

## Dr. Mallikarjun Anandalli

Email: mhanandalli@gmail.com

Phone: +919482283441

Date of Birth: 01-06-1990

Gender: Male

Category: General

### Academic qualification



SL No.	Degree	Year	Subject	University/Institution	% of
	Ph.D.	2022	Physics(Condensed Mater Physics and Material Science)	Karnatak University Dharwad	Awarded
1	M. Sc.	2015	Physics(Solid State Physics)	VSKU Bellary, Karnataka	64.3%
2	B.Ed.	2012	Mathematics and Physics	VSKU Bellary, Karnataka	80.07%
3	BSc	2011	Physics, Chemistry, and Mathematics	Gulbarga University	66.32%

<b>Ph.D thesis title</b>	Preparation and Characterization of Fluorescent dye doped polymer nanocomposites
<b>Guide Name</b>	Prof. R.F. Bhajantri Nuclear and Condensed Matter Physics Department of Physics
<b>Institute/ Organization/ University</b>	Karnatak University, Dharwad, Pavatenagar-580003 Karnataka, India
<b>Year of Award</b>	13-05-2022

### Work experience

SL No	Positions held	Name of the Institute	From	To
1	Project Assistant	Karnatak University Dharwad (DST-SERB Sponsored Project, New Delhi)	30-11-2015	14-05 2018

### Fellowship received

SL No	Name of Award	Awarding Agency	Year
1	Project Assistant	Karnatak University Dharwad (DST-SERB Sponsored Project, New Delhi)	30-11-2015 to 14-05 2018
2	URS fellowship	Karnatak University Dharwad	16-05-2018 to 31-04-2019
3	Vidyashree Ph.D Fellowship	BCWD government of Karnataka	1-05-2019 to 24-12-2022

## Other Information

### Research and Teaching Experience

Position held	Duration	Name and Address of University/Organization
Postdoctoral Fellow	30-11-2022 going on	IIUCNN, Mahatma Gandhi University, Kottayam, Kerala
Research Associate	20-01-2022 to 07-11-2022	Dept. of Physics, Polymer Physics Lab. Karnatak University, Dharwad-580003
Guest Faculty	01-06-2022 to 31-08-2022	BNDC degree college Dandeli
Ph.D. Research Scholar	Registered, 27-12-2016 Awarded, 13-05-2022	Dept. of Physics, Karnatak University, Dharwad-580003
Project Assistant (DST-SERB, New Delhi)	Nov.2015 to March 2018	Dept. of Physics, Karnatak University, Dharwad-580003
Technical Assistant	01-07-2015 to 29-11- 2015	Dept. of Physics, Karnatak University, Dharwad-580003

### Research Collaborations

Name of Faculty	Name of Organization	Experimental collaboration
Prof. Ali Ben Ahmed	University of Sfax Tunisia, North Africa	DFT Studies
Prof. Sabu Thomas	Department of Chemistry Mahatma Gandhi University, Kottayam,	UV-Visible and other experimental techniques
Prof. Nandakumar Kalarikkal	Department of Physics Mahatma Gandhi University, Kottayam, Kerala	Nonlinear optics Pulsed Laser
Dr. P. S. Patil	Department of Physics KLE Institute of Engg, Hubli	Nonlinear optics continues wave
Prof. V. Ravindrachary	Department of Physics, Mangalore University, Mangalagotri 547 199	Dielectric and Fluorescence spectroscopy

### Guest of Honors

- Invited two days Special lecture series for MSc students Department of Studies in Physics, Raichur University, Karnataka, **29<sup>th</sup> and 30<sup>th</sup> June 2022**
- Special Lecture on “**Astrophysics**” Department of Physics, JSS Arts Science and Commerce and PG Department, Gokak, **4<sup>th</sup> July 2022**

- Invited as a *Resource Person* event on “**One Day work Shop Hands on Training of Spin coating Machine For Research Scholar** ” Department of Chemistry, Karnatak Science College, Dharwad, 6<sup>th</sup> September 2022

#### **Research Interest:**

Synthesis of nanoparticles/Quantum dots and polymer nanocomposites, Optical, electrical and microstructural properties of polymer-based nanocomposites, Polymer blends, Surface morphological studies, Universal Testing Machine (UTM) for Mechanical Properties of the Polymer Nanocomposite, Steady state and Time resolved fluorescence studies, Anisotropy and Polarisation Emission studies, Development of optoelectronic materials. Dielectric studies on polymer-based nanocomposites. Nonlinear optical (NLO) properties of polymer nanocomposites

