



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

AY 2021-22 (1st of July 2021- 31<sup>st</sup> of June 2022)

**1) Dr. Murugendrappa M.V**

**HOD & Associate Professor, Dept. of Physics**

**August 1<sup>st</sup>, 2021:** Dr. Murugendrappa M V, Associate Professor and Head, Department of Physics published a research paper entitled “Investigation of temperature-dependent conduction mechanism in  $MnCO_2O_4$  / polypyrrole nanocomposites by three-dimensional variable range hopping (3D-VRH) and band-conduction model” in **Journal of Applied Physics**. Q2 journal with impact factor 2.546, Vol. No 130, Page No. 015112-1 to 015112-10 (2021), <https://doi.org/10.1063/5.0039671>

**November 20<sup>th</sup> 2021:** Dr. Murugendrappa M V, Associate Professor and Head, Department of Physics attended the Board of Studies (BOS) online meeting conducted by Department of Physics, Ballari Institute of Technology & Management, Ballari.



**November 25<sup>th</sup> 2021:** Dr. Murugendrappa M V, Associate Professor and Head, Department of Physics delivered a talk as a guest speaker for the online FDP on "Advanced Materials and their Technological Relevance - 2021" organised by Department of Physics, Don Bosco Institute of Technology, Bengaluru.



**May 16th, 2022:** Dr. Murugendrappa M V, Associate Professor and Head, Department of Physics published a research paper entitled “Enhanced gas-sensing performance at room temperature and electrical properties of polyaniline Ni<sub>0.6</sub>Zn<sub>0.4</sub>Fe<sub>2</sub>O<sub>4</sub> nanocomposites” in **Journal of Process Mechanical Engineering Part E**. SAGE Publishers, Q2 journal with impact factor 1.620,

[DOI: 10.1177/09544089221100778](https://doi.org/10.1177/09544089221100778)

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## **2) Dr. T.S Pranesha**

### **Professor, Dept. of Physics**

**November 27<sup>th</sup> 2021:** Dr. T.S Pranesha, Professor, Department of Physics published a research paper entitled “Variability of ozone and oxides of nitrogen in the tropical city, Bengaluru, India”, in Springer published international journal “Environmental Monitoring and Assessment”, volume 193, Article number: 844 (2021) with ISSN 01676369, 15732959  
<https://doi.org/10.1007/s10661-021-09635-5>

**April 01st, 2022:** Dr. T.S Pranesha, Professor, Department of Physics published a research paper entitled “Analysis of Ozone Photochemistry over Southern Tropical Megacity, Bengaluru, India”, in Wiley published international journal “Photochemistry and Photobiology”, with Online ISSN: 0031-8655

<https://doi.org/10.1111/php.13626>

**April 30th, 2022:** The Department organised felicitation to Dr. T.S Pranesha, Professor, Department of Physics, on Saturday, at 12.30 P.M. in Auditorium 2, New Academic block as he attained superannuation on 30-04-2022.



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**3) Prof. T.Renuka**

**Associate Professor, Dept. of Physics**

**November 08<sup>th</sup>-12<sup>th</sup> 2021** - Prof. T. Renuka, Associate Professor, successfully completed AICTE sponsored 5-day FDP-SI UHV Online Workshop on AICTE Incorporating Universal Human Values in Education.

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**4) Prof. K.Ravishankar**

**Associate Professor, Dept. of Physics**

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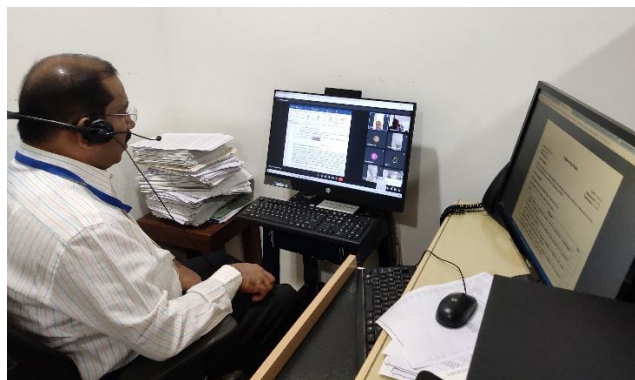
**5) Dr. B.L Suresha**

