

Sri Sai Ram Engineering College

Department Of Humanities And Sciences

Name : Dr. G. RAMANATHAN



Designation :

PROFESSOR

Qualification :

M.Sc., M.Phil., Ph.D

Area of Specializations

Material Science, Thin film

Experience :

Teaching : UG : 25 yrs 1 months 12 days

PG : 2 yrs

Industry : Nil yrs

**No. of Workshop /Conferences /FDP
attended**

**15/ 25(International-12) / National-13/
FDP-14 Attended-09**

Publication :

Journal National : 19

International : 19

Conference National : 20

International : 12

Research Guidance :

6-M.Sc., student project- guidance.

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|---------------------------|--|
| <i>General :</i> | 100% result produced (+2 physics) in Mary Ann Matriculation school in Madurai |
| <i>Staff Achievements</i> | 19 times 100% result in B.E Anna university Theory examination (I Year) Many times more than 90% result in Anna university and Madurai Kamarajar university theory examination. |

EDUCATIONAL QUALIFICATION:

| Category | Name of the Degree | Specialization | Year of Passing | Name of the College | Name of the University | % of Marks / Grades obtained | Class obtained |
|--------------|--------------------|----------------|-----------------|----------------------------|-----------------------------------|------------------------------|----------------|
| <i>UG</i> | <i>B.Sc.,</i> | <i>Physics</i> | <i>1995</i> | <i>M.S.S.W.B.C</i> | <i>Madurai Kamaraj University</i> | <i>69%</i> | <i>I</i> |
| <i>PG</i> | <i>M.Sc.,</i> | <i>Physics</i> | <i>1997</i> | <i>N.M.S.S.V.N College</i> | <i>Madurai Kamaraj University</i> | <i>73%</i> | <i>I</i> |
| | <i>M.Phil.,</i> | <i>Physics</i> | <i>2001</i> | <i>Alagappa University</i> | <i>Alagappa University</i> | <i>71%</i> | <i>I</i> |
| <i>Ph.D.</i> | | <i>Physics</i> | <i>2014</i> | <i>M.S.U</i> | <i>M.S.U</i> | | |

| Name of the College | Designation | Joining Date | Relieving Date | Experience | | |
|---|----------------------------|-------------------|-------------------|------------|-----------|-----------|
| | | | | Years | Months | days |
| <i>Madurai Kamaraj University College</i> | <i>Lecturer</i> | <i>10.10.1997</i> | <i>10.09.2004</i> | <i>6</i> | <i>11</i> | <i>1</i> |
| <i>Sourashtra College</i> | <i>Lecturer</i> | <i>14.09.2004</i> | <i>08.09.2006</i> | <i>1</i> | <i>11</i> | <i>25</i> |
| <i>Rajalakshmi Engineering College</i> | <i>Lecturer</i> | <i>10.01.2007</i> | <i>30.08.2009</i> | <i>2</i> | <i>7</i> | <i>21</i> |
| <i>Sri Sai Ram Engineering College</i> | <i>Assistant Professor</i> | <i>05.09.2009</i> | <i>31.07.2016</i> | <i>6</i> | <i>10</i> | <i>26</i> |
| <i>Sri Sai Ram Engineering</i> | <i>Associate professor</i> | <i>01-08-2016</i> | <i>31.05.2019</i> | <i>2</i> | <i>9</i> | <i>31</i> |

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|--|------------------|-------------------|------------------|-----------|-----------|-----------|
| <i>College</i> | | | | | | |
| <i>Sri Sai Ram Engineering College</i> | <i>Professor</i> | <i>01-06-2019</i> | <i>Till date</i> | <i>3</i> | <i>9</i> | <i>28</i> |
| <i>Total</i> | | | | <i>25</i> | <i>01</i> | <i>12</i> |

Specialization in Teaching:

1. *Solid state physics*
2. *Electronics*
3. *Material science*
4. *Engineering Physics*
5. *Electromagnetic theory*

Specializations in Research:

1. *Thin films semiconductor*
2. *X-ray crystallography*

Research Interest:

Nano materials, Charge density studies in metals, semiconductors, dilute magnetic semiconductors

Workshops:

Total=15

1. **Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the Online workshop series on MATLAB for engineering & science Module code EXEWEE03-signal and image processing using MATLAB Organized by Elixir educational services, Chhattisgarh and The PRIME ACADEMY from 03-17 July 2021.**
2. **Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One week Workshop On Materials Technology Advancement in current scenario-MTACS2020 organized by the Department of**

physics, Sathyabama Institute of science and Technology, Chennai through Zoom video communication from 4th to 10th July 2020.

3. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the Webinar series on "MY LIFE MY YOGA" organized by Yoga and Meditation club of Sri Ramakrishna Engineering college Coimbatore from 25-27 June 2020.
4. One day National level workshop on "INSTRUMENTATION TECHNIQUES FOR ADVANCED RESEARCH" Organized by Sri Venkateswara College of Engineering Sriperumbudur on 28th July 2017.
5. Two days National level workshop on Revealing the Advances in material science at Sri Sairam Institute of Technology on 19th and 20th July 2016.
6. One day *workshop on thin film characterization basic principles and practices organized by Department of physics IIT madras on Feb 21st 2016.*
7. "National workshop on Analytical Instrumentation Techniques Organized by St Peter's University Department of Science and Humanities Association and Indian Spectrophysics Association during 25th Sep 2015.
8. "Two days workshop on Advanced characterization Techniques of materials" *conducted by Department of Mechanical Engineering, College of Engineering, Guindy on 23-24 Feb 2015.*
9. International workshop on strongly correlated materials *held at centre of highpressure Research, School of Physics, Bharathidasan University on 20 January 2015.*
10. One day *workshop on Materials in Research and Development organized by Jeppiaar Engineering College on 28 July 2014.*
11. Two days *workshop on Material characterization Techniques organized by Department of Physics, SSN college of Engineering on January 3-4 2014.*
12. *Hands on Workshop on " Characterization of Nano materials" organized by CENCON, Hindustan University on 15 th November 2013.*
13. One day *workshop on Renewable energy organized by Department of Mechanical Engineering in Sri Sairam Engineering College on 24 -Feb 2012.*

14. A two days workshop on “Advanced Analytical Techniques for Materials characterization” organized by SRM University on 19-20 July 2011.

15. National Workshop on THEORY AND PRACTICE OF X-RAY DIFFRACTION TECHNIQUES (TPXRDT-2009) organized by School of Physics Alagappa University on 13-17 July 2009.

ATTENDED ONLINE NATIONAL WEBINAR:-

Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has Participated online national webinar:

1. “Frontiers in Functional Materials” topics organized by PG Department of Chemistry in Marudhar Kesari jain college for women, Vaniyambadi, on 11-10.22
2. “Nanomaterials and Their Applications” topics organized by the Department of Chemistry, School of Basic Sciences, BIHER. on 30th November
3. *Experimental Techniques for the Fabrication & Characterization of Metal Oxide thin films for the various Applications On 28.02.2022 organized by PG & Research Department of Physics, Muthurangam Government Arts and college (A), Vellore-02.*
4. *Exploring the universe with gravitational waves organized by PG & Research Department of Physics, The New college (Autonomous) Chennai-14 On 22.11.2021*
5. *Experimental Techniques and Related Analysis Methods in condensed Matter physics jointly organized by Laboratory of Functional Oxides, Department of Physics, Saurashtra University, Rajkot & Gujarat Council on science & Technology, Department of science and Technology-Gujarat, Gandhinagar on 9th and 10th July 2021.*
6. *Raman effect and fiber optics Revolutions Organized by School of studies in Electronics and Photonics & Institute of Renewable energy and Technology and Management Pt Ravishankar shukla University, Raipur Chhattisgarh from 28 Feb 2021.*
7. *Understanding of program outcome, Program specific outcome and course outcome Organized by S.T.Co.Op.Education society's Ltd. Science senior college shahada District Nandurbar from 09 June 2021.*
8. *Nuclear power for sustainable Development organized by Public outreach center & Institute of Renewable Energy Technology & Management Pt. Ravishankar shukla University, Raipur Chhattisgarh from 4 September 2021.*
9. *Ionic Liquids as Environmental Benign solvents for sustainable Developments organized by Rasayan Journal of chemistry from 24 Feb 2021.*
10. *“My Life My Yoga” organized by Yoga and Meditation club of Sri Ramakrishna engineering college Coimbatore from 25-27 June 2020.*

11. *Study of Interaction of PAH's with Hydrogen using Mass spectroscopy organized by Department of physics Sacred Heart College (Autonomous) Tirupattur from 19 Aug 2020.*
12. *Micro & Nanotechnology and Its Applications organized by Department of Physics GTN Arts college (Autonomous) Dindigul from 14 May 2020.*
13. *Thin films and its Applications organized by School of science and Humanities Department of Physics Sathyabama Institute of science and Technology from 17 May 2020.*
14. *Taking Research Forward During the pandemic organized by Loyala institute of Frontier Energy (LIFE) Loyola college Chennai from 20 May 2020.*
15. *Research and Innovations in defence sectors organized by Research and Development Sri Sairam engineering college from 24 June 2020.*
16. *R &D Proposal writing for faculties organized by Department of Mechanical Engineering, Sri Sairam Engineering college from 12 June 2020.*
17. *Piezoelectric Based energy Harvesting Techniques organized by Department of electrical and Electronics Mohamed Sathak AJ college of Engineering from 3 June 2020.*
18. *Magnetic Materials for Energy and storage Devices organized by Dhaanish Ahmed Institute of Technology Coimbatore from 11 July 2020.*
19. *Solar Pv installation & Maintenance for your Home organized by Department of Electrical and Electronics Sri Ramakrishna Polytechnic college Coimbatore from 17 July 2020.*
20. *Online Lectures in solid state physics Series 1: Electrons in solids Organized by Department of Theoretical physics University of madras from 26-30 May 2020.*
21. *Exploring the universe with gravitational wave-organized by PG & Research Department of physics, The New college (Autonomous) Chennai on 22 November 2021.*

