

## **Faculty Profile**



**Dr. J. Thirupathy, M.Sc., M.Phil., Ph.D**  
Assistant Professor - Physics

### **HIGHLIGHTS:**

- Number of Journal Publications: 25
- H-Index: 09
- Project Funding Received: Nil
- Patents Published: 13
- Patents Granted: 08

### **PROFESSIONAL LINKS:**

- Scopus ID: 57202032898
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57202032898>
- Google Scholar ID: <https://scholar.google.co.in/citations?user=TPiIUEQAAAAJ&hl=en>
- Anna University Faculty ID:
- AICTE Faculty ID:
- Anna University Supervisor ID: 4170008
- LinkedIn: <https://www.linkedin.com/in/dr-j-thirupathy-376497242/?originalSubdomain=in>

### **PROFESSIONAL BACKGROUND:**

- Teaching Experience till date: 5 Years 8 Months
- Industrial Experience: 3 Years

**INTERNATIONAL EXPOSURE: Nil**

**AREA OF SPECIALIZATION:**

- Crystal Growth
- Nanomaterials
- Spectroscopy
- Shock waves
- Microwave Processing
- Thermophysical Properties
- Instrumentation

**Ph.Ds AWARDED WITH DETAILS:**

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time/Part Time
-	-	-	-	-

**Ph.Ds GUIDING:**

- **Full Time Scholars: Nil**
- **Part Time Scholars : Nil**

**SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:**

1. Aksh OptiFibre Limited, Rajasthan – Consultancy: Rs. 96000/ (2021) – **Fund Received.**
2. UGC, Dr. D. S. Kothari research grant for newly recruited faculty members – Rs. 10 Lakhs (2022) – Not yet received.
2. UGC-DAE CSR, Application number - CRS/2023-24/1501 (2023) – Not yet received.
3. TNSCST Student Project Proposal Rs. 7500/- in the year of (2023) – **Fund Received.**
4. TNSCST (Science and Technology Project Scheme) (2024) - Rs.5 Lakhs – Submitted.
5. DST (Nano mission) (2024) - Rs.34 Lakhs – Submitted.
6. ANRF-ECRG, (2024), Rs.42 Lakhs – Submitted.
7. ANRF-IRG, (2024), Rs.52 Lakhs – Submitted.

**PATENTS PUBLISHED/GRANTED:****PUBLISHED**

1. Title of invention : Design and development of extendable stand  
(**Application no: 202141016304**) – 2021.
2. Title of invention : Apparatus for measuring thermal expansion of liquid with controlled evaporation (**Application no: 202241060832**) – 2022.
3. Title of invention : Device for measuring solid state thermal expansion using oriented FAST and rotated BRIEF algorithm (**Application no: 202341088485** ) – 2023.

4. Title of invention: A method of growing bulk size single crystal by up and down movement of seed crystals (**Application no: 202441028719**) – 2024.
5. Title of invention: Estimation of thermal expansion of solid materials by using graphite rod and a method thereof (**Application no: 202441046228**) – 2024.

#### **GRANTED**

1. Title of invention : Apparatus for crystal growth in vacuum – Design Patent  
(**Application no: 353544-001**) - 2021 (**Granted on 13/01/2023**).
2. Title of invention : Apparatus for crystal growth in vacuum and a method thereof  
(**Application no: 202141057590**) – 2021 (**Granted on 30/08/2023**).
3. Title of invention : Extendable stand for immersion heater – Design Patent  
(**Application no: 343338-001**) - 2021 (**Granted on 18/04/2024**).
4. Title of invention : Air tight sound free sample possessor for Optoacoustic Spectroscopy –  
Design patent (**Application no: 397196-001**) - 2023 (**Granted on 24/04/2024**).
5. Title of invention : Sample holder for Photoacoustic Spectroscopy – Design Patent  
(**Application no: 397197-001**) - 2023 (**Granted on 10/05/2024**).
6. Title of invention : Miniature Shock Tube – Design Patent  
(**Application no: 417385-001**) – 2024 (**Granted on 19/07/2024**).
7. Title of invention : Shuttle Guard - Badminton Helmet for Safe Play – Design Patent  
(**Application no: 417386-001**) – 2024. (**Granted on 19/07/2024**)
8. Title of invention : Miniature Magnetic stirrer – Design Patent  
(**Application no: 418656-001**) – 2024. (**Granted on 19/07/2024**)

