

Name of the Teacher: Dr. Jyothi G.

Designation : Assistant Professor

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Academic Qualification

M.Sc B.Ed, Ph.D, SET, NET

Area of Interest/Specialization

Development of inorganic photoluminescent materials for efficient lighting elements and displays

Teaching Experience (as on 31.03.2021) : 10 Years

Details of Major or Minor Projects

Nil

Administrative / Official Responsibilities

Member, Malpractice prevention squad, University of Kerala,

Observer, KEAM

Coordinator WWS, Coordinator IIRS-ISRO Outreach programs (both college level)

Coordinator NAAC (department level)

Academic Positions

Member, BoS (Optoelectronics), University of Kerala

Research guide, Department of Physics, University of Kerala

Awards and Accolades

No

Seminar / Conference organized

- Coordinator, One Week Online Short-Term Faculty Development Programme on Pedagogical and e-learning tools for teaching (MOOC with four quadrants), organised by Sanatana Dharma College, Alappuzha in collaboration with The Kerala State Higher Education Council in August 2020
- Coordinator , One Week Online Short-Term Faculty Development Programme on Implementation of Information and Communication Technology in Teaching (MOOC with four quadrants) , organised by School of Legal Studies , Cochin University of Science and Technology in collaboration with The Kerala State Higher Education Council in July 2020

Centre Coordinator, State level All Kerala Physics Talent Search Examination by APT Kerala in 18-19

Programme coordinator, Talent Hunt-Sasthrajalakam, 3-day residential Workshop, conducted at M.S.M. College, Kayamkulam in association with Department of General education and SIET Kerala in November 2018

Training Courses attended

- Online short- term course in Advanced Group theory at UGC-HRDC, University of Kerala, Thiruvananthapuram from 16.12.2020 to 22.12.2020

One Week Online Short-Term Faculty Development Programme on Towards a digital era of teaching and learning (MOOC with four quadrants), organised by UGC-HRDC, University of Kerala, Thiruvananthapuram in collaboration with KSMDDB College, Sasthamkotta from August 12- 18, 2020

- Refresher course in Material Science at UGC-HRDC, University of Kerala, Thiruvananthapuram from Nov-Dec 2019
- FDP in Philosophy of Science by Kerala state higher Education Council at School of

Environmental sciences, Mahatma Gandhi University, Kottayam on Aug-Sept 2019

- Orientation Programme at UGC-HRDC, University of Kerala, Thiruvananthapuram from January 2016
- Refresher course in Nano Sciences at UGC-HRDC, University of Kerala, Thiruvananthapuram on Oct- Nov 2013
- Refresher course in Quantum Mechanics by Indian Academy of Sciences at S.B. College, Changanacherry on May 2013

Seminar / Conference attended

International

- Europium activated perovskites for solid state lighting, Two- day virtual international conference on energy, environment and health , Sree Ayyappa College, Chengannur, Kerala, 11-12 September 2020
- Influence of substitution of LiNbO₃ in enhancing luminescence in Eu³⁺ activated strontium titanate, International conference on optoelectronic and Nano Materials for Advanced technology, Cochin University of Science and Technology, Kochi, 3-5 January 2019
- Synthesis, structural and photoluminescence studies on perovskites –A novel phosphor for WLEDs, First International Conference on Advanced Materials at Amrita Viswavidyapeetham University, Coimbatore on 19-21 December 2016
- Second International Conference on Advanced Materials for Power Engineering at International and Inter University Centre for Nano science and Nanotechnology Mahatma Gandhi University, Kottayam, Kerala on 11-13 November 2016

National

- Red luminescence from Eu³⁺ activated (SrTiO₃)_{1-x}(LiNbO₃)_x perovskites, national seminar on Science, Technology and future world at St.Xavier's college, Thumba on 5-8 September 2018
- Photoluminescent properties of red emitting Sr_{0.8-x}La_{0.2}TiO₃: xEu³⁺ phosphors for

white light emitting diodes, National seminar on Trends and advancements in ICT at Department of physics, University of Kerala, 7th december 2015.

