

COLLEGE WEBSITE- FACULTY PERSONAL PAGE

DATASHEET

PERSONAL details

Name	Dr. Linju Ann Jacob (ASSOCIATE PROFESSOR)
Department	Physics
Date of commencement of permanent service	07-01-2002
Years of teaching experience as on 1 st June of the year	22 Years
Address	Chakalayil Near ESI Dispensary, Erayilkadavu, Kottayam
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Research GateURL	https://www.researchgate.net/profile/Linju_Jacob2/research
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ACADEMIC QUALIFICATIONS

Degree	Institute	University	Grade/ Rank etc.
UG	Assumption College, changanacherry	M G University	First class with distinction
PG	Department of Physics, Cochin University of Science and Technology	Cochin University of Science and Technology	First class
Ph D	School of Pure and Applied Physics, M G University	M G University	
Additional	UGC – NET qualified	UGC	

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College-level Duties and in-charge (Mention major charges)

Duty	Position	Duration
MGOCSM	Vice president	2019-2020
Open course	Coordinator	2013-2016
University Examination	Senior Exam Superintendent	2023-2024
University Examination	Deputy Chairman-Kottayam zone	2024 onwards
Physics Department	Head of the Department	2024 onwards

PUBLICATIONS AND PRESENTATIONS

International Publication

- Linju Ann Jacob**, S. Sisira, Kukku Thomas, Dinu Alexander, P.R. Biju, N.V. Unnikrishnan, Cyriac Joseph, A reddish-orange emitting samarium doped α -Na₃Y(VO₄)₂ nanocrystal for single phased UV excitable white light applications, Journal of Solid State Chemistry 280 (2019) 120998.
- Linju Ann Jacob**, S. Sisira, Kamal P Mani Kukku Thomas, Dinu Alexander, P.R. Biju, N.V. Unnikrishnan, Cyriac Joseph, High purity blue photoluminescence in thulium activated α - Na₃Y(VO₄)₂ nanocrystals via host sensitization, Journal of Luminescence 223 (2020) 117169 1-9.
- Linju Ann Jacob**, S. Sisira, Kamal P Mani, Kukku Thomas, Dinu Alexander, P.R. Biju, N.V. Unnikrishnan, Cyriac Joseph, A new potential green emitting erbium activated α -Na₃Y(VO₄)₂ nanocrystals for UV excitable single phase pc-WLED applications, SN Applied Sciences 2 (2020) 1076.
- Linju Ann Jacob**, S. Sisira, Kukku Thomas, Dinu Alexander, P.R. Biju, N.V. Unnikrishnan, Cyriac Joseph, Synthesis, structural and luminescence characterization of single phased Tm³⁺/Dy³⁺ co-doped Na₃Y(VO₄)₂ nanocrystals, Journal of Crystal Growth 555 (2021) 125957.
- Sisira S, **Linju Ann Jacob**, Kamal P Mani, Biju P R, N V Unnikrishnan, Cyriac Joseph, Single phased white light emitting Dy³⁺/ Sm³⁺ co-doped CePO₄ nanocrystals for white light applications, **Journal of Materials Science: Materials in Electronics**, 30(12)(2019) 11354-11367.
- Sisira S, **Linju Ann Jacob**, Kukku Thomas Dinu Alexander, Biju P.R., N.V. Unnikrishnan, Cyriac Joseph, Effect of doping concentration and annealing temperature on the luminescence of novel orange red emitting CePO₄:Sm³⁺ nanocrystals, **Journal of Luminescence**, 209 (2019) 197-207.
- Sisira S, **Linju Ann Jacob**, Kamal P Mani, Biju P R, N V Unnikrishnan, Cyriac Joseph, High color rendering index single phase white light emitting phosphor based on

