



B.M.S COLLEGE OF ENGINEERING, BENGALURU-19
Autonomous Institute, Affiliated to VTU
Department of Physics

AY 2023-24 (1st of July 2023- 31st of June 2024)

1) Dr. B.L Suresha

HOD & Associate Professor, Dept. of Physics

July 24th, 2023: As per the official Memorandum of the principal dated 22.07.2023 (NO.BMS/PPL/EST/2023), Dr. B. L Suresha, Associate Professor, Department of Physics took charge as HOD Department of Physics at 9.40 AM in the HOD chamber 2nd floor BSN Platinum jubilee Building.



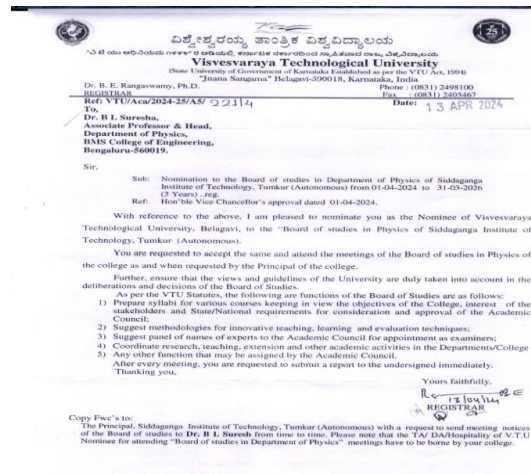
October 18th 2023: Dr. B.L Suresha, Head, Department of Physics, published a research paper entitled "Dielectric and spectroscopic studies of MWCNTs dispersed in 5CB nematic liquid crystal" in the journal of Next materials, Q 2 Journal. with Volume 1, Issue 4, December 2023, 100054, Impact factor 3.748. ISSN: 2949-8228

<https://doi.org/10.1016/j.nxmate.2023.100054>

April 14th 2024: Dr. B.L Suresha, Head of the Dept. Physics, published a research paper entitled " Green, cost-effective synthesis of NiMnO₃ nanoparticles and their use in supercapacitor and photodegradation applications", Nano-Structures & Nano-Objects Volume 38, May 2024, 101151 with impact factor **5.914**, Q1 Journal, ISSN 2352-507X (print), 2352-5088 (web)

DOI: <https://doi.org/10.1016/j.nanoso.2024.101151>

April 13rd 2024– Dr. B.L Suresha, Associate Professor and Head, Department of Physics has been Nominated as VTU Nominee to the Board of Studies in Department of Physics of Siddaganga Institute of Technology, Tumkur from 01-04-2024 to 31.03.2026.



2).Dr. Murugendrappa M.V

Associate Professor, Dept. of Physics

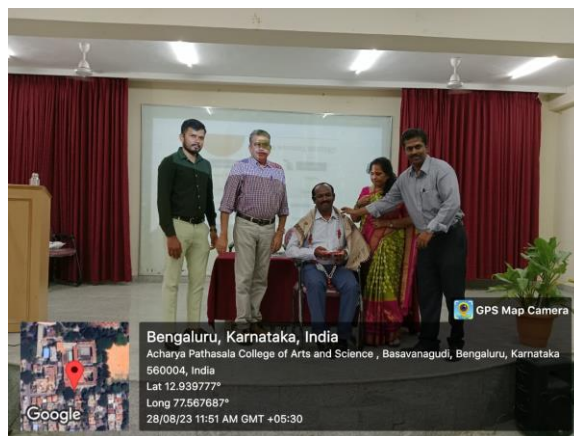
July 24th, 2023: As per the official Memorandum of the principal dated 22.07.2023 (NO.BMS/PPL/EST/2023), Dr. Murugendrappa M V, Associate Professor, Department of Physics, reported as Deputy Controller of Examinations in the COE office, P.G Block, 4th floor, BMSCE.



