

# BMS INSTITUTE OF TECHNOLOGY & MANAGEMENT

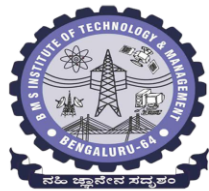
(Autonomous Under VTU)

## DEPARTMENT OF PHYSICS

<b>Event Name</b>	<b>Online Five Days Faculty Development Programme</b>
<b>Topic</b>	<b>“ADVANCED MATERIALS: CHALLENGES AND OPPORTUNITIES IN UPCOMING YEARS”</b>
<b>Date</b>	<b>17<sup>th</sup> – 21<sup>st</sup> May 2021</b>
<b>Highlights of the event</b>	<b>Distinguished scientists and academicians from premier institutions have given invited talks.</b>
<b>Number of Participants benefited with this</b>	<b>175 participants</b>

### Programme schedule

Date/Day	Session-I 10.00 am to 12.00	Break 12.00 to 2.00 pm	Session-II 2.00 pm to 4.00 pm
Day-1 17/05/2021 Monday	Keynote speaker <b>Prof. C.K. Jayasankar</b> Department of Physics, Sri Venkateswara University, Tirupati. <b>Title of the talk: Emerging and exciting rare-earth doped glasses and glass-ceramic materials for opto-electronic and display applications.</b>		<b>Dr. S.B. Bhanu Prashanth</b> Professor in Medical Electronics BMSCE, Bengaluru. <b>Topic: Biosensors &amp; the role of Nanomaterials</b>
Day-2 18/05/2021 Tuesday	<b>Dr. Pramod Avti,</b> M.Phil, Ph.D, MAMS Associate Professor, Department of Biophysics, Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh. <b>Topic:- Advanced Materials for Biomedical Applications - From bench to bedside, Challenges, and concerns</b>		<b>Dr. Ashok Kumar</b> Applied Science Department National Institute of Technical Teachers Training and Research Centre, Chandigarh <b>Topic:- Nanotechnology enabled energy devices: Energy harvesting and storage</b>
Day-3 19/05/2021 Wednesday	<b>Dr. Manohar Rao</b> National Business Development Manager for Pharma, PerkinElmer INDIA & South Asia <b>Topic: Hyphenation Technique: New Tool for Material Analysis</b>		<b>Dr. Gopal K. Pradhan</b> Assistant Professor, Department of Physics, School of Applied Sciences, Kalinga Institute of Industrial Technology Deemed to be University, An Institute of Eminence (IoE), Bhubaneswar, Orissa, India <b>Topic: Nano wires as Thermoelectric Materials</b>



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<b>Day-4</b> 20/05/2021 Thursday	<b>Prof. G. Mohan Rao</b> Professor Emeritus Dept. Of Instrumentation and Applied Physics, IISC, Bengaluru.  <b>Topic: Development of thin film micro batteries - issues with materials and processes</b>		<b>Dr. Urmila Kar</b> Professor, Education and Management, NITTR, Kolkata <b>Topic:- NEP 2020 : Reforms in Higher Education</b>
<b>Day-5</b> 21/05/2021 Friday	<b>Dr. Hareesh K</b> Assistant Professor School of Applied Sciences (Physics) REVA University, Bengaluru.  <b>Topic: Radiation assisted synthesis of carbon based nanocomposite and its application</b>		<b>Prof. C. Shivakumara</b> Principal research scientist Dept. of SSCU, IISc, Bengaluru.  <b>Topic: Multifunctional Materials for Energy and Environmental Sustainability</b>

**Chief Patron**

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**Dr. Manjula N. IAS**  
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**Who can attend:**

Academicians, Research scholars and Students.

**Facilities available at R & D Centre**

§ Raman spectrometer § Fourier transform infrared spectrometer § UV visible spectrometer § Hall effect setup -Research Mode § Solar Simulator-LED based § Ultra speed centrifuge § High temperature furnaces § Pelletizer.