ATTENDED ONLINE INTERNATIONAL WEBINAR:-

Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering

College has Participated online International webinar:

1. *Chemical Science for sustainability “ Topics organized by PG Department of Chemistry , Gonzaga College, Kathampallam, Krishnagiri, on 19.10.22*
1. *4f-3d Magnetic Interactions in Rare-Earth Ferrite Oxide (RFeO₃) single crystal on 07-10-2021 organised by PG & Research Department of Physics, Muthurangam Governement Arts and college (A),Vellore-02.*
2. *Nano materials for energy applications Organized by PG and Research Department of Physics, Arul anandar college (Autonomous) from 22 September 2021.*

3. *Nanotechnologies for Environmental Remediation: Organized by RASAYAN Journal of chemistry from 13 March 2021.*
4. *Exploration of main group compounds for Promoting metal free transformation in industries organized by Department of science St.Joseph's college of Engineering Chennai from 19 Aug 2020.*
5. *Functional Novel material for Electrochemical sensors and energy storage devices organized by Thiagarajar college & Ming chi university of Technology New Taipei Taiwan from 15 May 2020.*
6. *Thin film technologies in our daily life organized by P.G and Research Department of physics, Nadar Mahajan sangam S.Vellaichamy Nadar college, Madurai from 30 May 2020.*
7. *Methods and Mechanism of Co₂ and H₂ adsorption in Metal Organic frameworks organized by Chennai Institute of Technology from 1 July 2020.*
8. *Strengthening Research capabilities Remotely organized by BrightTALK from 25 June 2020.*
9. *Essential tips for Publishing in high Impact journals organized by BrightTALK from 25 June 2020.*
10. *Researchers: CiteScore 2019 and the responsible use of metrics organized by BrightTALK from 2 July 2020.*

Paper presentation in the International conference:Total: 12

1. *Dr.G.Ramanathan, professor in physics, Sri Sairam Engineering College has participated & presented in the paper of "Detection of H₂S Gas sensing performance of sol gel prepared Metal oxide (Indium oxide,tin oxide ITO) thin films" in the 2nd International conference on Multifunctional Materials (ICMM-22) held at Department of physics, Geethanjali college of Engineering and Technology, Hyderabad during 22.12.22 to 26.12.22.*
2. *Dr.G.Ramanathan, professor in physics, Sri Sairam Engineering College has participated & presented in the paper of "Estimation of crystalline size, pore sizes and surface area of CeO₂ nanoparticles by Williamson-Hall methods" in the 3rd International Virtual Conference on Recent Trends in clean Technologies for Sustainable Environment held at Department of Chemical Engineering, Sri Sivasubramaniya Nadar College of Engineering, Chennai during 15.09.21 to 16.09.21.*

3. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated & presented in the paper of "Impact of Tin concentration in ITO films on its Optoelectronic sensor" In the second International conference on Materials science and Manufacturing Technology 2020 (ICMSMT2020) held at Hotel Aloft, Coimbatore,TamilNadu,India during 09-10 April 2020. Proceeding of the ICMSMT2020 will be published by the Institute of Physics, United Kingdom in the IOP conference series: Materials science and Engineering, a conference proceeding journal.*
4. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated & presented in the paper of "surface area,Average pore size CeO₂ Nano particles" in the International conference on Recent Advancements in Material science (NewPhy2020) organized by The NEW COLLEGE (Autonomous) PG & Research Department of Physics Chennai on 21st January 2020.*
5. *Paper presented in the International conference on Advancements and Challenges in chemical Sciences (ICACCS-2018) Organized by PG & Research Department of Chemistry Pachaiyappa's college on 2nd& 3rd February 2018*
6. *Optical properties of Sol gel dip coated SnO₂ films- Fourth International conference on Nano Science and Nano technology (ICONN-2017) organized by Department of Physics and Nanotechnology, SRM University during 09-11th August 2017.*
7. *Indium Oxide thin films grown by Acrylamide sol gel dip coating and their H₂S gas detection characteristics - International Conference on Recent Advances in Nano Science and Technology (RAINSAT-15) organized by Sathyabama University on 8 to 10h July 2015.*
8. *Properties of sol gel dip coated tin Oxide thin films-Second International conference on Advances In Materials Processing and Characterization (AMPC-2013) organized by Anna university Department of Mechanical Engineering on February 6-8th*
9. *Properties of ITO films prepared by the Acrylamide sol gel route=International conference on Research in condensed Matter physics (ICCMP-2012) organized by University of Madras on 1-3 October 2012.*
10. *Sol gel dip coated Indium Oxide films-International conference on Nanoscience; Engineering &Technology (ICONSET-2011) organized by Sathyabama University on 28-30th November 2011.*