**Asst. Professor, Dept. of Physics**

**July 06<sup>th</sup>, 2021:** Dr. B L Suresha, Assistant Professor , Dept. of Physics participated and presented a paper “Structural, Optical, Characterization and photo catalytic behavior of Cr<sub>2</sub>O<sub>3</sub> catalyst via thermal decomposition method” in the four day “2nd International Symposium on Modeling of

Crystal Growth Processes and Devices MCGPD – 2021 Organized by SSN Research Center, SSN College of Engineering, SSN Institutions Kalavakkam, Chennai-603110, Tamilnadu, India in association with Indian Association for Crystal Growth & Indian Science and Technology Association International Organization for Crystal Growth.

**July 09<sup>th</sup>, 2021:** Dr. B L Suresha, Assistant Professor appointed as external BOS member Malnad college of Engineering, Hassan. He attended online BOS Meeting of Physics.



**November 11<sup>th</sup> 2021:** Dr. B.L Suresha, Assistant Professor, Department of Physics was appointed as a member for BOE for UG Exams of 2021-22- in the Bangalore University to scrutinize the Engineering Physics.

**April 01st, 2022:** The Physics Department Research scholar Mr Sumantha H.S (USN: 1BM17PGA04) doing his Ph.D. under the guidance of Dr. B L Suresha, Assistant Professor of Physics delivered an online Pre-Ph.D. Open Seminar-2 on the research work entitled “**Synthesis & Characterization of Nano porous Anode for Li<sup>+</sup> Batteries**” through **Cisco Webex** at 2.00 – 3.00 PM.

**Link:**

<https://bsncentre.webex.com/bsncentre/j.php?MTID=m4c3acec381dc654b3565585bb4ba4242>

**April 28th, 2022:** Dr. B.L Suresha, Assistant Professor, Department of Physics attended the BOE Meeting for UG Exams in Bangalore University Jnana Bharati campus.

**May 08th, 2022:** Dr. B L Suresha, Assistant Professor, Dept. of Physics published a research paper entitled “Electrochemical determination of paracetamol by SWCNT-modified carbon paste electrode: a cyclic voltammetric study” in **Carbon Letters, Springer Journal**.

DOI: 10.1007/s42823-022-00354-6

**May 27th, 2022:** The Department Astronomy club known as Alternate universe BMSCE conducted a Star gazing session from 8.30 PM to 9.30 PM on the Terrace of B S Narayan Platinum Jubilee Academic block. The event was organized and coordinated by Dr. B.L Suresha, Faculty, Dept. of Physics.



**June 16th, 2022:** Dr. B L Suresha, Faculty, Dept. of Physics published a research paper entitled “Synthesis, characterization, and anti-cancer potential study of Ag-MgO nanocomposite” in *Inorganic Chemistry Communications* (Impact factor-3.428, Elsevier, Q2 Journal).

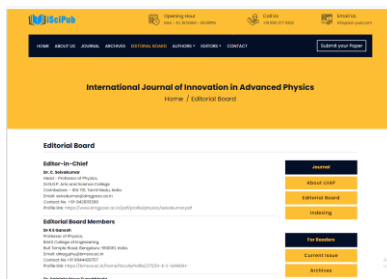
<https://doi.org/10.1016/j.inoche.2022.109671>

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**6) Dr. K.E Ganesh**

**Asst. Professor, Dept. of Physics**

**September 25<sup>th</sup>, 2021:** Dr. K.E Ganesh, Assistant Professor, Dept. of Physics is appointed as an Associate Editor for IJIAP journal for three years. [https://www.isci-pub.com/journals/ijiap/editorial\\_board.html](https://www.isci-pub.com/journals/ijiap/editorial_board.html)