July 28th, 2023 - Dr. Murugendrappa M V, Associate Professor and Head, Department of Physics invited as an external subject expert to conduct the doctoral committee meeting of research scholar Shilpa T N (1RN17PGA01) at Department of Physics, RNS Institute of technology, Bengaluru.

August 28th, 2023 – Dr. Murugendrappa M V, Associate Professor, Department of Physics delivered an invited talk on the topic “Selection of Research Problem and Benefits of Publications”

in One day Seminar in association with IQAC organized by, PG Department of Economics, APS College of Arts and Science, N R Colony, Bengaluru.



November 16th 2023 - Dr. Murugendrappa M V, Associate Professor, Department of Physics, published a research paper entitled “Exploration of structural and morphological characteristics of Ag²⁺ substituted Zn-CuFe₂O₄ nanoparticles by green synthesis” in Nano-Structures & Nano-Objects [Volume 36](#), October 2023, 101058, Online ISSN: 2352-5088, Print ISSN: 2352-507X Impact factor - **0.807**, Q1 journal.

<https://doi.org/10.1016/j.nanoso.2023.101058>

January 6th 2024: Dr. Murugendrappa M.V, Associate Professor, Department of Physics published a research paper entitled “Utilization of Aloevera-infused Sm³⁺ doped La₂MoO₆ nanophosphors: Their role in anti-counterfeiting, white LEDs and transport properties” in Ceramics International, Volume 50, Issue 4, January 06th, 2024 and Q1 Journal. Impact factor: 5.532, Print ISSN: 0272-8842, Online ISSN: 1873-3956

DOI: <https://doi.org/10.1016/j.ceramint.2023.12.290>

January 15th 2024: Dr. Murugendrappa M.V, Associate Professor, Department of Physics published a research paper entitled “Green color emitting pure cubic zirconia nano phosphor synthesized by solution combustion technique” in Journal of Nanoparticle Research, Volume 26, article number 18, (2024) Q2 Journal. Impact factor: 2.533, Print ISSN: 1388-0764, Electronic ISSN:1572-896X

DOI: <https://doi.org/10.1007/s11051-023-05923-y>

January 30th 2024: Dr. Murugendrappa M V, Associate Professor, Department of Physics invited as an external subject expert to conduct the doctoral committee meeting of research scholar Shilpa T N (1RN17PGA01) RNS Institute of Technology, Bengaluru.

February 4th, 2024 - Dr. Murugendrappa M.V, Associate Professor, Department of Physics published a research paper entitled “An impact of RGO on the ZnO nanoparticles: structural, morphological, electrical, and gas sensing properties” in **Sensing Technology**, Volume 2, 2024 - Issue 1, **Article:** 2310479, **Impact factor:** 2.07, **ISSN Print:** 2161-122X, **ISSN Online:** 21611238 <https://doi.org/10.1080/28361466.2024.2310479>

February 23rd, 2024 – Dr. Murugendrappa M V, Associate Professor, Department of Physics delivered an invited talk on the topic “Synthesis and Characterization of Conducting Polymer Composites for Sensors Applications” in Two-day workshop on “Introduction to Composite Materials and their Applications” from February 23-24, 2024 organized by, Centre of Excellence in Material Science and Devices at RNS Institute of Technology, Bengaluru.

February 23rd, 2024 – Dr. Murugendrappa M V, Associate Professor, published a research paper entitled “Synthesis and characterization of PANI-CZF nanocomposites for enhanced electromagnetic interference shielding” in Journal of Materials Science: Materials in Electronics, Q3 Journal, Volume 35, article number 391, 2024 with Impact factor 2.8 Electronic ISSN 1573-482X and Print ISSN 0957-4522 <https://doi.org/10.1007/s10854-024-12086-6>

May 24th, 2024 - Dr. Murugendrappa M V, Associate Professor, Department of Physics, B.M.S. College of Engineering, Bengaluru, was invited as the Indian External Examiner to conduct the final Ph.D. viva-voce examination of research scholar Ms. Benazir Banu K M (SH202D005), who worked under the supervision of Dr. N S Shubhashree, Professor, Department of Physics, Dr. M.G.R. Educational and Research Institute (Deemed to be University), Chennai.

