



Name: **Dr. Raghavendra U. P.**
Designation: **Assistant Professor**
Qualification: **M.Sc., M.Phil., Ph.D.,**
Experience: **9 Years 8 Months**
Contact No.: **9448900243**
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raghavendra@bit-bangalore.edu.in
Area of Research: **Molecular Spectroscopy, Nanoscience and
Material science.**

Short Term Training Program (STTP)/Faculty Development Program (FDP) Attended:

1. Participated in one week Faculty development program on “**Recent Trends in Photonic Techniques**” organized by Department of Physics, Ramaiah Institute of Technology, Bengaluru from 31st July to 5th August 2017.
2. Participated Faculty development program on “**Modern Materials and their Applications**” organized by Department of Physics, B.N.M. Institute of Technology, Bengaluru from 16th to 20th January 2018.

Courses Participated:

1. Participated in a course on “**SHAPE ANISOTROPIC MATERIALS AND THEIR APPLICATIONS IN DISPLAY DEVICES**” from 19th February to 2nd March 2018 conducted by Ministry of Human Resource Development (Global Initiative for Academic Networks), Government of India at BMS college of Engineering, Bengaluru.

Workshops / Seminars / Conferences Attended:

1. Participated in two days workshop on “**Research Methodologies and Latex**” organized by **Visvesvaraya Technological University** at Bangalore Institute of Technology, Bengaluru during 4th and 5th February 2013.
2. Participated in two days National workshop on “**Luminescence Materials Devices and Applications**” organized by **Luminescence Society of India and Department of Physics of Bangalore University** at Bangalore University, Bengaluru during 22nd and 23rd November 2013.
3. Participated in a one-day workshop on “**Basic Science Syllabus for B.E programme**” organized by **Visvesvaraya Technological University** at UBDT Engineering College, Davanagere on 19th August 2014.
4. Participated in one-day workshop on “**Plagiarism Check for the Ph. D. Thesis**” held on 25th, July-2015 organized by Visvesvaraya Technological University - Belagavi at S. J. B. Institute of Technology, Bengaluru - 560060, Karnataka, India.
5. Participated in “**One day Workshop on 100th Year Celebration of Einstein’s Works**” held on 23rd April-2016 organized by Department of Physics at Bangalore Institute of Technology, K. R. Road, V. V. Pura, Bengaluru - 560004, Karnataka, India.
6. Participated in Two day Science Academies’ Lecture Workshop on “**Shockwaves in Science, Engineering and Medicine**” held on 24th and 25th March-2017 sponsored by

IISc, Bengaluru and organized by Department of Physics at Bangalore Institute of Technology, K. R. Road, V. V. Pura, Bengaluru - 560004, Karnataka, India.

7. Participated in a one day conference on “**Laser Physics and Non-Linear Optics**” held on 30th October-2017 organized by Department of Physics at Bangalore Institute of Technology, K. R. Road, V. V. Pura, Bengaluru - 560004, Karnataka, India.
8. Participated in two days workshop on “**Material Modelling and Simulation**” held on 04-12-2018 and 05-12-2018 organized by DHIO Research & Engineering Pvt. Ltd at Sanctum hotel, Gandhinagar, Bengaluru, Karnataka, India.

Research Papers Presented in National/International Conferences:

1. **U.P. Raghavendra** and J. Thipperudrappa, “*Effect of solvents on absorption and fluorescence properties of a newly synthesized coumarin fluorophore and estimation of dipole moments*” National Conference on Frontiers in Applied Spectroscopy held at Maharani Science college for Women, Bengaluru during February 13th and 14th, 2014.
2. Chaluvaraju B V, **Raghavendra U P** and Murugendrappa M V, *Preparation, Characterization and I-V Characteristic Studies of Polypyrrole/Molybdenum Trioxide Composites*, National Conference on “Current Trends in Scientific Research for Engineering Applications (NCSEA-2014)” held from 17th to 18th July-2014 organized by Departments of Science at St. Joseph College of Engineering, Vamanjoor, Mangalore - 575028, Karnataka, India.
3. **U.P. Raghavendra** and J. Thipperudrappa, “*Solvatochromic studies of biologically active iodinated 4-aryloxymethyl coumarins and estimation of dipole Moments*” International Conference on Advanced oxidation processes held at School of Environmental Sciences and Inter University Instrumentation Centre (IUIIC), Mahatma Gandhi University, Kottayam, Kerala (East End Hotel, Munnar) during September 25th - 28th, 2014.
4. J. Thipperudrappa and **U.P. Raghavendra**, “*Influence of silver nanoparticles on photophysical characteristics of biologically active 4-aryloxymethyl coumarin*” International Conference on Advanced oxidation processes held at School of Environmental Sciences and Inter University Instrumentation Centre (IUIIC), Mahatma Gandhi University, Kottayam, Kerala (East End Hotel, Munnar) during September 25th - 28th, 2014.
5. J. Thipperudrappa and **U.P. Raghavendra**, “*Photophysical characteristics of biologically active iodinated 4-aryloxymethyl coumarin IIPMBC*” National Conference on Atomic physics, Molecular physics and X-ray crystallography held at Vijaya college, Bengaluru during January 8th - 10th, 2015.
6. **U.P. Raghavendra** and J. Thipperudrappa, “*Spectroscopic investigations on the fluorescence quenching of biologically active iodinated 4-aryloxymethyl coumarin by plasmonic silver nanoparticles*” National Conference on Atomic physics, Molecular physics and X-ray crystallography held at Vijaya college, Bengaluru during January 8th - 10th, 2015.
7. **U.P. Raghavendra** and J. Thipperudrappa, “*Modulation of photophysical characteristics of a biologically active iodinated 4-aryloxymethyl coumarin by plasmonic silver nanoparticles*” National Conference on Advanced Nanotechnology and its Applications held at Maharani Science College for Women, Bengaluru during January 22nd and 23rd, 2015.

8. **U.P. Raghavendra**, M. Basanagouda and J. Thipperudrappa, “*Study of electron transfer between amines and biologically active 4-aryloxymethyl coumarin*” National Conference on Modern Materials, Devices & Applications held at Maharani Science College for Women, Bengaluru during January 7th and 8th, 2016.
9. Aaditya V B, Akhil D Prabhu, Bharathesh B M, Chaluvvaraju B V, **Raghavendra U P**, Thipperudrappa J and Murugendrappa M V, *Experimental Studies of D.C. Conductivity and Thermo Electric Power of Polypyrrole/Titanium Dioxide Nano Composites*, “International Conference on Smart Engineering Materials [ICSEM-2016]” held from 20th to 22nd, October-2016 organized by R V College of Engineering, Bengaluru-560059, Karnataka, India.
10. Bharathesh B M, Aaditya V B, Akhil D Prabhu, Chaluvvaraju B V, **Raghavendra U P** and Murugendrappa M V, *Chemically Synthesized Polypyrrole/Titanium Dioxide-MWCNT (PTM) Nano Composites for Experimental Studies of D.C. Conductivity and Thermo Electric Power*, “International Conference on Smart Engineering Materials [ICSEM-2016]” held from 20th to 22nd, October-2016 organized by R V College of Engineering, Bengaluru-560059, Karnataka, India.
11. Akhil D Prabhu, Bharathesh B M, Aaditya V B, Chaluvvaraju B V, **Raghavendra U P** and Murugendrappa M V, *A.C. Conductivities of Polypyrrole/Titanium Dioxide and Polypyrrole/ Titanium Dioxide-MWCNT Nano Composites: A Comparative Study*, “International Conference on Smart Engineering Materials [ICSEM-2016]” held from 20th to 22nd, October-2016 organized by R V College of Engineering, Bengaluru-560059, Karnataka, India.

Research Papers Published in National/International Journals:

1. **U.P. Raghavendra**, Mahantesha Basanagouda, R.M. Melavanki, R.H. Fattepur and J. Thipperudrappa, *Solvatochromic studies of biologically active iodinated 4-aryloxymethyl coumarins and estimation of dipole moments*, Journal of Molecular Liquids, 202 (2015) 9-16, Elsevier, <https://doi.org/10.1016/j.molliq.2014.12.003>, Impact Factor: 3.648.
2. J. Thipperudrappa, **U.P. Raghavendra** and Mahantesha Basanagouda, *Photophysical characteristics of biologically active 4-aryloxymethyl coumarins 4PTMBC and IIPMBC*, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 136(2015)1475-1483, Elsevier, <https://doi.org/10.1016/j.saa.2014.10.039>, Impact Factor: 2.536.
3. **U.P. Raghavendra**, Mahantesha Basanagouda and J. Thipperudrappa, *Investigation of role of silver nanoparticles on spectroscopic properties of biologically active coumarin dyes 4PTMBC and IIPMBC*, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy, 150 (2015) 350-359, Elsevier, <https://doi.org/10.1016/j.saa.2015.05.094>, Impact Factor: 2.536.
4. **U.P. Raghavendra**, J. Thipperudrappa, Mahantesha Basanagouda and R.M. Melavanki, *Influence of silver nanoparticles on spectroscopic properties of biologically active iodinated 4-aryloxymethyl coumarin dyes*, Journal of Luminescence, 172 (2016) 139-146, Elsevier, <https://doi.org/10.1016/j.jlumin.2015.12.003>, Impact Factor: 2.686.
5. **U.P. Raghavendra**, Mahantesha Basanagouda and J. Thipperudrappa, *Study of electron transfer between amines and biologically active 4-aryloxymethyl coumarin*, Mapana-Journal of Sciences, 15 (2016) 29-45, Christ University, India, ISSN 0975-3303|DOI: <https://doi.org/10.12723/mjs.36.3>.

6. J. Thipperudrappa, **U.P. Raghavendra**, H.R. Deepa and Mahantesha Basanagouda, *Study of role of silver nanoparticles on spectroscopic properties of ketocyanine dye*, Mapana-Journal of Sciences, 15 (2016) 1-16, Christ University, India, ISSN 0975-3303|DOI: <https://doi.org/10.12723/mjs.36.1>.
7. **U.P. Raghavendra**, Mahantesha Basanagouda and J. Thipperudrappa, *Study of interaction between amines and biologically active 4-aryloxymethyl coumarin*, Proceedings of National Conference on Modern Materials, Devices and Applications, January 7th and 8th (2016) 62-65, Maharani Science College for Women, Bengaluru, India, ISBN: 978-93-5254-637-4.
8. **U.P. Raghavendra**, Mahantesha Basanagouda, A.H. Sidrai and J. Thipperudrappa, *Spectroscopic investigations on the interaction of biologically active 4-aryloxymethyl coumarins with TiO₂ nanoparticles*, Journal of Molecular Liquids, 222 (2016) 601-608, Elsevier, <https://doi.org/10.1016/j.molliq.2016.07.088>, Impact Factor: 3.648.
9. J. Thipperudrappa, H.R. Deepa, **U.P. Raghavendra**, S.M. Hanagodimath and R.M. Melavanki, *Effect of solvents, solvent mixture and silver nanoparticles on photophysical properties of a ketocyanine dye*, Luminescence, John Wiley, 32 (2017) 51-61, <https://doi.org/10.1002/bio.3147>, Impact Factor: 1.509.
10. Chaluvaraju B V, **Raghavendra U P** and Murugendrappa M V, *Experimental Studies on Current, Susceptance, Impedance and Electrical Modulus of the Polypyrrole/Molybdenum Trioxide Composites*, Mapana-Journal of Sciences, 16 (2017) 9-24, Christ University, India, ISSN 0975-3303| DOI: <https://doi.org/10.12723/mjs.40.2>.
11. B. V. Chaluvaraju, **U. P. Raghavendra**, T. S. Pranisha and M. V. Murugendrappa, *A study of thermo-electric power and transport properties of polypyrrole/ash (paddy husk) nano-composites*, Journal of Material Science: Material in Electronics 28 (2017) 11230–11242 (ISSN: 0957-4522), Springer, , DOI 10.1007/s10854-017-6912-8, Impact Factor: 2.324.
12. J. Thipperudrappa, **U.P. Raghavendra** and Mahantesha Basanagouda, *Effect of TiO₂ nanoparticles on some photophysical characteristics of ketocyanine dyes*, Luminescence, John Wiley, 32 (2017) 1283-1288, <https://doi.org/10.1002/bio.3322>, Impact Factor: 1.509.
13. V. B. Aaditya, B. M. Bharathesh, R. Harshitha, B. V. Chaluvaraju, **U. P. Raghavendra** and M. V. Murugendrappa, *Study of dielectric properties of polypyrrole/titanium dioxide and polypyrrole/titanium dioxide-MWCNT nano composites*, Journal of Materials Science: Materials in Electronics, 29 (2018) 2848-2859, Springer, <https://doi.org/10.1007/s10854-017-8214-6>, Impact Factor: 2.324.
14. R. Harshitha, V. B. Aaditya, B. M. Bharathesh, B. V. Chaluvaraju, **U. P. Raghavendra** and M. V. Murugendrappa, *Studies of thermo-electric power and dielectric modulus of polypyrrole/zirconium oxide-molybdenum trioxide (PZM) composites*, Journal of Materials Science: Materials in Electronics, 29 (2018) 6564–6578, Springer, <https://doi.org/10.1007/s10854-018-8640-0>, Impact Factor: 2.324.
15. J. Thipperudrappa, **U.P. Raghavendra**, H.R. Deepa and Mahantesha Basanagouda, *Modification of Spectral behavior of ketocyanine dyes silver nanoparticles of different sizes*, International Journal of Nanoscience, 17 (2018), 1850022-1 to 10, World Scientific Publishing Company, DOI: 10.1142/S0219581X18500229, Impact Factor: 0.56.
16. **U.P. Raghavendra**, Mahantesha Basanagouda, R.M. Melavanki and J. Thipperudrappa, *Effect of plasmonic silver nanoparticles' size on photophysical characteristics of 4-*

