



BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT (Autonomous Under VTU)

Physics Faculty Achievements

2025

1. Dr. C. Kavitha attended Bangalore Tech Summit-2025 on 18-20th Nov, 2025 at BIEC, Bangalore



2. Dr. C. Kavitha attended CPMU online alumni meet on 20th Sept 2025 at JNCASR, Bangalore.





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3. Dr. C. Kavitha acted as one of the organizer and chaired the session for "VTU-FDP program on Applied Physics (1st year syllabus 2025 scheme) was held on 30th August 2025 at BMSIT&M



4. Dr. C. Kavitha and her research group published reputed research articles from ACS-Langmuir and Springer Nature-Applied Physics A in the year 2025. the work is on multifunctional optical sensor and supercapacitor.

LANGMUIR

Synergistic SERS Enhancement of Highly Sensitive and Reusable rGO-Ag-ZrO₂ Thin Film Nanocomposite to Detect Synthetic Textile Dyes

Avat Pama Mahale, C. Kavitha* | Ji-Rae Park and Nitesh S. Jhu

Graphical Abstract

The graphical abstract illustrates the synthesis of a rGO-Ag-ZrO₂ thin film nanocomposite. It shows a beaker containing a solution being heated at 90°C. The resulting nanocomposite is then deposited onto a substrate. The diagram also shows the SERS (Surface-Enhanced Raman Scattering) setup, where a laser beam is directed at the nanocomposite film, and the resulting SERS signal is detected by a SERS detector. The SERS signal is shown as a plot on a monitor. The nanocomposite is composed of rGO, Ag, and ZrO₂.

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RGO flakes decorated NiO nanoflowers for supercapacitor applications- synthesis and characterizations

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RGO flakes decorated NiO nanoflowers for supercapacitor applications-synthesis and characterizations

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5. Published two reputed publications from **ACS-Langmuir** and **RSC Advances**
6. VTU-Ph.D student got best oral presentation at international conf at VIT Chennai
7. Started initiating to fabricate supercapacitor mini prototype.
8. Ph.D student completed pre submission colloquim and initiated thesis submission.
9. BOS at BMSIT&M, BOE at AIT, Bangalore

Dr. C. Kavitha's one of the reputed international research publications is recognized by Department of Science and Technology website from April 23 to **still available** at whats new>S&T articles (2025)

Dr. Dhananjaya

- BoS member for the department of Physics, BMS College of Engineering.
- Chaired the Session at the International conference on computing for sustainability and intelligent future (COMPSIF-2025) held on 21-22 March 2025 at BMSIT&M.
- Chaired the Session at the 2nd International Conference on Applied Research in Engineering Sciences-ICARES2025 held on 20&21st February 2025 at Ramaiah Institute of Technology.

Dr. Daruka Prasad B

1. Resource person for the one-day faculty development program on "Applied Physics" organized by the VTU, in association with VVVE, Mysore held on 30th August 2025.
2. BoS Member for JNTUA college of Engineering, Pulivendula. AP
3. BoS Member at Sri Venkateshwara College of Engineering, Bangalore.
4. Department Advisory Committee member for Ph.D. program at Manipal University, Bangalore
5. Reviewer for the M.Phil thesis submitted to New Castle University, Australia.

Dr. Harish Sharma A

- Presented paper in 2025 **International Thin Films conference (TACT 2025)**

All faculties of Physics department were organized the one-day faculty development program on "Applied Physics" organized by the VTU, in association with BMSIT&M held on 30th August 2025.





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One-day faculty development program on “Applied Physics” organized by the VTU, in association with BMSIT&M held on 30th August 2025.

Dr. Basavaraju R.B.

- Received Research excellence award from BMSIT&M, Bangalore
- One of the researcher of Top 20% scientist list survey given by Stanford university

2024

10. Dr. C. Kavitha was invited to attend Bangalore Tech Summit 2024 which was held on 19-21 Nov 2024.



11. Dr. C. Kavitha attended and presented a research paper on super capacitor at prestigious Bangalore India Nano conference which was held on 1-3 August 2024.





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13. Dr. C. Kavitha's interaction with eminent ISRO women Scientist and our own material scientists and outstanding Technological experts in different scientific and technology conferences.





Dr. Dhananjaya N

Received the best Researcher 2023-2024 award from BMSIT&M.

Dr. Harish Sharma A

- Received Project amount 32,72,641 INR from Anusandhan National Research Foundation-Science and Engineering Research Board-Core Research grant (ANRF-SERB-CRG) Ongoing (2024-2027).

Dr. Daruka Prasad B

1. Received the best Researcher 2023-2024 award from BMSIT&M.
2. Convener for the one-day faculty development program on “Applied Physics” organized by the VTU, in association with BMSIT&M held on 30th August 2025.
3. BoS Member for JNTUA college of Engineering, Pulivendula. AP
4. Department Advisory Committee member for Ph.D. program at Manipal University, Bangalore.
5. Reviewer for the project proposals submitted at National Science Centre, Poland.

Dr. Chandra Shakher Pathak

Received seed grant of 2 lakhs from BMSIT&M.