- Eu^{3+} luminescence in the perovskite host lattice $\text{Sr}_{0.95}\text{Y}_{0.05}\text{TiO}_3$, National seminar on Photonics and its applications at Department of Optoelectronics, University of Kerala, 9-11 December 2015
- Considerable photoluminescence enhancement of $\text{LiSrTiNbO}_6:\text{xEu}^{3+}$ by Y^{3+} doping for white LEDs, National seminar Advanced materials characterization techniques at Department of physics, University of Kerala, 27-28 March 2015
- Novel red phosphor of double perovskite compound $\text{LiSrTiNbO}_6:\text{xEu}^{3+}$, Frontiers of polymers and advanced materials, Department of Chemistry, University of Kerala, 5-7 November 2014.

Social Media Links

My YouTube channels : Jyo Physics

(https://youtube.com/channel/UClz5KUK8VNHoxa_BFcEHooA) and Jyothi G

(https://youtube.com/channel/UC-rOSi2_wggcCxjgCiFSVw)

International Journal Publications

- Solution combustion synthesis and luminescence dynamics of $\text{CaTiO}_3:\text{Eu}^{3+}$, Y^{3+} nanophosphors, Journal of Luminescence, 235 (2021) 118048.
<https://doi.org/10.1016/j.jlumin.2021.118048>, ISSN: 0022-2313
- Role of La^{3+} ion substitution sites on the photoluminescence properties of the $\text{SrTiO}_3:\text{Eu}^{3+}$ phosphors, Journal of Science: Advanced Materials and Devices, 5(2020) 233-241.
<https://doi.org/10.1016/j.jsamd.2020.04.006>, ISSN: 2468-2179
- Perovskite titanates at the nanoscale: Tunable luminescence by energy transfer and enhanced emission with Li^{+} co-doping, Journal of Solid State Chemistry, 288 (2020) 121449.
<https://doi.org/10.1016/j.jssc.2020.121449>, ISSN: 0022-4596
- Influence of substitution of LiNbO_3 in enhancing luminescence in Eu^{3+} activated strontium titanate, AIP Conference Proceedings 2082 (2019), 050006.

<https://doi.org/10.1063/1.5093866>, ISSN: 0094-243X (print) 1551-7616 (web)

- Synthesis, structural and photoluminescence studies on perovskites –A novel phosphor for WLEDs, Materials Today: Proceedings 2018, 5, 16267–16271, DOI:10.1016/j.matpr.2018.05.118, ISSN: 2214-7853
- Compositional tuning and site selective excitations in SrTiO₃:Y³⁺, Eu³⁺ red phosphors, Dyes and Pigments, 2018, 149, 531-542, <http://dx.doi.org/10.1016/j.dyepig.2017.10.040>, ISSN: 0143-7208
- White emitting Dy³⁺ activated perovskite titanates and energy transfer by Eu³⁺ codoping, Ceramics International, 2017, 43, 12044–56, <http://dx.doi.org/10.1016/j.ceramint.2017.06.058>, ISSN: 0272-8842
- Site selective substitution and its influence on photoluminescence properties of Sr_{0.8}Li_{0.2}Ti_{0.8}Nb_{0.2}O₃:Eu³⁺ phosphors, RSC Advances, 2017, 7, 28438, DOI: 10.1039/c7ra03598e, ISSN: 2046-2069

National Journal Publications

Nil

Book Chapter Publications

- Luminescence Properties of Eu Activated BiYInNbO₇ as a Potential Phosphor for WLEDs, book chapter in ‘Methodologies and Applications for Analytical and Physical Chemistry, Apple academic Press, USA’, Canada Pub Date: May, 2018 Hard ISBN: 9781771886215 E-Book ISBN: 9781315159539

International Conference Publications

Nil

National Conference Publications

Nil

Workshops Attended

1. Seminar on MOOC Development by EMMRC, University of Calicut and DB College, Thalayolaparambu on October 2019
2. Workshop on Tune and Prune your research- Material Characterization Techniques by IIPC, Biomedical Wing, Sree Chitra Tirunal Institute for Medical Sciences and Technology on August 2014

Other Publications

Nil

Other Relevant information

Member, Association of Physics Teachers, Kerala

Resource person, The Kerala State Institute of Encyclopaedic Publications

Additional Resources

My Moodle site: <https://jyothy.gnomio.com/>

My Google Scholar page: <https://scholar.google.co.in/citations?user=ejsjPwQAAAAJ&hl=en>

My blog: <https://physicsarise.blogspot.com/>