11. *Characteristics of sol gel dip coated Tin oxide thin films-Chennai chemistry conference organised by IIT Madras Chennai on February 11-13,2011.*
12. *Characteristics of sol gel deposited Alumina Films-International Conference on Nano Science & Nano Technology (ICONN-2010) held at SRM University on 24th and 26th February 2010.*

Paper presentation in the National conference:Total:11

1. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the National Webinar On "THIN FILMS AND ITS APPLICATIONS" Organized by School of science and Humanities, Department of Physics Sathyabama Institute of Science and Technology, Chennai Tamil Nadu, and India on 17th May 2020.*
2. *"Synthesis of copper doped Zinc Oxide nano particles by acrylamide sol gel method" paper presented in the National conference on Biomaterials in Medicinal chemistry (BMC-2017) Organised by Department of Natural Products Chemistry, Madurai Kamaraj University on 12-13 April 2017.*
3. *"Optical properties sol gel dip coated Tin Oxide films" Second National conference on RECENT DEVELOPMENTS IN NANO MAERIALS AND THIN FILMS RESEARCH organised by PG AND RESEARCH DEPARTMENT OF PHYSICS AVVM SRI PUSHPAM COLLEGE POONDI Thanjavur on 4=5 March 2017.*
4. *Sol gel dip coated ZnO films for DSSC application" National Conference on Recent Advances in Smart Materials (NCRASM- 16) Organized by Department of chemistry & CENCON on January 7-8 January 2016.*
5. *H2S Gas Sensor Based On a SnO2 Thin films-Second National Conference on Recent Advances in Materials(NCRAM-14) organized by Department of Physics B.S.Abdur Rahman University on 3&4th September 2014.*
6. *Dye Sensitized Solar Cells with Indium Oxide films prepared by the Acrylamide sol gel route-National seminar on Technologically important crystalline and Amorphous Solids (TICAS-2013) organized by Kalasalingam University on March 1 &2 2013.*
7. *Sol gel dip coated tin Oxide thin films-National conference on Recent Advancement in Nano scale Research(NCRNR 2012) organized by Department of Physics Anna university Madurai region on August 24th and 25th 2012.*

8. *Properties of sol gel dip coated Indium Oxide thin films National conference on Recent trends in materials science (NCRMS-2012) organized by department of physics A.V.C. College on march 8-9th 2012.*
9. *Sol gel Dip coated Indium Oxide films as electrode for Dye Sensitized solar cells- National Conference on Thrust Areas in Engineering (NCTAE=2012) Organised by Global Academy of Technology Bangalore on January 20th and 21th 2012.*
10. *Slurry coated PbSe films-National conference on Prospectives in Laser and Spectroscopy (NCPLAS-2009) held at Women's Christian College, Chennai on 24&25 September 2009.*
11. *Characteristics Of slurry coated CdS Films-Two days National conference on RECENT ADVANCEMENT AND DEVELOPMENT IN MATERIAL SCIENCE (RAADIMS-09) held at Mepco Schlenk Engineering Sivakasi during February 20-21 2009.*

Number of Attended in the National conference: Total:9

1. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the National Webinar On SPACE-2.0 held on 25th July 2020 organised by department of science, St.Joseph's college of Engineering Chennai, Tamil Nadu, India*
2. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the National Webinar On solar PV installation & Maintenance for your home organized by department of Electrical & electronics engineering on 17.07.2020.*
3. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the National Webinar On "TAKING RESEARCH FORWARD DURING THE PANDEMIC" Organized by Loyola Institute of Frontier Energy (LIFE), Loyola College (Autonomous) Chennai Tamil Nadu, and India on 20th May 2020.*
4. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the National Webinar On "MICRO AND NANOTECHNOLOGY AND ITS APPLICATION" Organized by Department of physics, G.T.N Arts College (Autonomous) Dindigul, Tamil Nadu, and India on 14th May 2020.*
5. *National seminar on New Engineering Materials and their Application organized by Valliammai Engineering college on 27 April 2015*