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- Tb³⁺/Sm³⁺ co-doped CePO₄ nanocrystals: The role of Tb³⁺ as a bridge between Ce³⁺ and Sm³⁺, **New Journal of Chemistry**, **43** (2019), **17367-17382**.
8. Dinu Alexander, Kukku Thomas, S. Sisira, **Linju Ann Jacob**, Ajeeshkumar S, P.R. Biju, N.V. Unnikrishnan, M.A. Ittyachen, Cyriac Joseph, Eu³⁺ activated terbium oxalatenanocrystals: A novel luminescent material with delayed concentration quenching and tunable multicolour emission, **Optical Materials** **86** (2018) **366-375**.
 9. Kukku Thomas, Dinu Alexander, S. Sisira, **Linju Ann Jacob**, P. R. Biju, N. V. Unnikrishnan, M. A. Ittyachen, Cyriac Joseph, Sm³⁺ doped tetragonal lanthanum molybdate: A novel host sensitized reddish orange emitting nanophosphor, **Journal of Luminescence**, **211** (2019) **284-291**.
 10. Kukku Thomas, Dinu Alexander, **Linju Ann Jacob**, P.R. Biju, N.V. Unnikrishnan, Cyriac Joseph, Novel blue emitting Tm³⁺ activated lanthanum molybdate : Investigations on luminescence behaviour and Judd-Ofelt theoretical analysis, **Optical Materials**, **100** (2020) **109623 1-7**.
 11. A.R. Chandran, **L.A. Jacob**, I. Paul, G. Jose, Photoluminescence study of reddish orange emitting Eu³⁺ activated LaPO₄ Nanoparticles via hydrothermal method , IOP Conf. Ser. Mater. Sci. Eng. 1263 (2022) 012006. <https://doi.org/10.1088/1757-899x/1263/1/012006>.
 12. S. Sisira, K.P. Mani, P. Punathil, **L.A. Jacob**, B. Baby, P.R. Biju, N. V Unnikrishnan, C. Joseph, Novel Intense Red Emitting Eu³⁺ Doped CePO₄ Nanocrystals for Solid State Lighting Applications , IOP Conf. Ser. Mater. Sci. Eng. 1263 (2022) 012015. <https://doi.org/10.1088/1757-899x/1263/1/012015>.
 13. S. Sisira, Kamal P Mani, **Linju Ann Jacob**, P. R Biju, N. V Unnikrishnan, Cyriac Joseph, Yellowish white light emitting Dy³⁺ ions doped CePO₄ nanocrystals for photonic application, Materials Today Proceedings. <https://doi.org/10.1016/j.matpr.2023.11.064>

Book Chapters

1. Sisira S, Ann Rose Abraham, Kamal P. Mani, Linju Ann Jacob, Cyriac Joseph, and M Kailasnath, Rare Earth Activated Phosphors for Solid-State Lighting Applications: A Case Study on Analyzing the Role of Ce³⁺ as an Efficient Sensitizer in Nanophosphors, in: RESILIENCE AND SUSTAINABILITY FOR ENERGY AND WATER New Advancements, Opportunities, and Framework., Apple academic press ISBN: 9781774916643
2. K.P. Mani, S. Sisira, V. Vidyadharan, L.A. Jacob, N.S. Panicker, C. Joseph, M. Kailasnath, Optical Nanothermometry Based on the Luminescence of Rare-Earth Ion-Doped Phosphors, in: A.S.M.A. Haseeb (Ed.), Encycl. Mater. Electron., Academic Press, Oxford, 2023: pp. V2-473-V2-496. <https://doi.org/10.1016/B978-0-12-819728-8.00054-1>.
- 3.

Paper Presentation

1. Host sensitized Sm³⁺ doped sodium yttrium vanadate red emitting phosphor for solid state lighting application, **Linju Ann Jacob**, Cyriac Joseph, National Photonics Symposium(NPS 2019), International School of Photonics, Cochin University of Science and Technology, 27-28 February 2019 .
2. Novel UV excitable Dy³⁺ doped sodium yttrium vanadate nanophosphors for solid state lighting applications, **Linju Ann Jacob**, Cyriac Joseph, International Conference on Advanced Functional Materials (ICAFM 2018) St. Berchmanns

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College, Kottayam, Kerala, 9-10 October 2018.

3. Synthesis and photoluminescence studies of host-sensitized Dy³⁺-doped Na₃Y(VO₄)₂ nanocrystals, **Linju Ann Jacob**, Cyriac Joseph, International Conference on Science, Technology and Applications of Rare Earths (ICSTAR 2018) S.V. University, Tirupathy, Andhra Pradesh, 23-25 September 2018.

Signature of the teachers with date