#### **COURSES CERTIFIED:**

1. **“Structural Analysis of Nanomaterials”** in Indian Institute of Technology Roorkee from September 2020 to October 2020 (4 week course).
2. **“Innovation, Business Models and Entrepreneurship”** in Indian Institute of Technology Roorkee from September 2020 to November 2020 (8 week course).
3. **“Optical Sensors”** in Indian Institute of Technology Roorkee from January 2021 to February 2021 (4 week course).
4. **“Solar Photovoltaics, Fundamentals, Technology and Applications”** in Indian Institute of Technology Roorkee from July 2021 to September 2021 (8 week course).
5. **“Solar Energy Engineering and Technology”** in Indian Institute of Technology Guwahati from July 2021 to October 2021 (12 week course).
6. **“Patent Drafting for Beginners”** in Indian Institute of Technology Madras from January 2022 to February 2022 (4 week course).

7. **“Patent Law for Engineers and Scientists”** in Indian Institute of Technology Madras from January 2022 to April 2022 (12 week course).
8. **“Air Pollution and Control”** in Indian Institute of Technology Madras from January 2022 to April 2022 (12 week course).
9. **“Innovation by Design”** in Indian Institute of Technology Bombay from July 2022 to August 2022 (4 week course).
10. **“Physics of Renewable Energy Systems”** in Indian Institute of Technology Kharagpur from July 2022 to October 2022 (12 week course).
11. **“Biomedical Nanotechnology”** in Indian Institute of Technology Roorkee from August 2022 to September 2022 (4 week course).
12. **“Body Language: Key to Professional Success”** in Indian Institute of Technology Roorkee from August 2022 to September 2022 (4 week course).
13. **“Guidance and Counselling”** in National Institute of Technical Teachers Training and Research, Chennai from July 2022 to September 2022 (4 week course).
14. **“Academic Writing”** in HNB Garhwal University (A Central University) Srinagar Garhwal (Uttarakhand) from July 2022 to October 2022 (15 week course).
15. **“Education: Concept, Nature and Perspectives”** in Indira Gandhi National Open University, New Delhi from July 2022 to September 2022 (16 week course).
16. **“Biophotonics”** in Indian Institute of Technology Kharagpur from January 2023 to April 2023 (12 week course).
17. **“Introduction to Professional Scientific Communication”** in Indian Institute of Technology Kanpur from January 2024 to February 2024 (4 week course).
18. **“Forensic Linguistics”** in Indian Institute of Technology Madras from February 2024 to March 2024 (4 week course).

#### **ACHIEVEMENTS AND AWARDS:**

- **“Young Scientist Fellowship Scheme Award”** on 23.10.2024 at TNSCST, Chennai.
- **“Appreciation Award - NPTEL Enthusiastic”** during Jan – Apr 2024 at **IIT Madras**.
- **“Appreciation Award - NPTEL Believer”** during July – Dec 2022 at **IIT Madras**.
- **“Appreciation Award - NPTEL Motivated Learner”** during Jan – Apr 2022 at **IIT Madras**.
- **“Young Scientist Award 2021”** on 16<sup>th</sup> June 2021 at **Institute of Researchers, Kalpetta, Kerala**.

