

DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT
22 Mile, B.M Kaval, Udayapura, Kanakapura Road, Bangalore-560082.



DEPARTMENT OF PHYSICS

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| Faculty Name | Dr. GIRISH K M |  |
| Designation | Assistant Professor | |
| Educational Qualification | M.Sc., Ph.D., | |
| Experience in Years | 9.5 | |
| Area of Interest | Material Science. Fabrication of Nanomaterials for Multifunctional Applications. | |
| Email ID | girishkmphy@gmail.com | |

Educational Details

- Ph.D - Nanomaterials, Photoluminescence, Bharathiar University
- M.Sc - Nuclear Physics , Bangalore University
- B.Sc - Computer Science, Bangalore University

Personal Details

- Date of Birth :20-07-1989
- Hobbies :Reading books
- Languages Known :Kannada, English and Hindi.

Professional Experience

- Working as an assistant professor in the department of physics, DSATM since from 2012
- **Young Scientist Award** in the International Awards on Engineering, Science and Medicine, held on 11th & 12th April 2020, Hyderabad, India, Organized by VDGGOOD Professional Association.
- **Best professional Performer of the year** Award in teachers day celebration held on 8th September 2021 at DSATM, Bengaluru.

Publications

International Journals:

- **K.M Girish**, Ramachandra Naik, S.C Prashantha, H Nagabhushana, H.P Nagaswarupa, KS Anantha Raju, HB Premkumar, SC Sharma, BM Nagabhushana. Zn₂TiO₄:Eu³⁺nanophosphor: combustion synthesis and its photoluminescence properties for near UV light emitting diodes". **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, 138 (2015) 857-865. -Elsevier.
- **K.M Girish**, S.C Prashantha, Ramachandra Naik, H Nagabhushana. Zn₂TiO₄: A novel host lattice for Sm³⁺ doped reddish orange light emitting photoluminescent material for thermal and fingerprint sensor. **Optical Materials**, 73 (2017) 197-205. -Elsevier.

- Ramachandra Naik, SC Prashantha, H Nagabhushana, SC Sharma, HP Nagaswarupa, KS Anantharaju, BM Nagabhushana, HB Premkumar, **KM Girish**. A single phase, red emissive $\text{Mg}_2\text{SiO}_4:\text{Sm}^{3+}$ nanophosphor prepared via rapid propellant combustion route. **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**, 140 (2015) 516-523 -Elsevier.
- **KM Girish**, SC Prashantha, Ramachandra Naik, H Nagabhushana, HP Nagaswarupa, HB Premakumar, SC Sharma, KS Anantha Raju. Visible photon excited photoluminescence; photometric characteristics of a green light emitting $\text{Zn}_2\text{TiO}_4:\text{Tb}^{3+}$ nanophosphor for wLEDs. **Materials Research Express**, 3 (2016) 075015. **IOP sciences**.
- **K.M Girish**, S.C Prashantha, H. Nagabhushana. Facile combustion based engineering of novel white light emitting $\text{Zn}_2\text{TiO}_4:\text{Dy}^{3+}$ nanophosphors for display and forensic applications. **Journal of Science: Advanced Materials and Devices**, 2 (2017) 360-370. -Elsevier.
- Ramachandra Naik, SC Prashantha, H Nagabhushana, SC Sharma, HP Nagaswarupa, KS Anantharaju, DM Jnaneshwara, **KM Girish**. Synthesis of color tunable $\text{Mg}_2\text{SiO}_4:\text{Dy}^{3+}$ nanophosphors: structural and photoluminescence studies. **Dyes and Pigments**, 127 (2016)25-36. -Elsevier.
- Ramachandra Naik, SC Prashantha, H Nagabhushana, HP Nagaswarupa, KS Anantharaju, SC Sharma, BM Nagabhushana, HB Premkumar, **KM Girish**. $\text{Mg}_2\text{SiO}_4:\text{Tb}^{3+}$ nanophosphor: Auto ignition route and near UV excited photoluminescence properties for WLEDs. **Journal of Alloys and Compounds**. 617(2014) 69-75. **Elsevier**.
- Ramachandra Naik, SC Prashantha, H Nagabhushana, SC Sharma, HP Nagaswarupa, **KM Girish**. Effect of fuel on auto ignition route, photoluminescence and photometric studies of tunable red emitting $\text{Mg}_2\text{SiO}_4:\text{Cr}^{3+}$ nanophosphors for solid state lighting applications. **Journal of Alloys and Compounds**, 682 (2016) 815-824. -Elsevier.
- Manohar T, Prashantha S. C, R. Naik, Nagabhushana H, Nagaswarupa, H.P Anantharaju, K.S **Girish K.M**, Premkumar, H.B. A benign approach for tailoring the photometric properties and Judd-Ofelt analysis of $\text{LaAlO}_3:\text{Sm}^{3+}$ nanophosphors for thermal sensor and WLED applications.**Sensors and Actuators B: Chemical**, 243(2017)1057—1066. -Elsevier.
- Ramachandra Naik, SC Prashantha, H Nagabhushana, **KM Girish**, Electrochemical, photoluminescence and EPR studies of Fe^{3+} doped nanoForsterite: Effect of doping on tetra and octahedral sites **Journal of Luminescence**, 197(2018)233-241-**Elsevier**
- RamachandraNaik S.C.Prashantha H.Nagabhushana, Yashwanth V.Naik, **K.M.Girish** H.B.Premkumar. Photoluminescent and thermoluminescent properties of low temperature synthesized Nd^{3+} doped Mg_2SiO_4 nanophosphors for display and dosimetry applications. **Optik**, 180(2019) 8-19-**Elsevier**