#### **Characterization Techniques known:**

X-Ray Diffraction (XRD), Transform Infra-Red Spectroscopy (FTIR), DPSS and He-Ne continuous wave Laser (Z-Scan Technique). Nd: YAG Ultrafast Pulsed Laser. Pulsed Laser Deposition (PLD), Fluorescence Image Microscope, Fourier Nanoparticle analyzer, Time-Correlated Single Photon Counting (TCSPC), UV-Visible Spectroscopy, Fluorescence Spectrofluorometer (PL), Impedance Analyzer, Universal Testing Machine (UTM), Thermogravimetric Analysis (TGA), Differential Scanning calorimetry (DSC) Atomic Force Microscopy (AFM), Scanning Electron Microscopy (SEM), Contact Angle measurement.

**PROFICIENCY IN :** HTML 4.0, Adobe Photoshop 7.0, LaTeX Software, LabVIEW

#### **Reviewer of Journals:**

Chemical Physics Letter (CPL),

Journal applied Polymer Science (Wiley)

Journal of Material Science (Springer)

#### **Member of Reviewer Committee**

American Journal of Optics and Photonics (12-12-2022 to 12-12-2024)

#### **LIST OF PUBLICATIONS**

##### **A. Publications in International Journals**

1. Dominant role of organic dye on Mn: ZnS/PMMA polymer nanocomposites: structural, thermal, linear, and nonlinear optical limiting properties for optoelectronic and photonic applications

**Mallikarjun H. Anandalli**, R. F. Bhajantri, Shivaraj R. Maidur, L.A. Shastri, V Sasirekha

**Material Today Communication, Elsevier (2023)**

2. Physical, structural and photoluminescence characteristics of  $\text{Sm}_2\text{O}_3$  doped lithium borate glasses bearing large concentration of modifier  
Kavita Hanamar, B. G. Hegde, **Mallikarjun H Anandalli**, S. B. Kolavekar, R. F. Bhajantri, N. H. Ayachit, A G Pramod, K Keshavamurthy  
**Journal of Inorganic and Organometallic Polymers and Materials (2023)**
3. Investigation of linear and nonlinear optical properties of brilliant green (BG) dye doped PVA polymer composites for optoelectronic applications.  
**Mallikarjun H. Anandalli**, R. F. Bhajantri, Shivaraj R. Maidur and Parutagouda Shankaragouda Patil,  
**Journal of Materials Research**, volume 36, 2856–2871 (2021)
4. Dominant nature of 7-hydroxy 4-methyl coumarin dye on Thermal, Fluorescence and Antimicrobial Properties of PVA/OMS Blend Films.  
Vishram D Hiremani, **Mallikarjun H Anandalli**, Tilak Gasti, Shruti Dixit, Praveen K Bayannavar, Saraswati P Masti, R F Bhajantri, Shyam Kumar Vootla, Bhagyavana S Mudigoudra and Ravindra Chougale.  
**Journal of Polymer Research** 28, 353 (2021),
5. Fluorescence and third-order nonlinear optical properties of thermally stable CBPEA dye-doped PMMA/ZnO nanocomposites.  
**Mallikarjun H. Anandalli**, R. F. Bhajantri, Shivaraj R. Maidur and Parutagouda Shankaragouda Patil,  
**Journal of Materials Science: Materials in Electronics**, 31, 10531–10547 (2020),
6. Mechanical and Thermal Studies of Brilliant Green Doped Poly (vinyl alcohol) Polymer Composite.  
**Mallikarjun. H. Anandalli**, R. F Bhajantria, Sunil G. Rathod, Kanakaraj, Chetan Chavan and Shivaprasad Chalawadi  
**AIP Conference Proceedings**, 2115, 030222 (2019)
7. Physicochemical Properties of PMMA/ZnO Nanocomposite capped with 1- Chloro-9, 10-bis (phenyl ethynyl) anthracene.  
**Mallikarjun Anandalli**, and R. F. Bhajantri T. M. Kanakaraj, Vidyashree Hebbar, Jagadish Naik  
**AIP Conference Proceedings** 1953, 030189 (2018).
8. Influence of thiazole yellow dye on PMMA/CdS nanocomposite thin films enhances microstructural, linear, optical limiting and third order nonlinear optical properties of for optoelectronic and photonic applications (**communicated**).  
**Mallikarjun H. Anandalli**, R. F. Bhajantri
9. Investigation Structural and frequency, temperature dependent dielectric properties of impact anthracene derivative doped on PMMA/ ZnO nanocomposite for energy storage applications (**communicated**).  
**Mallikarjun H. Anandalli**, R. F. Bhajantri, Sunil. G. Rathod and Chetan Chawan
10. Optical properties of neutron irradiated PMMA doped methyl red  
Soumya S. Bulla, Rajashekara F. Bhajantri, Chetan Chavan, Shivaprasad Chalawadi, **Mallikarjun H Anandalli**, and Satyappa Kalliguddi.

