



## Centre for Research & Development

### Research Supervisor (Guide) Profiles

#### Discipline of Supervision: **Physics**



#### **Dr. Shivaraj Maidur**

Assistant Professor  
Department of Physical Sciences  
School of Computational & Physical Sciences

#### **Areas of Specialisation:**

Nonlinear optics, Materials Science,  
Density functional theory (DFT), Photonics

Dr. Shivaraj Maidur is an Assistant Professor of Physics at Kristu Jayanti (Deemed to be University), Bengaluru. He obtained his Ph.D. in Physics from Visvesvaraya Technological University, on the topic Nonlinear Optical Properties of Chalcone Derivatives Doped PMMA Thin Films. His research focuses on nonlinear optics, materials science, and density functional theory (DFT), with expertise in ultrafast laser spectroscopy, thin-film fabrication, nanomaterial synthesis, and structure-property investigations for photonic and optoelectronic applications. He has published over 60 international journal papers and 15 conference proceedings, with more than 1900 citations, an h-index 24, and an i-10 index 39. Beyond research, he is actively engaged in mentoring Ph.D. students (Universiti Sains Malaysia), guiding postgraduate projects, delivering invited talks, and serving as reviewer/editor for reputed journals (Elsevier, Wiley, ACS, RSC). His collaborations extend internationally, reflecting a commitment to advancing optics, materials, and photonic sciences through impactful teaching, research, and scholarly leadership. He has received funding from DST-SERB and KSCST and successfully organized international conference series on Recent Trends in Material Sciences (ICRTMS, 2023-2025). His contributions have been recognized through awards such as the Research Excellence Award (2023-24) and the Young Researcher Award (2021).

#### **Selected Publications:**

1. Vadhana Sharon, V., **Maidur, S. R.**, Barthwal, S., Anandalli, M. H., Kalarikkal, N., Sayed, M. A., and Shkir, M. (2025). Structural, magnetic and nanosecond third-order nonlinear optical studies of C.papaya mediated Mn & Sn doped ZnO nanoparticles. Journal of Alloys and Compounds, 1038, 182882. <https://doi.org/10.1016/j.jallcom.2025.182882>
2. Mariadass, A. R., MK, A. H. K., Upadhya, M. S., Sharon, V., **Maidur, S.**, Anandalli, M. H., ... Devarajan, P. A. (2025). Investigation on third-order nonlinear optical properties, XRD, FTIR, energygap, photoluminescence and scanning electron microscope of metal oxide/V2O5/SrTiO3. Journal of Materials Science: Materials in Electronics, 36(18). <https://doi.org/10.1007/s10854-025-15165-4>
3. **Maidur, S. R.**, Ekbote, A. N., Sharon, V. V., Rajkumar, M. A., Patil, P. S., Soma, V. R., ... Shankar, M. K. (2025). An extensive investigation of structural, linear, and ultrafast third-order nonlinear optical properties of a novel trimethoxy anthracene chalcone: Experimental and DFT studies. Optical Materials, 159, 116531. <https://doi.org/10.1016/j.optmat.2024.116531>