**October 22<sup>nd</sup> 2021** - Dr. K.E Ganesh, Asst. Professor published a research paper entitled “An Insight into the Air Quality features over South Indian City of Bengaluru during COVID-19 Lockdown Period” in International Journal of Innovation in Advanced Physics IJIAP Volume 01, Issue 02, October 2021, pp.58-70 [https://www.isci-pub.com/journals/ijiap/iap\\_pdf/iap\\_2021\\_volume\\_01/iap\\_2021\\_issue\\_02/IJIAP\\_Vol01\\_Iss\\_02\\_003.pdf](https://www.isci-pub.com/journals/ijiap/iap_pdf/iap_2021_volume_01/iap_2021_issue_02/IJIAP_Vol01_Iss_02_003.pdf)

**June 20<sup>th</sup>, 2022:** Dr. K E Ganesh, Assistant Professor, Dept. of Physics, published a research paper entitled “Temporal variability of PM<sub>2.5</sub> and its possible sources at the tropical megacity, Bengaluru, India” in Environmental Monitoring and Assessment, Page 194: Volume No 532 (Impact factor-2.513, Springer, Q3 Journal). <https://doi.org/10.1007/s10661-022-10235-0>

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**7) Dr. Latakumari**

**Asst. Professor, Dept. of Physics**

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## **8) Dr. Kaliprasad**

**Asst. Professor, Dept. of Physics**

**July 10<sup>th</sup>, 2021:** Dr. Kaliprasad C.S, Assistant Professor, Dept. of Physics published a research paper entitled “An analysis on geographical ascendancy and the effects of physico-chemical parameters on radionuclides concentration in the central and northern coastal regions of Kerala, India” in **Springer: Journal of Radioanalytical and Nuclear Chemistry** (2021), July 2021, ISSN NO 02365731, 15882780 Q2 Journal with Impact Factor: 1.37 <https://doi.org/10.1007/s10967-021-07880-z>

**August 15<sup>th</sup>, 2021:** Dr. Kaliprasad C.S, Assistant Professor, Dept. of Physics published a research paper entitled “Studies on the dependence of natural radioactivity on clay minerals of soils in Davanagere district of Karnataka, India” in **Journal of Radioanalytical and Nuclear Chemistry**, Q3 Journal with impact factor: 1.37, August 2021, ISSN NO 02365731, 15882780, <https://doi.org/10.1007/s10967-021-07920-8>

**October 22<sup>nd</sup> 2021** - Dr. Kaliprasad C.S, Asst. Professor, Department of Physics published a research paper entitled “Radioactivity of Different Types of Fertilizers and Its Effect on Agricultural Soils of Mangalore District, Karnataka, India” in **Radiochemistry(Springer) volume 63**, pages667–671 (2021) IF: 0.66 (Web of science)) <https://link.springer.com/article/10.1134/S1066362221050167>  
<https://doi.org/10.1134/S1066362221050167>

**December 01<sup>st</sup> 2021** - Dr. Kaliprasad C.S, Assistant Professor, Dept. of Physics published a research paper entitled “Evaluation of radiological hazards due to natural radionuclide in rocks and the dependence of radioactivity on the mineralogy of rocks in Udupi district on the south west coast of India” in **Springer: Journal of Radioanalytical and Nuclear Chemistry** (2021), ISSN NO 02365731, 15882780 Q3 Journal with Impact Factor: 1.37 <https://doi.org/10.1007/s10967-021-08114-y>

**January 03<sup>rd</sup> 2022** - Dr. Kaliprasad C.S, Asst. Professor, Department of Physics published a research paper entitled “Estimation of indoor <sup>222</sup>Rn and <sup>220</sup>Rn concentration and annual inhalation dose in the indoor environment around Kolar district of Karnataka state, India” in **Radiation Protection and Environment Volume 44 / Issue 3 & 4 / July-September & October-December 2021**, pages 146-51

