

Dr. R. THOMAS *M.Sc., B.Ed., M.Phil., Ph.D.,*

thomasroy82@gmail.com

drthomasroy82@gmail.com

☎ +91 9551333307

☎ +91 9488154564

ORCID ID: 0000-0003-2240-0083

Scopus ID: 57199448418

Google Scholar ID: 90IsBE8AAAAJ

Vidwan ID: <https://vidwan.inflibnet.ac.in/profile/483711>



Objective

To work with a reputed institution, that will provide me a good platform to utilize my teaching and administration skills and will help me to grow my career.

Academic Qualifications

Degree	Institution	Month & Year	Branch	Percentage (%)
Ph.D.	Madurai Kamaraj University, Madurai.	Sep. 2020	Physics	Highly Commended
M.Phil.	Bharathidasan University, Trichy.	Dec. 2007	Physics	76.5
B.Ed.	Govt. College of Education, Vellore.	April 2006	Physical Sciences	61.5
M.Sc.	N. M. S. S. V. N College, Madurai.	April 2005	Physics	73.95
B.Sc.	Arul Anandar College, Karumathur, Madurai.	April 2003	Physics	79.35

Professional Experience

Institution	Designation	Experience
St. Joseph's College (Autonomous), Trichy	Assistant Professor	June 2023 to Till Date
Loyola College of Arts and Science, Mettala, Rasipuram	Assistant Professor	October 2021 to June 2023
St. Joseph's College (Autonomous), Trichy	Assistant Professor	August 2021 to Sep 2021
Arul Anandar College, Karumathur, Madurai	Assistant Professor	June 2012 to April 2021
Professional Group of Institution, Palladam, Tirupur	Assistant Professor	January 2011 to January 2012
Montfort Matric. Hr. Sec. School, Kollathur, Salem	P.G. Assistant	June 2007 to January 2011

Project Guidance

M.Sc.:10

M. Phil: Nil

Ph. D: Nil

Extra Academic Activities

Question Setter:

1. Arul Anandar College (Autonomous), Karumathur, Madurai.
2. Thanthai Periyar Govt. Arts and Science College (Autonomous), Tiruchirappalli.

Reviewer In Journal

Materials in Today Communication – Elsevier.

Ph.D. Thesis Title:

Investigation on Rare Earth Metal Ion Doped FTO Thin Films for Optoelectronic Applications

List of Publications in International Journal

1. N. Soundaram, R. Chandramohan, S. Valanarasu, **R. Thomas**, A. Kathalingam, Studies on SILAR deposited Cu₂O and ZnO films for solar cell applications, *J Mater Sci: Mater Electron*, (2015), **26**, 5030–5036, (2015) (Impact Factor: 2.8)
2. K. Deva Arun Kumar, **R. Thomas**, S. Valanarasu, V. Ganesh, Mohd.Shkir, S. AlFaify, J. Thirumalai. Analysis of Pr co-doped Al:ZnO thin films using feasible nebulizer spray technique for optoelectronic technology, *Applied Physics A*, **125**, 712 (2019). (Impact Factor: 2.983)
3. **R. Thomas**, T. Mathavan, M. A. Jothirajan, H. H. Somainy, H. Y. Zahran, I. S. Yahia, An effect of lanthanum doping on physical characteristics of FTO thin films coated by nebulizer spray pyrolysis technique, *Optical Materials*, **99**, 109518 (2020). (Impact Factor: 3.754)
4. **R. Thomas**, T. Mathavan, M. A. Jothirajan, V. Ganesh, Mohd Shkir, I. S. Yahia, H. Y. Zahran, S. AlFaify, Tailoring the properties of nebulizer spray pyrolysis coated FTO thin films through rare earth element terbium for optoelectronic applications, *Physica B: Physics of Condensed Matter*, **580**, 411916 (2020). (Impact Factor: 2.998)
5. **R. Thomas**, T. Mathavan, S Mohamed Hamdy, S. AlFaify, Hyun-Seok Kim, A. Kathalingam, Influence of yttrium doping microstructural and optical properties of FTO thin films prepared by nebulizer spray technique, *Materials Today Communications*, **24**, 101087 (2020). (Impact Factor: 3.662)
6. **R. Thomas**, T. Mathavan, V. Ganesh, Mohd Shkir, I. S. Yahia, H. Y. Zahran, AlFiafy, A. Kathalingam, Investigation of erbium co-doping on fluorine doped tin oxide via nebulizer spray pyrolysis for optoelectronic applications, *Optical and Quantum Electronics*, **52**, 248 (2020). (Impact Factor: 2.794)
7. **R. Thomas**, T. Mathavan, Mohd Shkir, Opto-electronic properties of cerium doped FTO thin films prepared using Nebulizer spray technique for TCO application, *Optik*, **213**, 164769 (2020). (Impact Factor: 2.84)
8. A. M. S. Arulanantham, K. V. Gunavathy, P. Mohan raj, M. Rigana Begam, V. Ganesh, I. S. Yahia, S. Rex Rosario, **R. Thomas**, Noticeable gas sensing properties of ZnO nano-crystallites using two-step preparation technique, *Applied Physics A*, **129**, 290 (2023). (Impact Factor: 2.5)