- **“Best paper presentation Award”** in the “National Seminar of Materials System and Modeling (ETMSM – 2018)” held during 28<sup>th</sup> – 1<sup>st</sup> March 2018 at **Government Arts College for Men, Krishnagiri.**
- **“Best paper presentation Award”** in the “National Conference on Recent Trends in Physics of Materials (NCRTPM – 2018)” held during 9<sup>th</sup> – 10<sup>th</sup> February 2018 at **Pachaiyappa’s College, Chennai.**
- **“Best crystal display award”** in the “22<sup>nd</sup> National Seminar on Crystal Growth and Applications” in association with Indian Association for Crystal Growth (IACG) held during 29<sup>th</sup> – 31<sup>st</sup> January 2018 at **Sacred Heart College, Tirupattur.**
- **“Best crystal display award”** in the “International Conference on Recent Trends in Material Science and Technology (ICRTMST – 2018)” held during 19<sup>th</sup> – 20<sup>th</sup> January 2018 at **Sri Vijay Vidyalaya College of Arts and Science, Dharmapuri.**
- **“Award for research excellence”** in the year 2018 – 2019 at **Sacred Heart College, Tirupattur.**
- **“Award for research excellence”** in the year 2017 – 2018 at **Sacred Heart College, Tirupattur.**
- **“Appreciation award”** for Photoacoustic Spectrometer Instrument Fabrication in the year 2016 – 2017 at **Sacred Heart College, Tirupattur.**
- **“Second prize in paper presentation”** in the “International Conference on Material Science and Technology” held on 5<sup>th</sup> October 2017 at **Gonzaga College, Krishnagiri.**
- **“First prize in paper presentation”** in the “UGC Sponsored - National Conference on Smart Materials” held during 11<sup>th</sup> – 12<sup>th</sup> September 2017 at **Sacred Heart College, Tirupattur.**
- **“Best crystal display award”** in the “21<sup>st</sup> National Seminar on Crystal Growth and Applications” in association with Indian Association for Crystal Growth (IACG) held during 6<sup>th</sup> – 8<sup>th</sup> March 2017 at **National College, Tiruchirapalli.**
- **“First prize in paper presentation”** in the “National seminar on Emerging Trends in Material Science” held on 25<sup>th</sup> September 2015 at **Gonzaga College, Krishnagiri.**

#### **SPECIAL SESSIONS DELIVERED:**

1. Resource Person in the workshop on IPR Awareness Program on the topic **“Patent Searching Strategies”** Organized by Intellectual Property Right Cell of Marudhar Kesari Jain College for Women, Vaniyambadi on 28.02.2024.
2. Resource Person in the seminar on **“My Story – Motivational Session by Successful Entrepreneurs”** Organized by Institution’s Innovation Council (IIC), ATAL Ranking of

Institutions in Innovation Achievements (ARIIA) & Women Entrepreneurship Development Cell (WEDC) of Marudhar Kesari Jain College for Women, Vaniyambadi on 31.01.2024.

3. Resource Person in the National Energy Conservation Day Session on **“Need of Energy Conservation”** Organized by Institution’s Innovation Council (IIC) & ATAL Ranking of Institutions in Innovation Achievements (ARIIA) of Marudhar Kesari Jain College for Women, Vaniyambadi on 14.12.2023.
4. Resource Person in the seminar on **“Chemistry of Crystals”** Organized by the Department of Chemistry, Islamiah Women’s College, Vaniyambadi on 21.03.2023.

#### **CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:**

1. Participated in SERB sponsored **“Two days workshop on Perovskite solar cells (WPSC 2023)”** held during 15<sup>th</sup> Dec 2023 to 16<sup>th</sup> Dec 2023 at Bharathidasan University, Trichy.
2. Participated a **“5 Days online workshop on SPSS in research”** organized by Star International Foundation for Research and Education, Tiruchengode, Tamil Nadu, India during 26.12.2023 to 30.12.2023.
3. Participated in DST SERB CRG sponsored workshop on **“Advanced Electrochemical Techniques”** held on 26<sup>th</sup> September 2022 at Bharathiar University, Coimbatore.
4. Participated in CSIR sponsored national seminar on **“Nanomaterials for Energy Harvesting and Applications”** held on 26<sup>th</sup> August 2022 at KGISL Institute of Technology, Coimbatore.
5. Participated and presented a paper **“National Conference on Innovation in Science and Technology (NCIST – 2021)”** held during 8<sup>th</sup> - 9<sup>th</sup> July 2021 at Sri Venkateswara College of Engineering and Technology, Chittoor.
6. Attended the Live Workshop on **“Technology Commercialisation”** held on 15<sup>th</sup> February 2021 at Turnip Innovations Pvt. Ltd., Mumbai.
7. Participated and presented a paper in the national seminar **“Advanced Materials and its Applications”** held during 5<sup>th</sup> and 6<sup>th</sup> March 2020 at Karpagam Academy of Higher Education, Coimbatore.
8. Participated and presented a paper in the **“International Conference on Advances in Materials Research (ICAMR – 2019)”** held on 12<sup>th</sup> February 2019 at Sacred Heart College, Tirupattur.
9. Participated and presented a paper in the **“23<sup>rd</sup> National Seminar on Crystal Growth and Applications (NSCGA – 2019)”** in association with Indian Association for Crystal Growth (IACG) held during 28<sup>th</sup> – 30<sup>th</sup> January 2019 at Bharathiar University, Coimbatore.
10. Participated and presented a paper in the **“National Conference on Advanced Materials and applications”** held on 7<sup>th</sup> September 2018 at Auxilium College, Vellore.