2023

14. Dr.C. Kavitha’s one of the reputed international research publications is recognized by Department of Science and Technology website from April 23 to still available at [whats new>S&T articles.](#)

[New low-cost substrate can enhance sensitivity of analytical tools for detecting toxic pollutants](#)

NORHA On Ag/SiO₂/MoO₃ Raman map of NORHA

Publication Info

[https://doi.org/10.1016/j.ceramint.2023.12.146](#)

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15. Dr. C. Kavitha Presented poster on ultracapacitor research at ECSI-IISc international conference on women in electrochemistry 7-8 April 2023.



Dr. Daruka Prasad B

1. BoS Member for JNTUA college of Engineering, Pulivendula.
2. Department Advisory Committee member for Ph.D. program at Manipal University, Bangalore.
3. Reviewer for the project proposals submitted at National Science Centre, Poland.

Dr. Dhananjaya N

16. Under the Supervision Ph. D degree was awarded to Yashodha R from VTU

2022

Dr. C. Kavitha conducted VTU-Pre-Ph.D viva voce and open seminar 1 for her interdisciplinary chemistry student on 18th March 2022 and Dr. Dhananjaya also conducted exam for his time VTU- final viva voce two of his part-students.



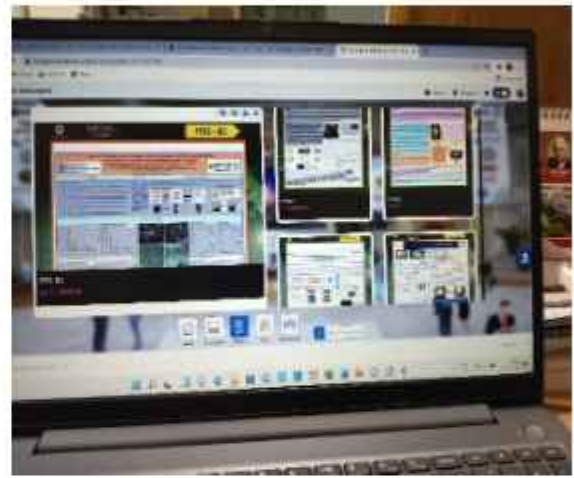


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17.

Dr. C. Kavitha attended virtual Bangalore-India Nano-22 conference on 7-8 March 2022 along with student and presented a virtual interactive Poster.



18. Dr. C. Kavitha Received **outstanding women scientist award** in Materials Science at VIWA-2022, International Women Conference at Green Park, Chennai on 5th March 2022.



Dr. Dhananjaya N

19. Under the Supervision Ph. D degree was awarded to Sowmya N and Pratibha S from VTU.



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Dr. Daruka Prasad B

20. BoS Member for JNTUA college of Engineering, Pulivendula.
21. BoS Member for JNTUA college of Engineering, Ananthapuramu.
22. Department Advisory Committee member for Ph.D. program at Manipal University, Bangalore.
23. Reviewer for the project proposals submitted at National Science Centre, Poland.

Dr. Basavarau R.B.

- Received VGST-K-FIST-L1 worth Rs.15 Lacs from VGST, GoK.

2021

24. Dr. C. Kavitha received **VGST-K-FIST-L2** sponsored project worth Rs. 20 Lacs by VGST-GOK for the year 2022-2024 and it was announced on august 2021.
25. Dr. C. Kavitha invited to attend Bangalore –Tech Summit inaugural function which was held on 17th Nov 2021.



Dr. Daruka Prasad B

26. Delivered the **keynote speech** at National conference on RANN-2021, held at Vidyavardhaka College of Engineering, Mysuru - 570 002, in association with KSTA, Government of Karnataka.
27. BoS Member for JNTUA college of Engineering, Pulivendula.
28. BoS Member for JNTUA college of Engineering, Ananthapuramu.
29. Department Advisory Committee member for Ph.D. program at Manipal University, Bangalore
30. Completed the VTU-RFTT, Research project worth of Rs. 5 Lakhs.
31. Reviewer for the project proposals submitted at National Science Centre, Poland.



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2020

32. Dr. C. Kavitha developed Covid 19 innovative product called " UV-C light based Dry sterilizer and Sanitizer to disinfect all type of Viruses and Bacteria for non-wettable items like currencies, groceries, electronic gadgets, bags, watches, N-95 masks etc. Sept 2020



33. Dr. C. Kavitha is invited by University of Lorraine, Vandoeuvre-Lès-Nancy, France to act as Editorial Board Member of the Journal of Material Science and Technology Research Aug(2020).
34. Dr. C. Kavitha is invited as organizing committee member and editorial member for the journal of international conference on material science exhibition and engineering will be conducted at Seol, South Korea. June 2020.





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8. Dr. C. Kavitha is invited to attend 11th Bangalore India Nano 2020 curtain raiser event and international conferences 2-4 March, 2020.



9. Dr. Kavitha acted as a resource person for 4 days staff development program on Material Testing and measurement techniques organized by Mech dept, BMSIT&M, Bangalore Jan 2020



10. Dr. C. Kavitha is invited to attend Industry-academic interaction Organized by NMR centre, IISc and JEOL scientific company, Japan. Thanks to eminent NMR Prof. Surya Prakash for inviting us to attend this wonderful workshop. Dec-2019.





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11. One of Dr. C. Kavitha's first author Materials Today research articles have been cited by very high impact factor **Nature: Scientific Reports.2019.**