6. *.CSIR sponsored National Seminar on Recent trends in Laser spectroscopy and its application organized by Department of Physics, srisairam Engineering college on 17 October 2013.*
7. *CSIR Sponsored National seminar on Recent Trends and Development in the Emerging Field of New Transparent conductors and Device Application using Multidisciplinary Approach held on 19th June 2012 at Kongu Engineering college, Erode.*
8. *National conference on Advanced Functional Materials (NCAFMS-2008) organized by Department of Physics SRM University held on 15th and 16th February 2008.*
9. *National Seminar on "Application Oriented Materials 07" Organized by Department of Physical science RAJALAKSHMI ENGINEERING COLLEGE held on 14th August 2007.*

FDP Program:

Total: 15

1. *Dr.G.Ramanathan, professor in physics, Sri Sairam Engineering College has participated in the seven days Indian summer school on crystal growth (ISSCG-2022) organized by SSN Research center, SSN institutions (Autonomous) chennai-603 110 in association with Indian Association for crystal growth (IACG) during 16.05.22 to 22.05.22.*
2. *Dr.G.Ramanathan, professor in physics, Sri Sairam Engineering College has participated in the five days short term courses on 2D Nanomaterials: Potential & Applications through ICT organized by Applied science Department ,Sathyabama Institute of Science and Technology (Deemed to be University chennai Tamil nadu 17.10.22 to 21.10.22*
3. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the five day ATAL FDPon "Magnetic levitation" Organized by Hindusthan Institute of technology from September 20-24 2021.*
4. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One week onlineFDP program on Research methodology and Budgeting" organized by Geethanjali College of Engineering, Telangana, from 13-17 September 2021.*
5. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One week online ATAL FDP program Novel Nanostructured Mg*

based alloy for industrial and biomedical applications organized by Jawaharlal Nehru new college of engineering shimoga from 30-08-2021 to 03-09-2021.

6. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One day FDP program Effective Teaching Learning and Evaluation online organized by Sri Kalliswari Institute of Management and Technology from 17 Feb 2021.*
7. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One week online FDP program on 5 days FDP on DEEKSHARAMBH (Student Induction Program) Organized by NIT Patna from 10-14 Aug 2020.*
8. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One week online FDP program on "The use of Virtual physics Labs-creating Next generation Teachers on May 20-24 2020. This event is organized by Geethanjali College of Engineering, Telangana, and India on 3rd day program to create awareness about novel Corona Virus epidemics.*
9. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the One week online lecturer in Solid State Physics-series 1: Electrons in Solids during 26-30 May 2020.*
10. *AICTE sponsored Faculty Development Program for Student Induction Program held at Easwari Engineering College between 3.12.18 to 9.12.18.*
11. *AICTE sponsored Faculty Development Program for Student Induction Program held at Panimalar Engineering College between between 27th to 29th August 2018.*
12. *Faculty Development program on "Materials Science (PH8251) and Physics for Civil Engineering (PH8201) Organized by the department of Physics Easwari Engineering college on 11th and 12th July 2018.*
13. *Faculty Development program on "NEXTGEN Teaching methodology" organized by Sri Sairam Engineering college on January 20 & 21 2018.*
14. *Staff Development program on 'RECENT DEVELOPMENTS IN COMPUTING" organized by Department of Computer Science and Engineering Sri Sairam Engineering college on April 2010.*
15. *Centre for Faculty Development Anna University Chennai Organized Faculty Development Training Program on 22nd to 30th December 2008.*

1. Published a paper entitled "Optical performance of tin doped Indium oxide (ITO thin films prepared by sol gel dip coating techniques using acrylamide route" in journal of Optical and quantum Electronics accepted in 7 July 2022.- <https://doi.org/10.1007/s11082-022-03973-5>
2. Published a paper entitled "Photocatalytic activity of SnO₂ nanoparticles" in Journal of Applied Electrochemistry accepted in January 2022- <https://doi.org/10.1007/s10800-022-01676-z>-pubsied online 18 February 2022.
3. *Published a paper entitled "Optical properties of alumina films by sol gel acrylamide route" in Journal of University of Shanghai for science and Technology-volume 23 issue-10-2021-SCOPUS JOURNAL DOI-10.51201/JUSST/21/09696*
4. *Published a paper entitled "Characteristics of slurry coated Cd_xPb_(1-x)Se thin films" in Journal of Huazhong University of Science and Technology- volume 50 issue 03 March-2021- SCOPUS JOURNAL- ISSN-1671-4512.*
5. *Published a paper entitled "Impact of Tin concentration in ITO films on its optoelectronic sensor- Material science and Engineering- DOI:10.1088/1757-899X/872/1/012168- June 2020 -SCOPUS JOURNAL -page number-1037-1047.*
6. *Published a paper entitled "Dip coated Indium oxide films and their optical constants- Transactions on electrical and Electronic Materials- DOI:10.1007/S42341-020-00202-2- April 2020- SCOPUS JOURNAL-ISSN 1229-7607.*
7. *Published paper entitled "Photocatalytic activity of Biosynthesized CeO₂ nano particles-SN Applied Sciences A Springer Nature Journal 18th December 2018. DOI=[http://doi.org/10.1007/\\$42452-018-0103](http://doi.org/10.1007/$42452-018-0103)-SCOPUS JOURNAL*
8. *Published a paper entitled "Micro structural Properties of Tin Doped Indium Oxide Thin Films-International Journal of ChemTech Research 2018, VOL-11 (09) 298-*