11. Participated and presented a paper in the **“National Conference on Processing and Fabrication of Advanced Materials (NCPFAM – 2018)”** held during 1<sup>st</sup> – 2<sup>nd</sup> March 2018 at SSN College of Engineering, Chennai.
12. Participated and presented a paper in the **“National Seminar of Materials System and Modeling (ETMSM – 2018)”** held during 28<sup>th</sup> – 1<sup>st</sup> March 2018 at Government Arts College for Men, Krishnagiri.
13. Participated and presented a paper in the **“National Conference on Recent Trends in Physics of Materials (NCRTPM – 2018)”** held during 9<sup>th</sup> – 10<sup>th</sup> February 2018 at Pachaiyappa’s College, Chennai.
14. Participated and presented a paper in the **“22<sup>nd</sup> National Seminar on Crystal Growth and Applications”** in association with Indian Association for Crystal Growth (IACG) held during 29<sup>th</sup> – 31<sup>st</sup> January 2018 at Sacred Heart College, Tirupattur.
15. Participated and presented a paper in the **“International Conference on Recent Trends in Material Science and Technology (ICRTMST – 2018)”** held during 19<sup>th</sup> – 20<sup>th</sup> January 2018 at Sri Vijay Vidyalaya College of Arts and Science, Dharmapuri.
16. Participated and presented a paper in the **“VII All India Young Scientist Convention”** held during 18<sup>th</sup> – 22<sup>nd</sup> December 2017 at Periyar University, Salem.
17. Participated and presented a paper in the **“International Conference on Material Science and Technology”** held on 5<sup>th</sup> October 2017 at Gonzaga College, Elathagiri, Krishnagiri.
18. Participated and presented a paper in the **“UGC Sponsored - National Conference on Smart Materials”** held during 11<sup>th</sup> – 12<sup>th</sup> September 2017 at Sacred Heart College, Tirupattur.
19. Participated and presented a paper in the **“International Conference on Material Science and Technology”** held during 28<sup>th</sup> – 29<sup>th</sup> August 2017 at Pachamuthu College, Dharmapuri.
20. Participated in the **“International Symposium on Recent Advances in Material Science”** held on 24<sup>th</sup> August 2017 at Sri Sarada College for Women, Salem.
21. Participated and presented a paper in the **“International Conferences on Advances in Materials”** held on 7<sup>th</sup> April 2017 at M. Kumarasamy College of Engineering, Thalavapalayam, Karur.
22. Participated and presented a paper in the **“21<sup>st</sup> National Seminar on Crystal Growth and Applications”** in association with Indian Association for Crystal Growth (IACG) held during 6<sup>th</sup> – 8<sup>th</sup> March 2017 at National College, Tiruchirapalli.
23. Participated in the **“National Level Workshop on Advanced Materials”** held on 23<sup>rd</sup> February 2017 at Periyar University PG Extension Centre, Dharmapuri.
24. Participated in the **“Science and Technology Conference”** held on 19<sup>th</sup> December 2016 at Sacred Heart College, Tirupattur.