9. A. M. S. Arulanantham, K. V. Gunavathy, C. Rangasami, R. Thomas, P. Mohanraj, S. AlFaify, MohdShkir, Comprehensive investigation on ruthenium doped Sn₂S₃ thin films for photosensing applications, *Physica B: Condensed Matter*, 693, 416380, (2024). (Impact Factor: 2.8)

Papers Presented at Conferences and Seminars

1. Synthesis and characterization of PANI/ZnO nanocomposites doped with pTSA, National Level Conference on Nanoscience and Nanotechnologies in the Livelihood Enhancement of Common Man (NSLECM-2017), 8th & 9th February-2017, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.
2. Effect of catalyst/sulfonating agent Para- toluene sulfonic acid on PANI/ZnO composite films for high performance capacitor, National Conference on Recent Advancements in Materials Science (NCRAMS-2017), 25th & 26th July 2017, Government Arts College, Tiruvanamalai, Tamil Nadu, India.
3. Structural, functional and optical properties of Para- toluene sulfonic acid doped PANI/CuO thin film by spray pyrolysis technique, National Conference on Energy Materials-2018 (NCEM-2018), 28th & 29th June 2018, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India.
4. Preparation and characterization of PANI/ CuO thin film by nebulizer spray pyrolysis technique, One day National Seminar on Material Science and Applications (NSMSA-2018), 30th July 2018, Mother Teresa Women's University, Kodaikannal, Tamil Nadu, India.
5. Structural and optical characteristics on SILAR deposited polyaniline and polyaniline/copper oxide thin films, 2nd International Conference on Recent Trends in Applied Science and Technology (ICRTAST-2018), 23rd - 25th August 2018, Periyar University, Salem, Tamil Nadu, India.
6. Investigating the effect of para-toluene sulfonic acid on PANI/ZnO composite films National Conference on Recent Trends in Advanced Materials (RTAM-2019), 23rd January 2019, PGP College of Arts and Science, Namakkal, Tamil Nadu, India.
7. Investigation on undoped and yttrium doped FTO thin films for optoelectronic applications, 4th National Conference on Recent Advances in Nanotechnology (RAIN-2019), 16th & 17th August 2019, A. Veeraiya Vandaiyar memorial Sri Puspam College, Thanjavur, Tamil Nadu, India.
8. Investigation on Structural, Optical and Electrical properties of La doped FTO thin film, International Conference on Expanding Frontiers in Chemistry (EFC-19), 13th September 2019, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.

9. Investigation on Structural, Optical and Electrical characteristics of Cerium doped FTO thin films, National Conference on Material Science (NCMS-2020), 9th January 2020, Loyola College, Chennai, Tamil Nadu, India.
10. Detailed investigations of Er rare earth element doped FTO thin films coated by nebulizer spray pyrolysis for optoelectronic technology, International conference on Advanced Materials (ICAM 2020), 11th & 12th February 2020, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.

Conferences and Seminars Attended

1. State Level Seminar on Communication – the world scenario, 22nd march 2001 Department of Physics, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.
2. State Level Seminar on “Thrust Areas in Material Science”, 15th - 17th July 2004 Department of Physics, Lady Dock College, Madurai.
3. Recent Trends in Optical Spectroscopy on 10th March 2005, Department of Physics, N.M.S.S.V.N College, Nagamalai, Madurai.
4. One day State level seminar on Research Avenues in Physics, 18th February 2013, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.
5. Two-day State Level Awareness and Motivational Seminar on Non-conventional and Renewable Energy Resources, 27th & 28th November 2013, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.
6. National Conference on Academic Audit and Quality Enhancement in HEIs, 22nd & 23rd March 2016, organized by Internal Quality Assurance Cell (IQAC), Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.
7. National Conference on Advances and Space Technology (NCAAST-18), 29th January 2018, Arul Anandar College, Karumathur, Madurai, Tamil Nadu, India.
8. International Webinar Series on Advanced Materials for Sustainable Development, 2nd & 3rd July 2020, organized by the Department of Physics, School of Advance Sciences, Kalasalingam Academy of Research and Education, Krishnankoil, Tamil Nadu, India.
9. ACS Science Talk on Engineering Charge Transit in Optically Sensitive Two-dimensional Materials on 3rd July 2020, ACS Science Talk Virtual Lecture Series.
10. International Webinar Series on Raman Spectroscopy: Basics, Instrumentation & Applications, 2nd & 3rd July 2020, organized by Centre for Nanoscience and Nanotechnology, Satyabhama Institute of Science and Technology, Chennai, Tamil Nadu, India.
11. International Webinar on Future Generation Solar Cell, 4th July 2020, organized by the Department of Science and Humanities (Physics), Nehru Institute of Technology, Kaliyapuram, Coimbatore, Tamil Nadu, India.