**January 05<sup>th</sup> 2022** - Dr. Kaliprasad C.S, Asst. Professor, Department of Physics published a research paper entitled “Assessment of Effective Dose and Radiological Risk from Natural Radioactivity in Rock Samples of Davanagere District, Karnataka, India” in International Journal of Environmental Analytical Chemistry. (Impact factor: 2.86, Web of sciences, Q2) <https://doi.org/10.1080/03067319.2021.2020764>

**January 17<sup>th</sup> 2022** - Dr. Kaliprasad C.S, Asst. Professor, Department of Physics published a research paper entitled “Radiation level, radionuclide distribution and mineralogy of soils in Belagavi region of Karnataka, India” in International Journal of Environmental Analytical Chemistry. (Impact factor: 2.86, Web of sciences, Q2) <https://doi.org/10.1080/03067319.2022.2027932>

**February 20<sup>th</sup>, 2022:** - Dr. Kaliprasad C.S, Asst. Professor, Department of Physics published a research paper entitled “Distribution of radionuclides in vertical profile and physico – chemical parameters of soil in Somwarpet taluk, Coorg district, Karnataka state, India.” in International Journal of Environmental Analytical Chemistry 20th Feb, 2022 <https://doi.org/10.1080/03067319.2022.2032686>, Impact Factor: 2.82 (Q2)

**March 30<sup>th</sup>, 2022:** Dr. Kaliprasad C.S, Assistant Professor, Department of Physics published a research paper entitled “Seasonal variation of indoor radon, thoron and their progeny in Belagavi district of Karnataka, India” in Environmental Monitoring and Assessment, **volume 194**, Article number: 310 (2022) <https://doi.org/10.1007/s10661-022-09931-8> (Impact factor 2.51. Q2)

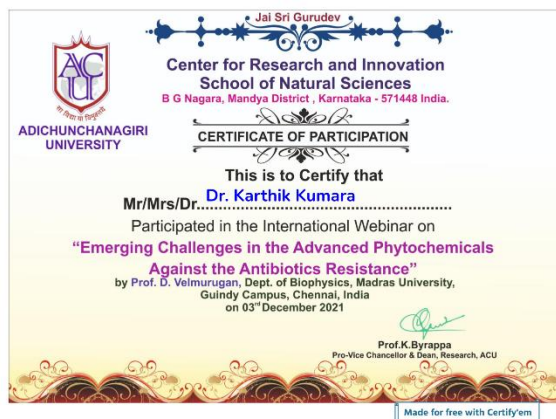
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### **9) Dr. Karthik Kumara K**

**Asst. Professor, Dept. of Physics**

**December 03<sup>rd</sup> 2021** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the international webinar on “Emerging Challenges in the advanced Phytochemicals Against the Antibiotic Resistance” organized by Centre for Research and Innovation School of Natural Sciences, Adi Chunchanagiri University, Karnataka.





**December 09<sup>th</sup> 2021** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the international Chemistry world webinar on “Efficient Modelling of Polymers for Industrial Applications Using Molecular Dynamics” organized by Chemistry World Webinars.



**December 17<sup>th</sup> 2021** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the international webinar on “Research and Clinical Applications of Flowcytometry” organized by Centre for Research and Innovation School of Natural Sciences, Adi Chunchanagiri University, Karnataka.



**December 20<sup>th</sup> – 24<sup>th</sup> 2021** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the AICTE Training and Learning (ATAL) Academy Online Elementary FDP on “Research Challenges in Atmospheric Sciences with a Computing Edge” organized by M. S. Ramaiah Institute of Technology, Bengaluru in association with AICTE.



**December 21<sup>st</sup> 2021** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the national webinar on “The universal concept of emergence ranging from bird flocks to quantum materials” organized by the Department of Studies in Physics, Karnataka State Open University, Mukthagangothri, Mysuru.