National Journals:

- Photoluminescence properties of Dy^{3+} doped LaOF nanophosphor for white LED application. CURRENT SCIENCE,VOL.113 NO.6 25 SEPTEMBER 2017. doi: 10.18520/cs/v113/i06/1139-1141

- Ramachandra Naik, SC Prashantha, H Nagabhushana, Yashwanth V Naik, **KM Girish** Green Light Emitting Tb³⁺ Doped Phosphors-A Review. Material science research india <http://dx.doi.org/10.13005/msri/150307>.

Conferences:

- **K.M.Girish**, S.C.Prashantha, H.Nagabhushana, H.B.Premakumar, Ramachandra Naik, H. C.Madhusudhana, “ Synthesis of Pr³⁺ doped Zn₂TiO₄ Nanophosphor and its Photocatalytic properties” National conference on convergence of science, technology and management (NCCSTM-2017) at DSATM, on 19th may 2017 (ISBN 978-93-85682-48-3)
- **K.M.Girish**, Ramachandr Naik, S.C.Prashantha, H.Nagabhushana, H.B.Premakumar, Yaswanth V naik, “ Influence of Li³⁺ on Structural and Photoluminescent properties of Synthesis Zn₂TiO₄:Eu³⁺Nanophosphor for display applications” National conference on Trends in Advanced Materials and their Applications (TAMA-2017) at Tumkur University, on 30th november 2017 (ISBN 978-93-8694-44-1)
- Ramachandr Naik, S.C.Prashantha, **K.M.Girish**, H.Nagabhushana, D.M Jnaneshwara H.B.Premakumar, Yaswanth V naik, “Synthesis Characterization and EPR studies of Fe³⁺ doped Mg₂SiO₄” National conference on Trends in Advanced Materials and their Applications (TAMA-2017) at Tumkur University, on 30th november 2017 (ISBN 978-93-8694-44-1)
- T. Manohar, S.C.Prashantha, Ramachandr Naik, **K.M.Girish**, D.M Jnaneshwara Bhavani V naik, “Photoluminescence properties of the Nd³⁺ doped LaAlO₃- A Green light emitting nanophosphor for near UV-excited light emitting diodes” National conference on Trends in Advanced Materials and their Applications (TAMA-2017) at Tumkur University, on 30th november 2017 (ISBN 978-93-8694-44-1)
- P.K Jisha, S.C.Prashantha, Ramachandr Naik, **K.M.Girish**, D.M Jnaneshwara C.R Ravikumar, Ashwini. “Cyclic Voltametry study of cobalt doped GdAlO₃” National conference on Trends in Advanced Materials and their Applications (TAMA-2017) at Tumkur University, on 30th november 2017 (ISBN 978-93-8694-44-1)
- S. Ashwini, S.C.Prashantha, Ramachandr Naik, **K.M.Girish**, D.M Jnaneshwara, K.S.Narasimhamurthy, K.S Anantharaju, P.K Jisha “Synthesis Characterization and Photoluminescence properties of Bi₂O₃ doped with Eu³⁺ nanophosphor” National conference on Trends in Advanced Materials and their Applications (TAMA-2017) at Tumkur University, on 30th november 2017 (ISBN 978-93-8694-44-1)
- **K.M.Girish**, S.C.Prashantha, H.Nagabhushana, H.B.Premakumar, Ramachandra Naik, “Judd Ofelt analysis of Eu³⁺ doped Zn₂TiO₄ nanophosphors” National conference on AFM-2015 held on 4-5 December 2015 at DSCE Bangalore (ISBN 978-93-85682-04-9)
- **K.M. Girish**, S.C. Prashantha, Ramachandra Naik, H. Nagabhushana , h.b Premakumara. Structural, photocatalytic studies of Zn₂TiO₄:Sm³⁺nanophosphor”. International conference on advances in science and engineering held at East West Institute of Technology, Bengaluru, on 19th January 2017.

