary** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
06. **Science Exhibition** for School, Polytechnic & College Students “**Creating a New World with Science and Technology**” on **5<sup>th</sup>, 6<sup>th</sup> & 7<sup>th</sup> January 2012** as **Coordinator** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
07. **International Conference on Innovative Computing Information Processing – 2012** as **Steering Committee Member** on **29<sup>th</sup>, 30<sup>th</sup> & 31<sup>st</sup> March 2012** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
08. **Tamil Nadu State Council for Science & Technology [TNSCST], Government of Tamil Nadu Sponsored [Financial Assistance] Orientation Programme for School Science Teachers** in Namakkal, Salem, Dharmapuri & Krishnagiri Districts on **Effective and Innovative Teaching** as **Convener cum Coordinator** on **21<sup>st</sup> and 22<sup>nd</sup> June 2012** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.

09. As the Man behind and Instrumental in Designing the Embalm & Organized Events for **Mahendra Young Scientist and Technologist's Forum**, which was inaugurated on **22<sup>nd</sup> June 2012** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District to Inculcate Science & Technology with the School, College and Polytechnic Students to bring out their Scientific Talent to the Outside World.
10. **MATTE'12** – 2<sup>nd</sup> National Level Workshop on “**MATLAB: A Tool for Engineers**” on **7<sup>th</sup> & 8<sup>th</sup> September 2012** as **Convener** organized by Department of Physics & ECE, Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
11. **International Conference on Communications, Controls, and Systems – 2012 [ICCCS'12]** as **Steering Committee Member** on **14<sup>th</sup>, 15<sup>th</sup> & 16<sup>th</sup> September 2012** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.
12. **Tamil Nadu Science Forum's [TNSF] 3<sup>rd</sup> Youth Science Festival [YSF'12]** as **Organizing Secretary** on **6<sup>th</sup> & 7<sup>th</sup> October 2012** at Mahendra Engineering College, Mallasamudram – 637 503, Namakkal District.

**CONFERENCE/SYMPOSIUM/SEMINAR/WORKSHOP/FDP ATTENDED:**

01. **'III Winter School on Solar and Solar-Terrestrial Physics'** held at Indian Institute of Astrophysics, Kodaikanal from **27 - 31 January 1998**.
02. One Day Workshop on **'Physical Ultrasonics'** held at Department of Physics, St. Joseph's College, Tiruchirappalli on **27 January 2000**.

03. *'National Symposium on Acoustics'* held at Department of Physics, St. Joseph's College, Tiruchirappalli on **22 & 23 November 2000.**
04. *'X National Symposium on Ultrasonics'* held at Department of Physics, Osmania University, Hyderabad on **March 15 & 16 2001.**
05. *'SERC School on Concepts in Chemical Dynamics'* held at Department of Chemistry, Indian Institute of Technology [IIT- Madras], Chennai between **5 to 24 March 2001.**
06. *'XI National Symposium on Ultrasonics'* held at Department of Physics, Sri Krishnadevaraya University, Anantapur **January 10 & 11 2002**
07. *'National Seminar on Chemical Physics'* held at Department of Physics, Annamalai University, Annamalainagar **March 10 & 11 2003.**
08. *'National Seminar on Emerging Trends in Molecular Physics'* held at Department of Physics, Annamalai University, Annamalainagar **March 8 & 9 2004.**
09. *'4<sup>th</sup> Asia Pacific EPR/ESR Symposium'*, held at Department of Physics, Indian Institute of Science, Bangalore **November 22 – 25 2004.**
10. Training Programme on *'Instructional Design and Delivery'* conducted by National Institute of Technical Teachers Training & Research at Velalar College of Engineering and Technology **November 7 - 12 2005**
11. *'National Conference on Ultrasonics'* held at Department of Physics, Holy Cross College, Tiruchirappalli **December 1 & 2 2005.**
12. *'National Conference on Recent Trends in Crystal Growth, Thin Films and Nano-Structured Materials'* held at Department of Physics, Aditanar College of Arts and Science, Tiruchendur **August 5 & 6 2009.**