307 DOI=<http://dx.doi.org/10.20902/IJCTR.2018.110936>-SCOPUS JOURNAL-
ISSN(ONLINE) 2455-9555

9. Published a paper entitled "OPTICAL PROPERTIES OF SOL GEL DIP COATED SnO₂ FILMS" - International Journal of Current Advanced Research (IJCAR) on Volume 6; Issue 9; September 2017 ISSN: O: 2319-6475, ISSN: P: 2319 –
6505.DOI:[HTTP://dx.doi.org/10.24327/ijcar.2017.5892.0827](http://dx.doi.org/10.24327/ijcar.2017.5892.0827)
10. Published a paper entitled "EFFECT OF H₂S GAS SENSING PERFORMANCE OF SOL-GEL DIP COATED In₂O₃ THIN FILMS"=RASAYAN Journal of Chemistry (RJC) on July-september issue 2017. (ISSN: 0974-1496 / e-ISSN: 0976-0083, Vol.10, No.3, 2017). SCOPUS JOURNAL-<http://dx.doi.org/10.7324/RJC.2017.1031715>.
11. Published a paper entitled "Dye Sensitized Solar Cells Behaviors of TCO materials" has been published in the International Journal of Advanced Scientific Technologies in Engineering and Management Sciences (IJASTEMS).(ISSN2454 356X, Vol.2,issue No.10, -october-2016).This journal Impact factor is 3.022.
12. Published a paper entitled "Tin Oxide Thin films grown by acrylamide sol gel dip coating and their H₂S gas detection characteristics-Journal of Applied Physical Science International. 7(1):1-7 2016. ISSN 2395-5260 July 2016.
13. Published a paper entitled "Sol gel dip coated ZnO films for DSSC application- International Journal of Applied Engineering Research (IJAER)ISSN 0973-4562 Vol. 10 No.91 (2015)-SCOPUS JOURNAL
14. Published a paper entitle "Characteristics of Tin Doped Indium Oxide films- International Journal of ChemTech Research Vol.8 No.8 pp 260-264, 2015. ISSN 0974-4290
15. Published a paper entitled "Dye Sensitized Solar cells with ITO films prepared by the Acrylamide sol gel route-IOSR Journal of Applied Physics Vol.2 Issue No.6 PP 47-50. January-February 2013.
16. Published a paper entitled "Sol gel dip coated Tin Oxide thin films-Elixir Thin film Tech 50 -2012 pp 10588-10590. 2012-10588-10590
17. Published a paper entitled "Sol gel dip coated Indium Oxide films and their properties- The society for solid state science and Electrochemical science and Technology-ECS Transaction 41 (35) 33-38 2012 ISSN1938-5862- SCOPUS JOURNAL.

18. *Published a paper entitled "Sol gel dip coated Indium Oxide films-IEEE-2011-SCOPUS JOURNAL*

19. *Published a paper entitled "Characteristics of Slurry coated lead Selenide film-Chalcogenide Letters Vol-6 No.3 March 2009-SCOPUS JOURNAL*

PROJECT PROPOSAL:

1. *Photocatalytic removal of hazardous chemical from hospital effluents by metal oxide semiconductor nanocomposites- proposal submitted to Tamil Nādu state council for science and technology (TNSCST)-DOTE campus-chennai-25*

PATENT:

1. *Application number-202141038802 A-NOVEL ARCHITECTURE FOR DESIGN AND EVALUATION OF ASYNCHRONOUS SYSTEM ON CHIP FOR VLSI TECHNOLOGY- Publication date-10-09-2021-The patent Office Journal No.37/2021.*
2. *Application number- 202231053181 NOVEL Battery Management system for Green Energy Storage- Publication date-16-09-2022-The patent Office Docket No.29702*

Reviewer:

1. *ELSEVIER-MATERIALS TODAY PROCEEDING-*
2. *IOP-NANO TECHNOLOGY*
3. *IEEE BOMBAY SECTION*
4. *POLYMER BULLETIN*
5. *JOURNAL OF APPLIED CHEMICAL SCIENCE INTERNATIONAL*