May 27th, 2024 – Patent has been granted for the invention titled, ‘A Portable Device for Detecting Malaria Infection’.

Patentee: B.M.S College of Engineering Bengaluru.

Inventors: Dr. Jisha P, Assistant Professor, Dr. Suma M S, Professor, Department of Medical Electronics, Dr. Murugendrappa M V, Associate Professor, Department of Physics and Dr. Kalyan Raj, Professor, Department of Chemistry, BMS College of Engineering, Bengaluru.



3) Dr. Latakumari

Asso. Professor, Dept. of Physics

July 01st 2023 - Dr. Latha Kumari, Associate Professor, Dept. of Physics, published a research paper entitled "Chloramine-T-induced oxidation of Rizatriptan Benzoate: An integral chemical and spectroscopic study of products, mechanisms and kinetics" in Open Chemistry, Q2 Journal, Volume 21, Issue 1, with impact factor 1.216 ISSN 2391-5420 (Online) <https://doi.org/10.1515/chem-2022-0341>

September 02nd 2023: Dr. Latha Kumari, Associate Professor, Department of Physics presented Project proposal (External grants) at the IIT Delhi.



January 8th 2024 :Dr. Latha Kumari, Associate Professor, Dept. of Physics, published a research paper entitled “A Comparative Study on the Structural and Optical Properties of NiMoO₄ Nanomaterials Synthesized by Hydrothermal and Solvothermal Route" [Crystal Research & Technology](#) Q1 Journal Volume 59 Issue 1, Page no 2300178, with impact factor 1.599 ISSN 02321300, 15214079 (Online)

DOI: <https://doi.org/10.1002/crat.202300178>

March 4th 2024: Dr. Latha Kumari, Associate Professor, Dept. of Physics, published a research paper entitled "Influence of synthesis method and processing on the thermoelectric properties of CoSb³ skutterudites”, *J Mater Sci: Mater Electron* (2024) with impact factor **2.8**, **SJR: Q2**, ISSN 1573-482X (print), ISSN 0957-4522, Volume-35:514

DOI: <https://doi.org/10.1007/s10854-024-12277-1>

4) Dr. K.E Ganesh

Asso. Professor, Dept. of Physics

February 28th, 2024 – Dr. K.E Ganesh, Associate Professor, published a research paper entitled “Assessment of primordial radionuclides and radon exhalation in granitic terrain of Bengaluru, India” in *Nuclear Inst. and Methods in Physics Research, B*, Q2 Journal, Impact factor 1.4 Electronic ISSN 0168583X <https://doi.org/10.1016/j.nimb.2024.165300>

5) Dr. Kaliprasad

Asst. Professor, Dept. of Physics

July 24th 2023 - Dr. Kaliprasad C.S, Assistant Professor, Dept. of Physics, published a research paper entitled "Efficient removal of metal ions from aqueous solutions using MoS₂ functionalized chitosan Schiff base incorporated with Fe₃O₄ nanoparticle" in the International Journal of Biological Macromolecules 248 (2023) 125976, Q1 Journal with impact factor 8.025, ISSN 0141-8130 <https://doi.org/10.1016/j.ijbiomac.2023.125976>

6) Dr. Karthik Kumara K

Asst. Professor, Dept. of Physics

July 29th 2023 - Dr. Karthik Kumara, Assistant Professor, Department of Physics, published a research paper entitled "Jahn-Teller distortion in SP-like [Cu(bipy)(triamine)] 2BF₄ complexes with novel N-H ... F/C-H ... F synthon: XRD/HSA- interactions, Physicochemical, electrochemical, DFT, docking and COX/LOX inhibition" in Journal of Molecular Liquids, Impact factor - 6, Q1 journal, Volume 387, 1 October 2023, Pg Nos 122689