13. ISTE Organized One Day Workshop on ‘*Environmental Issues in Energy Technologies with Focus on Renewable Energies*’ held at Mahendra Engineering College **10 August 2011.**
14. One Day Workshop Organized in Association with IIT Madras on ‘*National Programme on Technology Enhanced Learning [NPTEL]*’ held at Mahendra Engineering College **27 October 2012.**
15. ‘*Special Seminar on Recent Trends in Novel Materials*’ held at Centre for High-Pressure Research (**CHPR**), School of Physics, Bharathidasan University, Tiruchirappalli **20 February 2013.**
16. Two Week ISTE Workshop on ‘*Fluid Mechanics*’ held at Selvam College of Technology, Namakkal and Conducted by Indian Institute of Technology, Kharagpur **20 to 30 May 2014.**
17. ‘*International Conference on Advances & Challenges in Interdisciplinary Engineering and Management*’, held at Vidyaa Vikas College of Engineering and Technology, Tiruchengode **February 11 & 12 2017.**
18. Online Faculty Development Programme on “*Remarkable Structural, Magnetic and Microwave Adsorption Properties of Rare Earth-Doped Mn-Cu Ferrites. & In-situ Characterization of Materials at Elevated Temperatures*” Organized by the Department of Physics, Kristu Jayanti College (Autonomous) Bengaluru **4 May 2020.**
19. Webinar on “*Crystallography and its Applications*” organized by Department of Science & Humanities, Er. Perumal Manimekalai college of Engineering, Hosur on **8 May 2020.**
20. Webinar on “*Development of Technologically Important Single Crystal*” organized by Department of Physics, (SRM) Easwari Engineering College, Chennai on **13 May 2020.**

21. Webinar on *“Physics in Day to Day Life”* Organized by Department of Physics, (SRM) Easwari Engineering College, Chennai on **13 May 2020**.
22. Webinar on *“Micro & Nanotechnology and its Applications”* Organized by Department of Physics, G.T.N. Arts College (Autonomous), Dindigul on **14 May 2020**.
23. *“Indian Summer School on Crystal Growth (ISSCG – 2020)”* Organized by SSN Research Centre, SSN Institutions (Autonomous), Chennai in Association with Indian Association for Crystal Growth during **14 May 2020 to 23 May 2020**.
24. International Level COVID-19 Pandemic Webinar on *“Functional Novel Materials for Electrochemical Sensors and Energy Storage Devices”* Organized by Thiagarajar College, Madurai and Ming Chi University of Technology, New Taipei City, Taiwan on **15 May 2020**.
25. Virtual Symposium on *“International Day of Light (IDL-2020)”* Organized by IEEE Photonics Society, SPIE Student Chapters and Department of Physics, Indian Institute of Technology (IIT), Guwahati on **16 May 2020**.
26. Online Faculty Development Program on *“Patent to All”* organized by ResearchBrains Academic Research Lab, Erode on **17 May 2020**.
27. Webinar on *“Materials Science: Webinar Series – I”* Organized by Centre for Nanoscience and Nanotechnology (CNSNT), Sathyabama Institute of Science and Technology (Deemed to be University), Chennai during **18 May 2020 to 23 May 2020**.
28. Faculty Development Program on *“Nanomaterials for Energy Harvesting and Biomedical Applications”* Organized by Nanomaterials for Photovoltaic and Biomaterials Laboratory (NPBL), Department of Humanities and Basic

Sciences, Godavari Institute of Engineering and Technology (Autonomous), Rajamahendravaram, Andhra Pradesh from **18 May 2020 to 22 May 2020.**

29. Webinar on *“Supercapacitors: New Age Energy Storage Devices”* Organized by the Department of Physics, Ayya Nadar Janaki Ammal College, Sivakasi on **19 May 2020.**
30. Online Faculty Development Programme on *“The Use of Virtual Physics Lab – Creating Next Generation Teachers”* Organized by Department of Freshman Engineering, Geethanjali College of Engineering and Technology, Medchal, Telangana in Association with Indian Society for Technical Education (ISTE) from **20 May 2020 to 24 May 2020.**
31. International Virtual Seminar on *“The Role of Nanotechnology Against COVID-19”* Organized by the Department of Nanoscience and Technology, Alagappa University, Karikudi from **20 May 2020 – 22 May 2020.**
32. Webinar on *“An Insight into NAAC – RAF”* Organized by the Internal Quality Assurance Cell (IQAC), V.O. Chidambaram College, Thoothukudi on **22 May 2020.**
33. Webinar on *“Post COVID-19: Science and Technology”* Organized by SRM University – AP, in Association with The Hindu on **29 May 2020.**