25. Participated and presented a paper in the **“National Conference on Systematic Investigations of Structural, Morphological and Optical Properties of Materials”** held on 01 December 2016 at Sacred Heart College, Tirupattur.
26. Participated in the **“Workshop on Functional Materials and Spectroscopy”** held on 23<sup>rd</sup> August 2016 at Sacred Heart College, Tirupattur.
27. Participated in the **“International Conference on Smart Materials”** held on 13<sup>th</sup> November 2015 at Sacred Heart College, Tirupattur.
28. Participated in the **“Workshop on Spectroscopy and its Perspectives”** held during 10<sup>th</sup> – 12<sup>th</sup> September 2015 at Sacred Heart College, Tirupattur.
29. Participated and presented a paper in the **“National seminar on Emerging Trends in Material Science”** held on 25<sup>th</sup> September 2015 at Gonzaga College, Elathagiri, Krishnagiri.
30. Participated in the **“National Workshop on Luminescence Materials Devices and Applications (LMDA - 2015)”** held during 19<sup>th</sup> – 20<sup>th</sup> August 2015 at IGCAR, Kalpakkam.

#### **WEBINARS:**

1. Participated in the international webinar on **“Indigenous Materials for Energy Storage (Lithium-ion and Supercapacitor) Applications”** held on 3<sup>rd</sup> September 2022 at Bharat Institute of Engineering and Technology, Hyderabad.
2. Participated the international webinar on **“Milestones as a Guide for Academic Career Development”** held on 28<sup>th</sup> July 2021 at Sri sarada college for women, Salem.
3. Participated the international webinar on **“Disruptive Technologies Reforming Industries”** held on 27<sup>th</sup> March 2021 at Arasu Engineering College, Kumbakonam.
4. Participated the international webinar on **“Nanostructure for Next Generation Devices”** held on 16<sup>th</sup> March 2021 at Loyola College, Chennai.
5. Participated the international virtual seminar on **“Nano Research and Development”** held on 16<sup>th</sup> March 2021 at Karpagam Academy of Higher Education, Coimbatore.
6. Participated the webinar on **“A Nonlinear Perspective of Extreme Events”** held on 17<sup>th</sup> February 2021 at Vel Tech Rangarajan DR. Sagunthala R&D Institute of Science and Technology, Avadi, Chennai.
7. Participated the webinar on **“Recent trends in Nanotechnology”** held on 6<sup>th</sup> February 2021 at Arasu Engineering College, Kumbakonam.
8. Attended the conference on **“International Virtual Conference on Advances in Molecular Materials Research (AMMR 2021)”** held at during 3<sup>rd</sup> February 2021 – 5<sup>th</sup> February 2021 at Osaka University, Japan.



9. Participated the webinar on **“Synthesis, Structural Explication and Spectral Characterizations of Macro and Nano Crystals”** held on 30<sup>th</sup> January 2021 at Arasu Engineering College, Kumbakonam.
10. Participated the webinar on **“Materials and Commercial Aspects of Solar Photovoltaic Systems”** held on 27<sup>th</sup> January 2021 at Vels Institute of Science, Technology & Advanced Studies (VISTAS), Pallavaram, Chennai.
11. Participated the webinar on **“Emerging Materials for Solar Energy Conversion”** held on 12<sup>th</sup> January 2021 at Sethu Institute of Technology, Virudhunagar.
12. Participated the webinar on **“Recent Development in Supercapacitors and Supercapatteries”** held on 9<sup>th</sup> January 2021 at Sona College of Arts and Science, Salem.
13. Participated the international webinar on **“Cosmology and Nanotechnology”** held at during 27<sup>th</sup> May 2020 - 29<sup>th</sup> May 2020 at Nallamuthu Gounder Mahalingam College, Pollachi.
14. Participated the webinar on **“Advanced Materials for Future”** held on 29<sup>th</sup> May 2020 at Morning Star Home Science College, Ernakulam, Kerala.
15. Participated the international webinar on **“Covid 19 and Global challenges”** held on 27<sup>th</sup> May 2020 at VELS Institute, Chennai.
16. Participated the webinar on **“Getting Started in Sky Watching”** held at during 25<sup>th</sup> May 2020 – 26<sup>th</sup> May 2020 at Saurashtra University, Rajkot.
17. Participated the webinar on **“Yoga for Mind and Body”** held on 21<sup>st</sup> May 2020 at Tamilnadu Teachers Education University, Chennai.
18. Participated the webinar on **“Eight Limbs of Yoga”** held on 14<sup>th</sup> May 2020 at Tamilnadu Teachers Education University, Chennai.
19. Participated the webinar on **“Online National Awareness Program Covid - 19”** held on 12<sup>th</sup> May 2020 at Indian Association of Physics Teachers, Madhya Pradesh.
20. Participated the webinar on **“Crystallography and its Applications”** held on 8<sup>th</sup> May 2020 at Er. Perumal Manimekalai College of Engineering, Hosur.
21. Participated the webinar on **“Principle and Applications of Electronic Spectroscopy”** held on 7<sup>th</sup> May 2020 at Annai College of Arts and Science, Trichy.
22. Participated the webinar on **“Webinar Series on Conceptual Applied Physics”** held at during 5<sup>th</sup> May 2020 – 8<sup>th</sup> May 2020 at Saurashtra University, Rajkot.