<https://doi.org/10.1016/j.molliq.2023.122689>

September 06th 2023: Dr. Karthik Kumara, Assistant Professor, Department of Physics published a research paper entitled

"Regioselective benzylation of imidazo[1,5-a]pyridines and indoles via iodine catalyzed reaction using alcohols - An approach to crystal structure prediction, DFT studies and Hirshfeld surface

analysis” in Journal of Molecular Structures, Volume 1295, Part 1, Scopus and Q2 Journal. Online ISSN: 1872-8014, Print ISSN: 0022-2860; DOI: <https://doi.org/10.1016/j.molstruc.2023.136591>

December 15th 2023: Dr. Karthik Kumara, Assistant Professor, Department of Physics published a research paper entitled

“Microwave-Assisted Synthesis and Characterization of Some Aldehyde Derivatives of Imidazo[2,1-b][1,3,4]thiadiazole: Crystal Structure Insights, In-Silico and Biological Studies” in Journal of ChemistrySelect, Volume8, Issue47,December 15, 2023,e202302877 and Q2 Journal. Online ISSN:2365-6549

Print ISSN:2365-6549.

DOI: <https://doi.org/10.1002/slct.202302877>

December 20th 2023: Dr. Karthik Kumara, Assistant Professor, Department of Physics published a research paper entitled

“Hydrothermal synthesis of Bi₂S₃ nanoparticle as a prospective electrode for supercapacitor” in Journal of Next Materials

Volume 2, January 2024, 100081, Q2 Journal. Online ISSN: 2949-8228.

DOI: <https://doi.org/10.1016/j.nxmte.2023.100081>

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7) Dr. Manjunatha S.O

Asst. Professor, Dept. of Physics

July 25th 2023 - Dr. Manjunatha S.O, Assistant Professor, Department of Physics, published a research paper entitled “Role of holmium on the humidity sensing properties of the CoCr₂O₄ ceramics for possible applications in humidity sensors” in J Mater Sci: Mater Electron (2023) 34:1583, Impact factor - **2.8 (2022)**, Electronic ISSN 1573-482X, Print ISSN 0957-4522 <https://doi.org/10.1007/s10854-023-10995-6>

January 19th 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled “Enhanced sensing response of Cd²⁺ substitution cobalt chromate ceramics for humidity sensors”, J Mater Sci: Mater Electron (2024) with impact factor **2.8, SJR: Q2**, ISSN 1573-482X (print) 0957-4522 (Electronic)

DOI: [10.1007/s10854-023-11772-1](https://doi.org/10.1007/s10854-023-11772-1)

16th February 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled “Study of structural, X-ray photoelectron spectroscopy, Raman and temperature dependent magnetic studies of NiFe₂O₄/CoCr₂O₄ nanocomposites”, Journal of Solid-State Chemistry (2024) with impact factor 3.3, **SJR: Q1**, ISSN 0022-4596 (print) 1095-726X (Electronic)

DOI: [10.1016/j.jssc.2024.124619](https://doi.org/10.1016/j.jssc.2024.124619)

29th February 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled "Structure, microstructure, and enhanced sensing behavior of nickle ferrite–cobalt chromate for humidity sensor applications", J Mater Sci: Mater Electron (2024) with impact factor **2.8**, **SJR: Q2**, ISSN 1573-482X (print) 0957-4522 (Electronic)

DOI: [10.1007/s10854-024-12198-z](https://doi.org/10.1007/s10854-024-12198-z)

March 1st 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled “Study of structural, X-ray photoelectron spectroscopy, Raman and temperature dependent magnetic studies of NiFe₂O₄/CoCr₂O₄ nanocomposites”, Journal of Solid-State Chemistry (2024) with impact factor 3.3, **SJR: Q1**, ISSN 0022-4596 (print) 1095-726X (Electronic)