- Aryloxymethyl coumarins*, Plasmonics, 33 (2018) 315-325, Springer, DOI 10.1007/s11468-017-0516-2, Impact Factor: 2.139.
17. Akhil D Prabhu, B. M. Bharathesh, V. B. Aaditya, B. V. Chaluvvaraju, **U. P. Raghavendra** and M. V. Murugendrappa, *A.C. Conductivities of Polypyrrole/Titanium Dioxide and Polypyrrole/Titanium Dioxide-MWCNT Nano Composites: A Comparative Study*, Materials Today: Proceedings 5 (2018) 21217–21224, Elsevier, <https://doi.org/10.1016/j.matpr.2018.06.521>, Impact Factor: 0.94.
 18. V. B. Aaditya, Akhil D Prabhu, B. M. Bharathesh, B. V. Chaluvvaraju, **U. P. Raghavendra**, J. Thipperudrappa and M. V. Murugendrappa, *Experimental Studies of D.C. Conductivity and Thermo Electric Power of Polypyrrole/Titanium Dioxide Nano Composites*, Materials Today: Proceedings 5 (2018) 20874–20881, Elsevier, <https://doi.org/10.1016/j.matpr.2018.06.474>, Impact Factor: 0.94.
 19. B. M. Bharathesh, V. B. Aaditya, Akhil D Prabhu, B. V. Chaluvvaraju, **U. P. Raghavendra** and M. V. Murugendrappa, *Chemically Synthesized Polypyrrole/Titanium Dioxide-MWCNT (PTM) Nano Composites for Experimental Studies of D.C. Conductivity and Thermo Electric Power*, Materials Today: Proceedings 5 (2018) 20882–20889, Elsevier, <https://doi.org/10.1016/j.matpr.2018.06.475>, Impact Factor: 0.94.
 20. Mayadevi Kalgi, **Raghavendra U P**, Mahantesha Basanagouda, S M Hanagodimath, and Thipperudrappa J, *Solvatochromic studies and estimation of excited dipole moment of newly synthesised iodinated coumarin derivative*, International Journal of Research and Analytical Reviews (IJRAR), 5 (2018) 716-723, ISSN 2349-5138.
 21. Mayadevi Kalgi, **Raghavendra U P**, Mahantesha Basanagouda, S M Hanagodimath, and Thipperudrappa J, *Effect of solvents on photophysical properties of biologically active iodinated 4-aryloxymethyl coumarin IIPBC*, Journal of emerging technologies and innovative research (JETIR), 5 (2018) 620-627, ISSN-2349-5162.

Reference: [Dr. Raghavendra U. P. - Google Scholar Citations](#)

Other Responsibilities undertaken:

1. Member, Board of Examination, Physics, DSCE (Autonomous Institution), Bengaluru.
2. Member, College magazine committee, BITANNICA-2012, 2013 and 2015.
3. Member, Organizing Committee for One Day Workshop on “100th year celebration of Einstein’s works” conducted by Department of Physics on 23rd April-2016 at Bangalore Institute of Technology, Bengaluru.
4. Member, Departmental Organizing Committee for Two-day Science Academies’ Lecture Workshop on “Shockwaves in Science, Engineering and Medicine” held on 24th and 25th March-2017 sponsored by IISc, Bengaluru and organized by Department of Physics at Bangalore Institute of Technology, Bengaluru.
5. Co-Author for Engineering Physics Practical Manual, Department of Physics, BIT.
6. Member, Squad team, VTU examinations, January-2014.
7. Departmental Coordinator, Continuous improvement committee, Department of Physics, BIT, Bengaluru.