#### **FACULTY DEVELOPMENT PROGRAMMES:**

1. Participated in International Level Virtual Faculty Development Program on **“Modern Research Convergence in Next Generation Computing”** Sri Krishna College of Engineering and Technology, Coimbatore, Tamil Nadu, India during 18.12.2023 to 22.12.2023.

2. Participated in One Week National Level Faculty Development Program (Online) Under DBT Star Status Scheme Organized by Department of physics on **“Development of materials characterization techniques and their future prospects”** Sri G.V.G Visalakshi College for Women, Udumalpet, Tamil Nadu, India during 18.12.2023 to 22.12.2023.
3. Participated in national one week Virtual Faculty Development Program on **“Recent Advances in Chemical Sciences”** from 27<sup>th</sup> Nov 2023 to 01<sup>st</sup> Dec 2023 at K.S.R College of Arts and Science for Women, Tiruchengode.
4. Participated in national one week faculty development programme on **“Research Methodology”** from 26<sup>th</sup> Sep 2023 – 04<sup>th</sup> Oct 2023 at Dr.M.G.R.Educational and Research Institute, Chennai.
5. Participated in national one week faculty development programme on **“ICT Tools for Effective Teaching and Learning”** from 23<sup>rd</sup> May 2022 – 28<sup>th</sup> May 2022 at Amar Sewa Mandal’s Kamla Nehru Mahavidyalaya, Nagpur, Maharashtra.
6. Participated the six days online faculty development programme on **“Green Chemistry for Sustainable Development”** held at during 16<sup>th</sup> May 2022 – 21<sup>st</sup> May 2022 at SRM Institute of Science and Technology, Ramapuram Campus, Chennai.
7. Participated the national level faculty development programme on **“An online Faculty Development Programme on Intellectual Property Rights”** held at 9<sup>th</sup> February 2022 at Jamal Mohamed College, Tiruchirapalli.
8. Participated the national level faculty development programme on **“An online Faculty Development Programme on Astronomical Studies”** held at during 7<sup>th</sup> – 8<sup>th</sup> February 2022 at Jamal Mohamed College, Tiruchirapalli.
9. Participated the seven days online faculty development programme on **“Advanced Materials for Future Science (AMFS)”** held at during 6<sup>th</sup> – 13<sup>th</sup> September 2021 at Jeppiaar Engineering College, Chennai.
10. Participated the national level faculty development programme on **“Applied Optics and Photonics”** held at during 10<sup>th</sup> – 12<sup>th</sup> August 2021 at Kumaraguru College of Technology, Coimbatore.
11. Participated in national level faculty development programme on **“Five Day Innovation series on patent search and filing”** held at during 16<sup>th</sup> February 2021 – 20<sup>th</sup> February 2021 at Andhra University collaboration with Turnip Innovations, Visakapatnam.
12. Participated in national level faculty development programme on **“Research Trends in Physics & Electronics”** held at during 27<sup>th</sup> January 2021 – 1<sup>st</sup> February 2021 at Little Flower Degree College, Uppal, Hyderabad.
13. Participated the faculty development programme on **“Funding Schemes and Patenting Scientific Innovations”** held on 13<sup>th</sup> June 2020 at Government Arts College, Trichy.