DOI: [10.1016/j.jssc.2024.124619](https://doi.org/10.1016/j.jssc.2024.124619)

March 1st 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled "Structure, microstructure, and enhanced sensing behavior of nickle ferrite–cobalt chromate for humidity sensor applications", J Mater Sci: Mater Electron (2024) with impact factor **2.8**, **SJR: Q2**, ISSN 1573-482X (print) 0957-4522 (Electronic)

DOI: [10.1007/s10854-024-12198-z](https://doi.org/10.1007/s10854-024-12198-z)

March 19th 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled “Synthesis of lithium doped magnesium ferrites and their vibrational and magnetic properties: Correlation of experimental and density functional theory", Ceramics International (2024) (In Press) with impact factor **5.2**, **SJR: Q1**, ISSN 0272-8842 (print) 1873-3956 (Electronic)

April 3rd 2024: Dr. Manjunatha S.O, Assistant Professor, Dept. of Physics, published a research paper entitled "Synthesis, characterization and application of rare earth (Lu³⁺) doped zinc ferrites in carbon monoxide gas sensing and supercapacitors", Ceramics International (2024) (In Press) with impact factor **5.2**, **SJR: Q1**, ISSN 0272-8842 (print) 1873-3956 (Electronic)

DOI: <https://doi.org/10.1016/j.ceramint.2024.04.045>

8) Dr. Sharanappa Chapi

Asst. Professor, Dept. of Physics

September 03rd 2023: Dr. Sharanappa Chapi, Assistant Professor, Department of Physics published a research paper entitled

“Preparation, characterization and swelling studies of bio-waste-derived absorbent hydrogels” in Polymers from Renewable Resources, Scopus and Q2 Journal. ISSN: 2041-2479; Online ISSN: 2045-1377; DOI: <https://doi.org/10.1177/20412479231200323>

February 13th, 2024 – Dr. Sharanappa Chapi, Assistant Professor, published a research paper entitled “Organic conjugated polymers and their nanostructured composites: Synthesis methodologies and electrochemical applications” in Nano-Structures & Nano-Objects, Impact factor -5.914 Volume 37, February 2024, 101102, Q2 Journal, Online ISSN: 2352-5088, Print ISSN: 2352-507X

<https://doi.org/10.1016/j.nanoso.2024.101102>.

May 24, 2024 – Dr. Sharanappa Chapi, Assistant Professor, Department of Physics, published a research paper entitled “Synthesis, anti-inflammatory, antibacterial, and antioxidant evaluation of novel pyrazole-linked hydrazone derivatives” in Journal of Molecular Structure, Impact Factor-3.8, Volume-1312, May 24, 2024 (138634), Q2 Journal, Online ISSN: 1872-8014 Print ISSN: 0022-2860.

<https://doi.org/10.1016/j.molstruc.2024.138634>

June 18th, 2024 – Dr. Sharanappa Chapi, Assistant Professor, Department of Physics published a research paper entitled “Prediction of electrocoagulation treatment of tannery wastewater using multiple linear regression-based ANN: Comparative study on plane and punched electrodes” in Desalination and Water Treatment, Volume 319, July 2024, Page No. 100530, Q3 Journal, Online ISSN: Online ISSN: 1944-3986

DOI: <https://doi.org/10.1016/j.dwt.2024.100530>

9) Dr. Maruthi. R

Asst. Professor, Dept. of Physics

December 26th 2023: Dr. Maruthi R, Assistant Professor, Department of Physics published a research paper entitled “Magnetic structure and field-induced transitions in the triangular spin-1 antiferromagnet NiNb_2O_6 : Observation of a triple point” in PHYSICAL REVIEW B, Volume 108, Page no 224430, December 26, 2023, and Q1 Journal.