Programs (Workshops/Seminars/Conferences) Organized:

1. Organized in “**Two Day Workshop on 100th Year Celebration of Einstein’s Work**” conducted by Department of Physics on 23rd April-2016 at Bangalore Institute of Technology, K. R. Road, V. V. Puram, Bengaluru - 560004, Karnataka, India.
- 2.. Organized in Two-day Science Academies’ Lecture Workshop on “**Shockwaves in Science, Engineering and Medicine**” held on 24th and 25th March-2017 sponsored by IISc, Bengaluru and organized by Department of Physics at Bangalore Institute of Technology, K. R. Road, V. V. Puram, Bengaluru - 560004, Karnataka, India.
4. Organized in one-day conference on “**Laser Physics and Non-Linear Optics**” held on 30th October-2017 sponsored by Rajya Vokkaligara Sangha, Bengaluru & Karnataka State Council for Science and Technology (KSCST), Bengaluru and organized by Department of Physics at Bangalore Institute of Technology, K. R. Road, V. V. Puram, Bengaluru - 560004, Karnataka, India.
5. Organized in two-day workshop on “**New Model Curriculum for First Year B.E./B.Tech.-CBCS Syllabus (2018-2019) as per Outcome-Based Education (OBE) format including Course Outcomes (CO) and Bloom’s Taxonomy**” organized jointly by VTU, Belagavi and Bangalore Institute of Technology held from 7th to 8th May-2018 at Bangalore Institute of Technology, K. R. Road, V. V. Pura, Bengaluru - 560004, Karnataka, India.

Awards/ Achievement:

- Awarded third prize for poster presentation in two day National Conference on “Advanced Nanotechnology and its Applications” held at Maharani Science College for women during 22nd and 23rd January-2015.

Research Profile:

- User, CARL ZEISS ULTRA-55 Field Effect Scanning Electron Microscope, CENSE, IISc, Bengaluru, India (2015-2016).
- User, Shimadzu UV-1800 UV-Visible Spectrophotometer, VTU research centre, BNM Institute of Technology, Bengaluru, India (2013-2016).
- User, Hitachi F-2700 Fluorescence Spectrophotometer, VTU research centre, MSRIT, Bengaluru, India (2013-2016).
- User, ChronosBH fluorescence lifetime spectrometer (TCSPC), USIC, Karnatak University, Dharwad, India (2014-16).
- User, AUTOLAB electrochemical device (Cyclic voltammeter), Department of Chemistry, Bangalore University, Bengaluru, India (2015).
- User, Forbes Tinsley 6421 LCR Data Bridge, P.G. Dept. of Physics, Basaveshwara science college, Bagalkot, India (2014).
 - User, Abbe’s Refractometer, P.G. Dept. of Chemistry, Basaveshwara science college, Bagalkot, India (2014).

Experimental Skills:

A. Material Synthesis

Synthesis of silver nanoparticles by chemical reduction method.

B. Characterization Techniques

- Optical Absorption studies using Shimadzu UV-1800 UV-Visible Spectrophotometer.
- Fluorescence emission studies using Hitachi F-2700 Fluorescence Spectrophotometer.
- Fluorescence lifetime studies using ChronosBH fluorescence lifetime spectrometer.
- Measurement of dielectric constant of liquids by Forbes Tinsley (FT) 6421 LCR Data Bridge.
- Measurement of refractive index of liquids using Abbe's refractometer.
- Determination of redox potential using cyclic voltammeter.
- Determination of size of nanoparticles using CARL ZEISS ULTRA-55 Field Effect Scanning Electron Microscope.

Instruments Handled:

- UV-VIS Spectrophotometer Model Shimadzu UV-1800.
- Spectrofluorimeter Model Hitachi F-2700.
- ChronosBH single photon counting fluorescence spectrometer.
- Forbes Tinsley (FT) 6421 LCR Data Bridge.
- Abbe's refractometer.
- Cyclic voltammeter.
- Vacuum distillation unit.
- Ultrasonicator.
- Analytical balance model RADWAG.