**AIP Conference Proceedings, 2244, 090004 (2020).**

11. Dopant Dependent Microstructural and Fluorescence Properties of Biodegradable Polymer Films for DSSC application.  
R Padmakumari, V Ravindrachary, B K Mahantesha, R Sahanakumari, RF Bhajantri, **Mallikarjun H Anandalli**.  
**Journal of Physics: Conference Series, 1172, 012079, (2019).**
12. Effect of calcination temperature on synthesized ZnO nanoparticles  
Chavan Chetan, Rajshekar F Bhajantri, Bulla Soumya, Chalawadi Shivaprasad, **Mallikarjun H Anandalli**, Kalliguddi Satyappa.  
**AIP Conference Proceedings, 2244, 070015 (2020),**  
Synthesis, characterization and AC conductivity studies on bismuth sulfide /Polyaniline-DBSA nanocomposites" **(communicated)**.  
Rajeshwari Mirji, Blaise Lobo, R. F Bhajantri, **and Mallikarjun Anandalli**.

#### **B. Presentation at National/International conference**

1. "Influence of Thiazole Yellow G (TY) dye on the Structural, Surface Morphology, Linear and Third-order nonlinear optical properties of PMMA/CdS thin films for Optoelectronic and Photonic applications " International Conference on Recent Trends in Materials Science (ICRTMS 2023), on 07 March, 2023, Kristu Jayanti College, Bengaluru.  
**Mallikarjun H. Anandalli**, R. F. Bhajantri, Nandakumar Kalarikkal, Sabu Thomas
2. Physicochemical Properties of PMMA/ZnO Nanocomposite capped with 1- Chloro-9, 10-bis (phenyl ethynyl) anthracene.  
**Mallikarjun. H. Anandalli**, T. M. Kanakaraj, Vidyashree Hebbar, Jagadish Naik and R. F. Bhajantri  
2nd International Conference on Condensed Matter &Applied Physics, Govt. Engineering College, Bikaner, Rajasthan. India held during 24<sup>th</sup>-25<sup>th</sup> November.2017.
3. Mechanical and Thermal Studies of Brilliant Green Doped Poly (vinyl alcohol) Polymer Composite.  
**Mallikarjun. H. Anandalli**, R. F Bhajantria, Sunil G. Rathod, Kanakaraj, Chetan Chavan and Shivaprasad Chalawadi  
63<sup>rd</sup> DAE Solid State Physics Symposium, Guru Jambheshwar University of Science and Technology, Hisar, Haryana. India during 18-22<sup>nd</sup> December 2018.
4. Investigation of Linear and Nonlinear optical properties brilliant green (BG) dye doped PVA polymer composites.**(Oral Presentation)**  
**Mallikarjun. H. Anandalli**, R.F Bhajantri, Shivaraj R. Maidur and Parutagouda Shankaragouda Patil  
2<sup>nd</sup>International Conference on Advanced Materials & Technology (ICMAT-20)  
Sri Jayachamarajendra College of Engineering, JSS Science and Technology University, Mysuru, Karnataka, India during 16<sup>th</sup> to 18<sup>th</sup> January 2020.
5. Optical, Structural and Thermal studies on synthesized chalcone derivative doped PMMA composite films,

**Mallikarjun. H. Anandalli**, R.F Bhajantri, Shivaraj R. Maidur and Parutagouda Shankaragouda Patil.

5<sup>th</sup> International conference on Nanoscience and Nanotechnology (ICONN-2019) held at SRM IST, Chennai India during 28-30 January 2019.

6. Third International Conference on Nanomaterials: Synthesis Characterization and Applications (ICN-2018) (IIUCNN) Mahatma Gandhi University, Kottayam. Kerala during 11<sup>th</sup> to 13<sup>th</sup> May 2018. (*Short invited talk*)

**Mallikarjun. H. Anandalli**, R.F Bhajantri, Shivaraj R. Maidur and Parutagouda Shankaragouda Patil.

7. Investigation of structural, thermal and mechanical properties of high filler CdSe dispersed PMMA polymer nanocomposites.