**December 24<sup>th</sup> 2021** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the international webinar on “Two Dimensional Nano Structures for Energy Conversion and Storage Applications” organized by Centre for Research and Innovation School of Natural Sciences, Adi Chunchanagiri University, Karnataka.



**January 07<sup>th</sup> 2022** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the international Indo-Japan Workshop entitled “Silicon Crystal Growth for Photovoltaic Applications” jointly organized by SSN Research Centre, SSN Institutions, Chennai and Nagoya University, Japan.



**SSN** **SSN COLLEGE OF ENGINEERING**  
 RAJIV GANDHI SALAI, KALAVAKKAM, CHENNAI – 603 110

& NAGOYA UNIVERSITY, JAPAN-4648601

**Certificate of Participation**

*This is to certify that*

**Dr. Karthik Kumara of Department of Physics, BMS College of Engineering,**  
**Bengaluru**

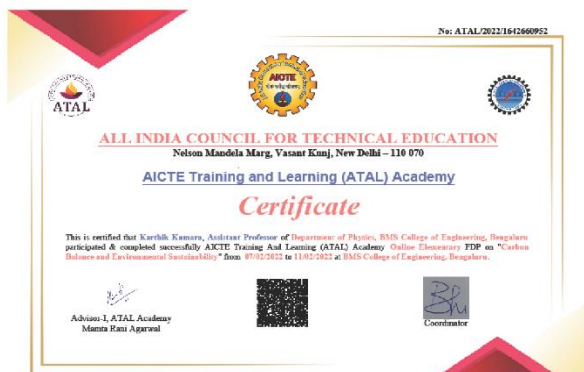
*has attended the Indo-Japan Workshop on “Silicon Crystal Growth for Photovoltaic Applications” on 7<sup>th</sup> January 2022, jointly organized by SSN Research Centre, SSN Institution, Chennai and Nagoya University, Japan.*

Convenor  
 Dr.M.Srinivasan

Convenor  
 Dr.Noritaka USAMI

Dean Research  
 Dr.P.Ramasamy

**February 07<sup>th</sup> -11<sup>th</sup> 2022** – Dr. Karthik Kumara, Assistant Professor, Department of Physics participated in the five days international ATAL-FDP on “Carbon Balance and Environmental Sustainability” jointly organized by AICTE-ATAL and BMS College of Engineering, Bengaluru.



**February 06<sup>th</sup>, 2022** – Dr. Karthik Kumara, Assistant Professor, Department of Physics published a research article titled “Syntheses, structural characterization and evaluation of the anti-tubercular activity of copper (II) complexes containing 3-methoxysalicylaldehyde-4-methylthiosemicarbazone” in Journal of Molecular Structure, Volume 1257, 132589, 2022. (Impact factor -3.196, Elsevier, Q2 Journal)

<https://doi.org/10.1016/j.molstruc.2022.132589>

**May 31<sup>st</sup>, 2022:** Dr. Karthik Kumara, Assistant Professor, Department of Physics published a research paper titled “Structural-property relationship in halogen-bonded schiff base derivative: Crystal structure, computational and SARS-CoV-2 docking studies” in Journal of Molecular Structure, Volume 1265, 133409, 2022. (Impact factor -3.196, Elsevier, Q2 Journal)

<https://doi.org/10.1016/j.molstruc.2022.133409>

**June 09<sup>th</sup>, 2022:** Second year M.Sc. Physics students from Government first grade college and PG center, Chintamani, have visited the research labs (center for nano display, XRD & SEM characterization facility, materials research lab, polymer composite lab, advanced materials synthesis lab, and atmospheric research lab) at B.M.S. College of Engineering, Bengaluru as a part of their M.Sc. project work. Dr. Karthik Kumara, Assistant Professor, Dept. of Physics, BMSCE, Bengaluru has coordinated the visit.

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**10) Dr. Manjunatha S.O**

**Asst. Professor, Dept. of Physics**

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**11) Dr. Vinutha.N**

**Asst. Professor, Dept. of Physics**