Membership:

1. *Indian Association of Physics Teacher-Life Membership number: 12071L8028.*
2. *Indian Society for Technical Education (ISTE)-Life member Membership number LM 131624.*
3. *IEEE society member-98386462.*
4. *IEEE Photonics society*

5. *IEEE power electronics society*
6. *Indian Association for crystal growth-IACG*

BOOK CHAPTER:

1. *G.Ramanathan professor published one chapter in the book name is CHALLENGES AND OPPORTUNITIES IN NEW GLOBAL BUSINESS, SCIENCE AND TECHNOLOGY- WISDOM INDIA PUBLICATIONS- ISBN: 978-81-958752-6-9*

Technical Reviewer and session chair:

1. *Technical Reviewer on Fourth International Conference on Materials Science and Manufacturing Technology 2022 (ICMSMT 2022)- April 08 the and 09-2022.*
2. *International conference on MODERN FUNCTIONAL MATERIALS-CHARGED A TECHNICAL SESSION- 24-25 th June 2021. Organized by Department of Humanities and sciences (Physics).*
3. *Technical Reviewer for having reviewed the manuscripts submitted for IEEE sponsored 2021 International conference on Emerging Trends in industry 4.0 (ETI.4.0) held at the OP JINDAL university Raigarh Chhattisgarh India during 19-21 May 2021.*

Awards:

- *Inspiring Research Associate Award- for his outstanding contribution and continued dedication in the field of Research and Development- ADVANCED MATERIALS & APPLICATIONS-ISSN:2582-5070- An international peer reviewed journal published by Madras Journal series PVT Ltd.-05-09-2020.*
- *Best oral paper awards in AICTE Sponsored National Level online Conference on Advances in Functional Materials (NCAF2020) Organized by Department of physics - THANTHAI PERIYAR GOVERNMENT INSTITUTE OF TECHNOLOGY-VELLORE.-08-09 OCTOBER 2020*

- *Best oral paper awards in International Conference on Recent Advances in Nano Science and Technology (RAINSAT-15) Organized by Sathyabama University on 8th to 10^h July 2015.*
- *Best oral paper awards in Second National Conference on Recent Advances in Materials (NCRAM-14) organized by Department of Physics B.S.Abdur Rahman University on 3th&4th September 2014.*

Others:

1. *CREATIVE MANAGEMENT CONSULTANTS organized Quality Management system and Audit training (INTERNAL AUDITOR ISO 9001:2015) on 8th June 2018.*
2. *Vivekananda Vidyalaya Junior college, Vyasarpadi will conduct state level science Exhibition (VIGYANA PRADARSHINI PRANTH) on Saturday (05.08.2017). On this occasion I have attended and act as JUDGE person in Science competition*
3. *SRDF Vivekananda Vidyalaya, Chromepet will conduct state level science and Maths Exhibition (VIGYANA &GANITHA PRADARSHINI) on Friday (07.07.2017). On this occasion I have attended and act as JUDGE person in Science competition*
4. *SRDF Vivekananda Vidyalaya Chromepet organized Vigyana Pradarshine (STATE LEVEL SCIENCE AND MATHS EXHIBITION) On 27.8.16 On this occasion I have attended and act as JUDGE person in Science competition*
5. *CREATIVE MANAGEMENT CONSULTANTS organized Quality Management system and Audit training (INTERNAL AUDITOR) on 11-12 October 2011.*
6. *Online course: Totally 18 hours successfully completed two online course namely Quantum physics for quantum computing and Artificial Intelligence A-Z.*

Membership:

1. *Indian Association of Physics Teacher-Life Membership number: 12071L8028.*
2. *Indian Society for Technical Education (ISTE)-Life member Membership number LM 131624.*

Online Course:

Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion of Psychological First Aid (Grade achieved 100%)

- 1. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion [Materials science:10 Things Every Engineer should know](#)"*
- 2. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion ["Air pollution"](#)*
- 3. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion [How thing work An introduction to physics"](#)*
- 4. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion [Covid 19What you need to know"](#)*
- 5. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion ["Ferrous Technology I"](#)*
- 6. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion [Ferrous technology-II"](#)*
- 7. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion ["Natural gas"](#)*

8. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion' [Materials processing](#)"
9. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed also received by coursera certifies heir successful completion "[Beyond the sustainable Development Goals \(SDGS\)](#)"
10. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed three weeks course and also received by coursera certifies heir successful completion of [Quantum Mechanics](#).(Grade achieved 100%)
11. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed two hours course and also received by coursera certifies successful completion of [Spreadsheets for Beginners using Google Sheets](#)..(Grade achieved 93.8%)
12. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the online course. I have successfully completed Two-three hours per weeks course and also received by coursera certifies their successful completion of [Electrodynamics: An Introduction](#). (Grade achieved 83.6%)
13. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the Udemy online course. I have successfully completed 7.5 hours [Essential physics: Master classical and Newtonian mechanics \(April 02 2020\)](#)
14. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the Udemy online course. I have successfully completed 16.5 hours [Artificial Intelligence A to Z Learn How to build on AI online course on Nov 14 2019](#).
15. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has joined in the Udemy online course. I have successfully completed 1.5 hours of [Quantum physics for Quantum computing online course on Nov 4 2019](#).

MHRD's Innovation Cell:

1. *Dr.G.Ramanathan, Associate professor in physics, from Sri Sairam Engineering College , Chennai has Successfully attended Leadership talk With Mr Mahesh Babu CEO Mahindra Electric Mobility Ltd. India's First Leadership Talk Series Session with Mr Mahesh Babu CEO Mahindra Electric Mobility Ltd. by MHRD's Innovation Cell*
2. *Dr.G.Ramanathan, Associate professor in physics, from Sri Sairam Engineering College , Chennai has Successfully attended Leadership With Dr. Nilesh N Oak, Expert (Indian Civilization & History) held on 30th May Dr. Abhay Jere (Chief Innovation Officer- MHRD Innovation Cell, Govt. of India) Hosting Live session of Leadership Talk With Dr. Nilesh N Oak, Expert (Indian Civilization & History) by MHRD's Innovation Cell.*
3. *Dr.G.Ramanathan, Associate professor in physics, from Sri Sairam Engineering College , Chennai has Successfully attended Leadership talk With Ms Ashwini Deshpande (Co-Founder & Director Elephant Design held on 6th June By MHRD 's Innovation cell.*
4. *Dr.G.Ramanathan, Associate professor in physics, from Sri Sairam Engineering College , Chennai has Successfully attended Leadership talk With Shri R.Subrahmanyam, IAS (Secretary Ministry of Social Justice & Empowerment) held on 13th Jun by MHRD'S cell.*
5. *Dr.G.Ramanathan, Associate professor in physics, from Sri Sairam Engineering College , Chennai has participated in the IIC online session conducted by Institution's Innovation council (IIC) of MHRD's Innovation Cell, New Delhi to Promote Innovation, IPR, Entrepreneurship, and strat-ups among HEIs from 28th April to 22 May 2020 during Covid-19 nationwide lockdown.*

Online Quiz Participation certificate:

1. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated for the enthusiastic participation and excellence in the “ National Level E-quiz competition on “Materials Science” organized by PG and Research Department of Physics pachaiyappa’s College, Chennai 600030 on 7/27/2020 and scored 80%.*
2. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated In recognition of completing the e-Quiz competition “PHYSICS COSMIC 2020” organized by PG and Research dept. of Physics, Marudupandiyar college, Thanjavur.*
3. *Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated for the enthusiastic participation and excellence in the “ Online Quiz -*

May 2K20” conducted on 18.05.2020 & 19.05.2020 organised by the PG Department of Physics, Bhaktavatsalam Memorial College for Women, Korattur, Chennai - 600 050.

- 4. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the quiz on ‘Covid-19’ Awareness Program This event is organized by Geethanjali College of Engineering, Telangana, and India on 3rd day program to create awareness about novel Corona Virus epidemics.*
- 5. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the quiz on ‘Covid-19’ Awareness Program and scored 93%. This event is organized by Unnat Bharat Abhiyan, Thiagarajar College of Engineering, Madurai, and Tamil Nadu on 3rd May 2020 to create awareness about novel Corona Virus epidemics.*
- 6. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the quiz on ‘Covid-19’ Awareness Program, this event is organized by NSS-UNIT, KOMMURI PRATAP REDDY INSTITUTE OF TECHNOLOGY, Hyderabad, Telangana to create awareness about Novel Coronavirus Epidemic.*
- 7. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated in the enthusiastic participation and excellence in the “ Online Quiz - May 2K20” conducted on 18.05.2020 & 19.05.2020 organized by the PG Department of Physics, Bhaktavatsalam Memorial College for Women, Korattur, Chennai - 600 050.*
- 8. Dr.G.Ramanathan, Associate professor in physics, Sri Sairam Engineering College has participated for the enthusiastic participation and excellence in the “Online Quiz - 5/31/2020 organised by PG DEPARTMENT OF PHYSICS SRI SUBRAMANIASWAMY GOVERNMENT ARTS COLLEGE” TIRUTTANI 631209 Tiruvallur District Tamil Nadu.*