12. International Webinar on Frontiers in Chemical Sciences, 6th – 10th July 2020, organized by the Department of Chemistry, National Institute of Technology, Rourkela, Odisha, India.
13. International Webinar on Use of Lanthanide Ions as Photoluminescence (Structural) Probes, 6th July 2020, organized by the Department of Physics, Saveetha Engineering College, Chennai, Tamil Nadu, India.
14. International Webinar on Nanoscale Nonlinear Optics- An Exciting Glimpse, 7th July 2020, organized by Vellore Institute of Technology (VIT), Chennai, Tamil Nadu, India.
15. International Webinar on Advance in the synthesis of Biopolymer-Ceramic Composites for Biological Applications, 10th July 2020, organized by the Department of Physics, Saveetha Engineering College, Chennai, Tamil Nadu, India.
16. International Webinar on Advance Nanostructured Metal Oxide Thin films for Sensor Technology, 16th July 2020, organized by the Department of Physics, Saveetha Engineering College, Chennai, Tamil Nadu, India.
17. International Webinar on Advance Infrared Spectroscopy of Transient Chemical Species in Helium Nanodroplets, 17th July 2020, organized by the Department of Physics, Sacred Heart College (Autonomous), Tirupattur, Tamil Nadu, India.
18. International Webinar on The Progress in Nanocomposites for Environmental and Device Applications, 5th August 2020, organized by the PG & Research Department of Physics, Arul Anandar College (Autonomous), Karumathur, Tamil Nadu, India.
19. International Webinar on Quantum Materials and Nanoparticles for Advanced Applications, 6th August 2020, organized by the Department of Physics, Kamaraj College Thoothukudi, Tamil Nadu, India.
20. International Webinar on Designing Metallic Nanocomposites for Multifunctional Applications, 14th May 2021, organized by the Department of Chemical Engineering, Sri Sivasubramaniya Nadar College of Engineering, Chennai, Tamil Nadu, India.
21. International Webinar Series on Advanced Materials: Superconductors on 24th August 2021, organized by the Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India.
22. International Webinar on Nanomaterials for Energy Applications, 22nd September 2021, organized by the PG & Research Department of Physics, Arul Anandar College (Autonomous), Karumathur, Tamil Nadu, India.
23. International Web Conference on Materials Science and its Technological Advancements, 22nd September 2021, organized by the Department of Physics, Voorhees College, Vellore, Tamil Nadu, India.
24. International Webinar Series on Advanced Materials: Materials characterization using Non-Destructive Testing (NDT) on 20th September 2021, organized by the Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India.

25. International Conference on Recent Trends in Physical Sciences, 17th and 18th February 2022, organized by the PG & Research Department of Physics, Arul Anandar College (Autonomous), Karumathur, Tamil Nadu, India.
26. ACS Science Talk on Designing Battery Electrode Architectures Across Length Scales on 11th March 2022, American Chemical Society.
27. International Conference on Crystal Growth and Spectroscopy, 29th & 30th August 2022, organized by the Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu, India.
28. International Webinar Series Event I, Advances on materials for renewable energy storage technology and sustainability, 8th September 2023, organized by Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.
29. International Webinar Series Event II, Electronic Monitoring for Offenders, 25th October, organized by Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.
30. International conference on Advanced Materials, 8th & 9th December, organized by CSIR - Delhi and Department of Physics, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.

Workshops Attended

1. Science Academies' Lecture Workshop, Introduction to Theoretical Physics, 4th & 5th August 2016, Government Arts College, Melur, Madurai, Tamil Nadu, India.
2. Two Day Workshop for Faculty Development Program on Light Harvesting Materials for Sustainable Energy, 3rd and 4th March 2022, organized by Department of Chemistry, National Institute of Technology, Warangal.
3. Faculty Development Program on Academic Research Writing, 22nd August 2023, organized by St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.
4. Faculty Development Program on Intricacies for writing for Research publications and Projects, 27th October 2023, organized by Internal Quality Assurance Cell, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.
5. Faculty Development Program on Patents and Consultancy, 20th November 2023, organized by Internal Quality Assurance Cell and Joseph Start-up Centre, St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.
6. One – Day Faculty Development Program on Academic Research in Science, 9th December, organized by St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.
7. High-Impact Faculty Development Programme, 6th May 2024 to 24th May 2024, organized by Joseph's Hub for Languages (JHL), St. Joseph's College (Autonomous), Tiruchirappalli, Tamil Nadu.

8. Faculty Development Program on Contemporary Research Trends, Innovations in Materials and Technology, 27th August 2023 to 31st August 2023, organized by Jeppiaar Institute of Technology, Sriperumbudur, Tamil Nadu.

Best Research Paper Award

1. Effect of catalyst/sulfonating agent Para- toluene sulfonic acid on PANI/ZnO composite films for high performance capacitor, National Conference on Recent Advancements in Materials Science (NCRAMS-2017), 25th & 26th July 2017, Government Arts College, Tiruvannamalai, Tamil Nadu, India.
2. Investigation on Structural, Optical and Electrical properties of La doped FTO thin film, International Conference on Expanding Frontiers in Chemistry (EFC-19), 13th September 2019, Arul Anandar College, Karumathur, Tamil Nadu, India.