- **K.M. Girish, S.C. Prashantha, Ramachandra Naik, H. Nagabhushana** Synthesis and X-Ray diffraction studies of combustion derived Zn_2TiO_4 nanomaterial. National conference on recent advances in materials at APS College of Engineering on 30th august 2017. ISBN no:978-1-5136-2495-2.
- **K.M Girish, M. shivram S.C Prashantha, H. Nagabhushana** NUV excited luminescence studies of Tb^{3+} in $CaTiO_3$ nanophosphor for wLEDs . International conference on nano technology (IC NANO-2016) at muddenahalli on April 21st to 23rd 2016.

Books and Book Chapters

Title: **“Engineering Physics: As per the VTU latest syllabus”**

Publishers: Notion press

ISBN : 9781685230265

Title: **“Facile Engineered nano Zinc titanate: its spectroscopic properties for multifunctional applications”**,

Publishers: Lamberts Publications

ISBN : 978-613-9-94548-1.

Title: **“Forensic studies and display analysis”**.

Publishers: Lamberts Publications

ISBN : 978-613-9-95107-9.

Title: **“PL analysis of RE³⁺ doped Mg₂SiO₄ nanophosphors for display devices”**

Publishers: Lamberts Publications

Book Chapter

- **“Impact of Eu³⁺ obvious luminescence in diverse host cross sections”, *Current advances in nano engineered materials*, ISBN: 978-93-85682-15-5, 189- 207.**
- **Visible Light Emitting Ln³⁺ Ions (Ln= Eu, Sm, Tb, Dy) in Mg₂SiO₄ Host Lattice”, *Luminescent Materials in Display and Biomedical Applications*. CRC Press Tayer and Francis group. ISBN: 9780367112127.**

Academic Activity and Faculty Development Activity

- Class Teacher and Proctor
- Cultural Coordinator for VTU fest held at Sir MVIT Bangalore.
- Participated in Faculty development program held at EWIT Bangalore
- Participated in Faculty development program held at DSCE Bangalore
- Participated One day workshop on AICTE MODEL CURICULLUM (under TEQIP-1.3) held on May 7th 2018 at BIT Campus, Bengaluru, organized by Visveswaraya Technological University, Belagavi.
- Participated Three Day NBA workshop held on 11th -13th December 2017, at Dayananda Sagar Academy of Technology and Management, Bengaluru-82.
- Participated Three days Faculty development program on Recent Advances in Basic Sciences for Engineering Applications , held on Jan 8th -10th 2018 at Dayananda Sagar Academy of Technology and Management, Bengaluru-82
- Participated Three Day OBE workshop held on 18th -20th June 2018, at Dayananda Sagar Academy of Technology and Management, Bengaluru-82.
- Participated Three Day FDP on Teaching Learning Process held on 26th -28th July 2018, at Dayananda Sagar Academy of Technology and Management, Bengaluru-82.
- Participated VTU-VGST faculty development programme on “Micro Nano Technology in Small Satellites” 19-22 August 2013 held at EWIT Bangalore.
- Participated in Faculty development program held at DSCE Bangalore

Contact Details

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My Vision

To be an international eminent Physist