Online ISSN:2469-9969

Print ISSN:2469-9950

DOI: [10.1103/PhysRevB.108.224430](https://doi.org/10.1103/PhysRevB.108.224430)

10) Dr. Rafiq Mulla

Asst. Professor, Dept. of Physics

January 19th 2024: Dr. Rafiq Mulla, Assistant Professor, Department of Physics published a research paper entitled “High performance thermoelectrics from low-cost and abundant CuS/CuI composites” in Journal of Materials Chemistry A (RSC), Volume n/a, Article/page number: d3ta06474c, December 19,

2023, and Q1 Journal. **Impact factor: 11.9** Online ISSN:2050-7496

DOI: <https://doi.org/10.1039/D3TA06474C>

March 8th 2024: Dr. Rafiq Mulla, Assistant Professor, Department of Physics published a Book Chapter entitled “Chalcogenide semiconductor nanocrystals-optoelectronic applications” in the Book: *Handbook of Emerging Materials for Sustainable Energy* (Publisher: Elsevier), Volume 1, Page number: 779-823, March 8 2024. Impact factor: NA Online eBook ISBN: 9780323996792 Paperback ISBN: 9780323961257 DOI: <https://www.sciencedirect.com/science/article/abs/pii/B978032396125700023X>

May 20, 2024 – Dr. Sharanappa Chapi, Assistant Professor, Department of Physics, published a research paper entitled “Enhanced structural, electrical, and electrochemical performance of polyethylene oxides (PEO)-based polymer electrolytes for solid state K⁺ ion batteries” in Journal of Applied Polymer Science, Impact factor-3, Volume 141, Issue 20, May 20, 2024, e55390, Q2 Journal, Online ISSN:1097-4628, Print ISSN:0021-8995.

<https://doi.org/10.1002/app.55390>

May 21st 2024: Dr. Rafiq Mulla, Assistant Professor, Department of Physics published a research paper entitled

“A simple DIY electrical resistivity apparatus for students” in Physics Education (IOP), Volume 59, Page number: 043004, May 21st, 2024, and Scopus Indexed, Quartile: Q2 as per SJR Scopus, Impact factor/Cite Score: 1.3 Online ISSN:0031-9120

DOI: <https://iopscience.iop.org/article/10.1088/1361-6552/ad4943043004>,

61-6552/ad4943043004,

Scopus Indexed, Impact factor/Cite Score: 1.3

Online ISSN:2050-7496

DOI: <https://iopscience.iop.org/article/10.1088/1361-6552/ad4943>

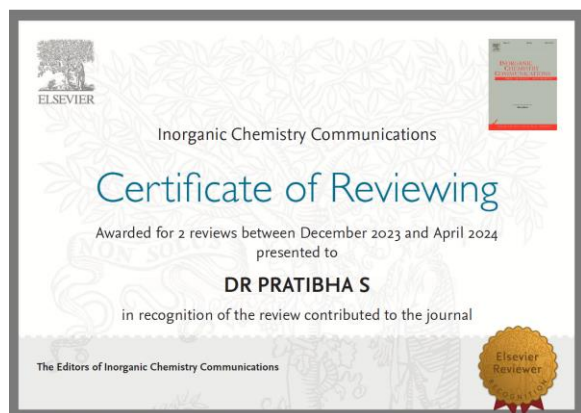
11)Dr. Chandan

Asst. Professor, Dept. of Physics

12)Dr. Pratibha S

Asst. Professor, Dept. of Physics

April 23rd, 2024 - Dr. Pratibha S, Assistant Professor, Dept. of Physics was Awarded with Certificate of Reviewing for 2 reviews between December 2023 to April 2024 by Inorganic Chemistry communications in recognition of review contributed to the Journal.



May 14th, 2024 – Dr. Pratibha.S, Assistant Professor, published a book chapter entitled "Biobased Nanomaterials in Sensing Technology" in Biobased Nanomaterials book with Springer nature Publication, Print ISBN 978-981-97-0541-2, Online ISBN 978-981-97-0542-9

https://doi.org/10.1007/978-981-97-0542-9_15