14. Participated the faculty development programme on **“Frontiers in Scientific Research and Technology”** held at during 11<sup>th</sup> June 2020 – 13<sup>th</sup> June 2020 at St. Joseph’s Institute of Technology, Chennai.
15. Participated the faculty development programme on **“Nanotechnology Innovation in Energy and Biomedicine”** held at during 8<sup>th</sup> June 2020 – 10<sup>th</sup> June 2020 at Kamaraj College of Engineering and Technology, Madurai.
16. Participated the faculty development programme on **“Changes in attitude towards teaching”** held on 2<sup>nd</sup> June 2020 at Arulmigu Palaniandavar College of Arts and Culture, Palani.
17. Participated the faculty development programme on **“Managing Online Classes and Co-Creating MOOCS: 2.0”** held at during 18<sup>th</sup> May 2020 – 3<sup>rd</sup> June 2020 at Ramanujan College University of Delhi, Delhi.
18. Participated the faculty development programme on **“Nanomaterials for Energy Harvesting and Biomedical Applications”** held at during 18<sup>th</sup> May 2020 – 22<sup>nd</sup> May 2020 at Godavari Institute of Engineering and Technology (Autonomous), Rajamahendravaram, Andhra Pradesh.
19. Participated the faculty development programme on **“Redefining Education Through Gamification”** held on 19<sup>th</sup> May 2020 at Geetha Jeevan Arts and Science College, Tuticorin.
20. Participated the faculty development programme on **“My Life My Pride My Career”** held on 18<sup>th</sup> May 2020 at Patrician College of Arts and Science, Chennai.
21. Participated the faculty development programme on **“Project Proposals for Funding Agencies (UGC Stride & ICSSR Impress): Preparation and Submission Protocol”** held at during 16<sup>th</sup> May 2020 – 17<sup>th</sup> May 2020 at Patrician College of Arts and Science, Chennai.
22. Participated the faculty development programme on **“Moodle Learning Management System”** held on 1<sup>st</sup> March 2020 at Vidyavardhini College of Engineering and Technology, IIT Bombay.

#### **PROFESSIONAL MEMBERSHIPS:**

1. Indian Association of Physics Teachers (IAPT) – 13883 L8877.
2. Institute of Researchers – LM012111.

#### **PUBLICATIONS:**

1. **J. Thirupathy**, P.Revathi, and T.Balakrishnan “Crystal growth, optical, mechanical and dielectric analysis of semiorganic glycine manganese sulphate single crystal for opto-electronic device application” in Crystal Research and Technology, 59, 12, 2400173 (**2024**) –

DOI: 10.1002/crat.202400173. (IF - 1.5).

