

# CURRICULUM VITAE

Dr. DEVARAJA P B

M.Sc., B.Ed., M. Phil., Ph. D.

## Communication Address:

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## Educational Qualification: M.Sc., B.Ed., M.Phil., Ph.D.

### Doctor of philosophy -Ph.D:- Physics

Thesis title: **Luminescence Properties of Rare Earth and Transition Metal Doped Nano Magnesium Oxide**

University – **Tumkur University** (Awarded on 07 October 2015)

### Master of Philosophy – M.Phil:- Physics

University – Annamalai University

### Master of Science – M.Sc:- Physics

University – University of Mysore

### Bachelor of Education – B.Ed:- (Physics, Mathematics)

University – University of Mysore

### Bachelor of Science – B.Sc:- Physics, Mathematics, Computer Science

University – University of Mysore

## Experience:-

### Teaching: (9 year teaching experience)

Presently Working as **Associate Professor**, Department of Physics, **Kalpataru Institute of Technology, Tiptur**. (From June 2015 to Till Date).

### Research:

- Worked as a research fellow (part-time/external) in Research center of Vijaya College, Bangalore and Annamalai University research center during M. Phil dissertation work for **one year**.
- Working as research fellow in the Center for Nano Research (CNR), Tumkur University, Tumkure, during Ph. D. work form last **five years**.

## Publications:

### List of publications in peer reviewed journals (International journals)

1. **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana, H.P. Nagaswarupa., *Synthesis, Structural and Luminescence studies of Magnesium oxide nanophosphor.*, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Elsevier)**, Volume 118, (2014) Pages 847–851.
2. **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana, H.P. Nagaswarupa, *MgO: Eu<sup>3+</sup> red nano phosphor: low temperature synthesis and photoluminescence properties.*, **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Elsevier)**, Volume 121, (2014) Pages 46–52.
3. **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana, H.P. Nagaswarupa, B. Dharuka Prasad. *Self ignition route of MgO: Dy<sup>3+</sup> nanophosphor for WLEDs under NUV excitation.*, **Materials Characterization (Elsevier)** Volume 97, August 2014, Pages 27–36.
4. **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana, H.P. Nagaswarupa., *Luminescence properties of MgO: Fe<sup>3+</sup> nanopowders prepared via low temperature solution combustion synthesis.* **J. Radiation research and applied sciences (Elsevier)** Volume 8, February 2015, Pages 362 – 373.
5. **P.B. Devaraja**, D.N. Avadhani, H. Nagabhushana, S.C. Sharma, S.C. Prashantha, H.P. Nagaswarupa., *Spectroscopic and photoluminescence properties of MgO: Cr<sup>3+</sup> nanosheets for WLEDs.* **Displays (Elsevier)** Volume: 41, Year : 2016 Page : 16–24.
6. **P.B. Devaraja**, H. Nagabhushana, S.C. Prashantha, C. Vedamurthy, M.C. Kirankumar., *Structural, optical and luminescent properties of MgO: Mn<sup>2+</sup> nanophosphors prepared by facile combustion route.* **International Journal of Engineering Science & Management.** ISSN 2277-5528.
7. Ramachandra Naik, S. C. Prashantha, H. Nagabhushana, H. P. Nagaswarupa, D. M. Jnaneshwara, **P. B. Devaraja**, G. P. Darshan., *Diffuse reflectance Properties and Bandgap analysis of Mg<sub>2</sub>SiO<sub>4</sub>:RE<sup>3+</sup> (RE=Eu, Tb, Sm, Dy) Nanophosphors for Light emitting Application.*, **AIP Conference Proceedings** **1832**, 050035 (2017); <http://doi.org/10.1063/1.4980268>.
8. **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana, H.P. Nagaswarupa, *MgO:Tb<sup>3+</sup> nano phosphor: Propellant chemistry route and photoluminescence properties for white light emission under NUV excitation.*, **J. Luminescence (Elsevier)** 2017.
9. **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana, H.P. Nagaswarupa, B. Dharuka Prasad., *Facile green combustion synthesis of MgO nanoparticles using Calotropis-gigantea and E. tirucalli plant extract as fuels and their luminescence properties.* **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (Elsevier)** 2017.

### List of publications in conference proceedings/conferences

1. Synthesis, Structural and Luminescence studies  $\text{Sm}^{3+}$  doped of Magnesium oxide nanophosphor., **P.B. Devaraja**, D.N. Avadhani, S.C. Prashantha, H. Nagabhushana, S.C.Sharma, B.M. Nagabhushana., “**Nano science and nano technology**” BMS Institute of Technology Bangalore. Oct -11- 2013, ISBN No.978-81-928203-2-3.
2. Red emissive  $\text{MgO}:\text{Sm}^{3+}$  nanophosphor prepared via facile combustion route for display applications. **P.B. Devaraja**, D.N. Avadhani, H. Nagabhushana, S.C. Prashantha, S.C. Sharma, Ramachandra Naik, H.P. Nagaswarupa, K.S. Ananthraju. (**ICNM 2014**)’ Mahatma Gandhi University, Kottayam, Kerala, India, 19-21 December 2014.
3. **P.B. Devaraja**, H. Nagabhushana, S.C. Prashantha, S.C. Sharma., *Facile green combustion synthesis of  $\text{MgO}$  nanoparticles using *Calotropis-gigantea* plant extracts as fuels and their luminescence properties.*, “**IFM-2015**” Dayananda sagar Institute of technology, Bangalore, India.4-5 december 2015. ISBN No. 978-93-85682-04-9.
4. **P.B. Devaraja**, H. Nagabhushana, S.C. Prashantha, S.C. Sharma., Green engineered  $\text{MgO}$  nanoparticles: E. thirucalli plant extract as fuels and their Photoluminescence studies..., “**IFM-2015**” Dayananda sagar Institute of technology, Bangalore, India.4-5 december 2015. ISBN No. 978-93-85682-04-9.

### List of workshops /conference/ proceedings attended

1. ‘National conference’ on ‘**Recent Advances in Functionalized Materials**’ M.S. Ramaiah Institute of Technology, Bangalore. 24-25 January 2012.
2. ‘National conference’ on ‘**Nano Science and Nano Technology**’, B.M.S. Institute of Technology, Bangalore, 11 October 2013.
3. ‘National Workshop’ on ‘**Luminescence Materials Devices and Applications**’, Department of Physics, Bangalore University & Luminescence Society of India, 22-23 November, 2013.
4. International conference’ on ‘**Nanostructured Materials and Nanocomposites (ICNM 2014)**’ Mahatma Gandhi University, Kottayam, Kerala, India, 19-21 December 2014.
5. ‘National conference’ on ‘**Advanced Functional Materials**’ (**IFM-2015**)’ Dayananda sagar Institute of technology, Bangalore, India.4-5 December 2015.
6. **61<sup>st</sup>DAE Solid state Physics Symposium**, KIIT, Bhubaneswar, Odisha, Dec26-30, 2016.