#### **RESEARCH FACILITIES AVAILABLE & DEVELOPED:**

- ❖ The Constant Temperature Bath [CTB] equipment with Cryogenic for growing crystals by Slow Evaporation and Slow Cooling Methods in the temperature range of **3°C to 80°C** and other basic necessary equipment's are available with **Dr. G. Rajarajan.**




❖ The Selvam Centre for Materials Research [**SCMR**] was established and developed by **Dr. G. Rajarajan** with instruments available with him personally. The **SCMR** was equipped with exclusive research facilities for the growth of crystals, deposition of thin films and acoustics studies. Thirteen II M. Sc., Physics Students [**2012 – 2014 Batch**] of Selvam Arts & Science College were carried out their final semester project work at SCMR in the field of NLO Crystals, Thin Films and Acoustics.

### **COMPUTER SKILLS:**

-  Having Excellent Hands on Experience/Exposure in Troubleshooting of Desktops & Laptops – **Installation of Operating System [MS Windows & Linux] with Software's and Hardware Servicing**
-  C, C++, VC++, VB, MATLAB, MATHEMATICA, Microcal Origin, HTML and Scientific Research Software's
-  Microsoft Windows Operating Systems, Linux, Microsoft Office, Latex, Adobe Photoshop, CorelDraw, and Networking

### **SKILLS WITH SCIENTIFIC INSTRUMENTS:**

-  Having good working and troubleshooting experience of sophisticated instruments for research viz., Constant Temperature Bath (**CTB**), X-Ray Diffractometer (**XRD**), Fourier Transform Infrared Spectrometer (**FTIR**), Differential Scanning Calorimeter (**DSC**), LCZ Dielectric Measurement Meter, Photoacoustic Instruments, Electron Paramagnetic Resonance Spectrometer (**EPR**) and all kinds of Ultrasonic Instruments.

## EXTRACURRICULAR ACCOMPLISHMENTS:

- ❖ Member of *Rotary Club of Erode Thindal* from *June 2009*
- ❖ Organized *Eye Screening Camps* with the Support from **Vasan Eye Care Hospitals** of **Erode, Salem, and Namakkal** at **Velalar College of Engineering and Technology, Mahendra Educational Institutions, Selvam Educational Institutions and Vidhya Mandhir Institute of Technology.**
- ❖ Served as *Staff Coordinator* of **ROTARACT CLUB** of Velalar College of Engineering and Technology, Erode – 638 012 from *July 2006* to *June 2010.*
- ☑ *During this Golden Era of the ROTARACT CLUB of VCET,*
  - ❄ The Rotaract Club got the *Rotary International Presidential Citation Award* for its Outstanding Service Activities to the society for the year *2007 – 2008 & 2009 – 2010.*
  - ❄ The *Rotaract Club of VCET* implanted *10,000 Tree Saplings* during *July & August 2008* in and around Erode City as a measure of protecting the Environment.
  - ❄ Instrumental in creating a *Blood Donors Club* among the students of Velalar College of Engineering and Technology, Erode – 638 012 for *Donating Blood* during the *Emergency Situation* for the needy patients.
  - ❄ The members of *Rotaract Club* celebrated the *Diwali* with inmates of various *Orphanages* situated in and around Erode City by providing them *New Dress, Fire Crackers and Sweets* during the *Years 2006 to 2010.*

❄ The preeminent serving Rotaract members from **Velalar College of Engineering and Technology** nurtured and designated to the post of **President, Secretary** and **Treasurer** at the **District Rotaract** level due the efforts of **Rtn. Dr. G. Rajarajan**.

**PERSONAL INFORMATION:**

Date of Birth & Age : **15 May 1976 & 46**

Father's Name : (Late) **Mr. T. Gopal**

Mother's Name : (Late) **Mrs. P. Manonmani**

Marital Status : Married

Spouse Name : **Dr. S. Jayanthi**

Religion & Community : Hindu & BC – Kongu Vellalar

Nationality : Indian