**Mallikarjun. H. Anandalli**, R. F. Bhajantri, Kanakaraj T.M, Satyappa Kalliguddi, Shivaprasad Chalawadi, Chetan Chavan and Soumya Bulla,

International Conference on Advanced Materials Science and Applications (ICAMSA-2020), Ramaiah Institute of Technology, Bangalore, Karnataka. India, during 3<sup>rd</sup> – 4<sup>th</sup> September 2020

8. Optical properties of polymer films of PVA doped with Thiazole Yellow G Dye  
Vidyashree Hebbar, R. F. Bhajantri, Sunil Rathod, Jagadish Nail, Chandrappa H, **Mallikarjun H Anandalli** and Sheela T.

International Conference on Materials Science and ionizing safety & Awareness (ICMSIRSA-2016), Department of Physics, Shivaji University, Kolhspur-416004, Maharashtra during 28-30<sup>th</sup> January 2016.

9. Role of ZrO<sub>2</sub> Filler on Mechanical and Conducting Properties of PVA/NaClO<sub>4</sub> Composites  
Jagadish Naik, R. F. Bhajantri, Sunil Rathod, Vidyashree Hebbar, Chandrappa H, **Mallikarjun H Anandalli** and Sheela T

International Conference on Materials Science and ionizing safety & Awareness (ICMSIRSA-2016), Department of Physics, Shivaji University, Kolhspur-416004, Maharashtra during 28-30<sup>th</sup> January 2016

10. Electrical, Mechanical and Dielectric Studies on MnO<sub>2</sub> doped PVA/NaClO<sub>4</sub> Polymer nanocomposite

Kanakaraj T.M, **Mallikarjun Anandalli** and R F Bhajantri

International Conference on Physics of Materials and Nanotechnology (ICPN 2019)

Department of Physics, Mangalore University, Mangalore, Karnataka, India, during 19-21<sup>th</sup> September 2019.

### C. Workshops Attended

1. Three Days Hands-on Training on Advanced Characterization Techniques” at SRM University Chennai from 6<sup>th</sup> to 8<sup>th</sup> March 2023.
2. Fabrication of optoelectronic device and sensors-hands-on experience (FODS-2019), Department of Physics, National Institute of Technology, Warangal, during 17<sup>th</sup> to 21<sup>th</sup> June 2019.
3. Workshop on Analytical Techniques SAIF and DST-New Delhi, Karnatak University Dharwad, 25<sup>th</sup> to 27<sup>th</sup> 2018.

4. One day workshop on Society Research and Development, Karnatak University Dharwad  
19<sup>th</sup> February.

### Personal Details

**Religion** : Hindu  
**Nationality** : Indian  
**Permanent Address** : S/O Huchhappa Anandalli  
House No #32 Bus stand near  
At: Post Neeralagi  
Tq: Dist Koppal-583285, Karnataka, India  
**Mobile** : +919482283441,  
**Languages Known** : Kannada, English & Hindi, and Telugu

### References

1	Dr. R.F. Bhajantri Professor Nuclear and Condensed Matter Physics Department of Physics, Karnatak University Dharwad, Pavatenagar-580003, Karnataka, India E-mail: rfbhajantri@gmail.com Ph. No: 09448623319 <a href="https://scholar.google.co.in/citations?user=c1VlfOoAAA AJ&amp;hl=en">Google Scholar Profile: URL:https://scholar.google.co m/citations?user=c1VlfOoAAA AJ&amp;hl=en</a>
2	Dr. Nandakumar Kalarikkal Senior Professor School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, Kerala, India E-mail: nkkalarikkal@mgu.ac.in Telephone: +91-9447671962 (Mobile), +91-481-2731669 (Office/Fax) Websites: www.iiucnn.mgu.ac.in, www.spap.mgu.ac.inhttp://nandakumarkalarikkal.com/ Google Scholar Profile: <a href="https://scholar.google.co.in/citations?user=vgr6uKIAAAAJ&amp;hl=en">https://scholar.google.co.in/citations?user=vgr6uKIAAAAJ&amp;hl=en</a>
3	Dr. L. A. Shastri Associate Professor Department of Chemistry Karnatak University Dharwad,Pavatenagar-580003, Karnataka, India E-mail: <a href="mailto:drlashastri@kud.ac.in">drlashastri@kud.ac.in</a> , chemilok@gmail.com Phone No.: 0836-2215286 Cell No. : 8762268779 <a href="https://scholar.google.co.in/citations?user=1ITjRoUA AAAJ&amp;hl=en">URL:https://scholar.google.co.in/citations?user=1ITjRoUA AAAJ&amp;hl=en</a>

Place: Dharwad

Yours Sincerely

Date:

Dr. Mallikarjun Anandalli