2. **J. Thirupathy**, P.Revathi, and T.Balakrishnan “An investigation on optical, dielectric and thermal analysis of semiorganic bisglycine cobalt chloride dihydrate single crystal for electronic and opto-electronic devices” in Optical and Quantum Electronics, 56, 104 (2024)– DOI: 10.1007/s11082-024-07713-9. (IF - 3.3).
3. M.Punithavathi, **J. Thirupathy**<sup>\*</sup>, P.Revathi “An Investigation on Optical, Larvacidal and Cytotoxicity Analysis of Sulfanilic Acid Single Crystal for Optical and Biomedical Applications” in Cell Biochemistry and Biophysics, (2024) - DOI: 10.1007/s12013-024-01547-8. (IF - 1.8).
4. P. Revathi, T. Balakrishnan and **J. Thirupathy**<sup>\*</sup> “An Investigation on Structural, optical thermal and Dielectric Analysis of L-Lysine Iodide Semiorganic Nonlinear Optical Single Crystal for Opto-electronic Application” in Brazilian Journal of Physics, 54, 209 (2024) – DOI: 10.1007/s13538-024-01588-7. (IF - 1.5).
5. P. Revathi, T. Balakrishnan and **J. Thirupathy**<sup>\*</sup> “Optical, dielectric, Hirshfeld surface analysis, mechanical, and photoacoustic spectroscopy of glycine nickel dichloride dihydrate single crystal for optoelectronic devices” in Journal of Materials Science: Materials in Electronics, 35, 1503 (2024) – DOI: 10.1007/s10854-024-13183-2. (IF - 2.8).
6. K. Mohanapandian, V. Ponnarasan and **J.Thirupathy**<sup>\*</sup> “An investigation on structural, dielectric and optical properties of pure and Fe-doped CuO nanoparticles for optoelectronic device applications” in Optical and Quantum Electronics, 54, 347 (2024) - DOI: 10.1007/s11082-023-05977-1. (IF - 3.3).
7. N. Preetha, Tae Hwan Oh, S. Esakki Muthu, S. Divya, **J. Thirupathy**<sup>\*</sup> “An investigation on optical, mechanical and thermophysical properties of sodium sulfanilate dihydrate single crystal for optical window and microelectronics applications” in Crystal Research and Technology, **2300212** (2023) - DOI: 10.1002/crat.202300212. (IF – 1.59).
8. A. Sivakumar, S. Sahaya Jude Dhas, Lidong Dail, **J. Thirupathy**, K. Sethuraman, Raju Suresh Kumar, Abdulrahman I. Almansour, N. Vijayan and S.A. Martin Britto Dhas, “Dynamic shockwave-induced switchable order to disorder states of single crystal of sulfamic acid: a combined study of X-ray and Raman Spectroscopy” in Journal of Materials Science, 58, 8415–8425 (2023) – DOI: 10.1007/s10853-023-08532-1. (IF – 4.68).
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#### **BOOK CHAPTERS PUBLISHED:**

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2. E. Yamuna, K. Prabakaran and **J. Thirupathy**, “Pharmaceutical Based Cyclohepta[B] Indoles Scaffolds” in Research and Development in Pharmaceutical Science Volume III, Bhumi Publishing, ISBN: 978-93-91768-47-8 (**2022**) (**National**).

3. **J. Thirupathy**, “Pharmacological Activities of Hetero-fused Analogues” in Recent Trends and Latest Innovations in Life Sciences, Global Academy, ISBN: 978-625-8284-03-4 **(2022) (International)**.
4. E. Yamuna, K. Prabakaran and **J. Thirupathy**, “Graphite Carbon Nitride” in IntechOpen, DOI: <http://dx.doi.org/10.5772/intechopen.104976> **(2022) (International)**.
5. **J. Thirupathy**, “A Nonlinear Optical Benzil Single Crystal for Photonic Applications” in Springer DOI: [https://doi.org/10.1007/978-981-99-2548-3\\_3](https://doi.org/10.1007/978-981-99-2548-3_3), ISBN: 978-981-99-2548-3, **(2023) (International)**.
6. **J.Thirupathy** “Psychology of Gratitude and Happiness” in journal of Essentials of Positive Psychology, Shanlax Publications, 26, ISBN: 978-81-19337-28-6, **(2023) (National)**.
7. **J.Thirupathy** “Promoting positive emotions on psychological well-being” in journal of Essentials of Positive Psychology, Shanlax Publications, 64, ISBN: 978-81-19337-28-6, **(2023) (National)**.
8. **J.Thirupathy** and P.Revathi “Optical analysis of few scientifically important nonlinear optical single crystal for optical applications” in The science nexus: Pioneering progress across Biotechnology, Chemistry, Computer Science, Physics and Microbiology, Chyren Publication, 53, ISBN: 978-81-19820-35-1, **(2024) (National)**.

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1. Journal of Physics: Condensed Matter – IOP Science.
2. Journal of Physics: Materials – IOP Science.
3. Physica Scripta – IOP Science.

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#### **RESEARCH PROJECT GUIDED:**

1. PG (M. Sc. Physics) – 16.
2. UG (B. Sc. Physics) – 12.