## BMS Institute of Technology and Management

Avalahalli, Yelahanka, Bengaluru- 560 064

Accredited by NBA and NAAC with "A" grade

FIVE DAY—ONLINE  
 FACULTY DEVELOPMENT PROGRAM

ON  
**ADVANCED MATERIALS: CHALLENGES AND OPPORTUNITIES IN UPCOMING YEARS**

Organized by

Department of Physics

From 17<sup>th</sup> to 21<sup>st</sup> May 2021



**Coordinators**

Dr. Dhananjaya N, Assoc. Prof.  
 Mrs. Yashaswini, Asst. Prof.  
 Mrs. Ashwini KR, Asst. Prof.  
 Dr. Daruka Prasad B, Asst. Prof.  
 Dr. Kavitha C, Asst. Prof.

**Chairman**

**Dr. Mohan Babu G. N**  
 Principal, BMSIT&M

**Organizing Secretary**

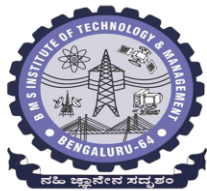
**Dr. Lokesh R**  
 Associate Professor and HoD  
 Department of Physics, BMSIT&M

**Registration and Enquiry Details:- Free Registration**

Registration link:- <https://forms.gle/chtm3caSfEv1mth7>

Whatsapp link:- <https://chat.whatsapp.com/G7eUBFKiBUMAm11Jd5D7V>

Email ID:- physics2021fdp@gmail.com



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## About Institute

### Institute Vision

To emerge as one of the finest technical institutions of higher learning, to develop engineering professionals who are technically competent, ethical and environment friendly for betterment of the society.

### Institute mission

Accomplish stimulating learning environment through high quality academic instruction, innovation and industry-institute interface.

BMSIT&M, an institution with a class of its own for high quality engineering education in the state. It is a well-established private engineering college in Bangalore recognized by the AICTE, Government of India and is affiliated to the Visvesvaraya Technological University (VTU), Belagavi.

With its modern infrastructure, highly qualified and committed faculty, and active industry engagement, the institute has been recognized as an "Emerging Technical Institute in the state of Karnataka" by the VTU. AICTE has given a zero deficiency report for the institute. BMSIT&M presently offers eight undergraduate courses and three master's degree programs among them Artificial intelligence and machine learning UG program is started by first private engineering college in India under AICTE. Most of the departments are recognized as research centers by VTU and making BMSIT&M as one of the most promising research houses in the country.

BMSIT&M has been awarded 'A' Grade by NAAC. BMSIT is very active in promoting Industry-Institute Interactions. The institute supports the students for their overall development as professionals through both curricular and co-curricular activities. The institute is practicing informal learning programs popularly known as outcomes based education (OBE).

## About the Department

### Department Vision

To impart sound fundamentals and concepts in Physics that helps students to nurture scientific temperament and creativity in the field of engineering.

### Department Mission

To provide sound knowledge in applied Physics through innovative techniques and scientific methodology. To motivate students to pursue scientific analysis and develop problem solving ability in the field of engineering.

The Department of Physics was established in the year 2002. The Department has well experienced teaching and technical staff. The department caters to the needs of all the branches as it is a basic science department. The Engineering Physics Lab is well furnished with latest equip and all necessary amenities.

The Department has been recognized by VTU as a Research Centre. The Centre for Advanced Materials Research (CAMR) lab for the purpose of research has been set up to enable faculty members to pursue experimental research in the field of nano-technology. Lab is equipped with instruments useful for Material/Nano material Characterization along with basic synthesis facilities. Facilities are open for characterization of samples for External institutions/Industry.

## FIVE DAY—ONLINE

## FACULTY DEVELOPMENT PROGRAM

From 17<sup>th</sup> to 21<sup>st</sup> May 2021

## ADVANCED MATERIALS: CHALLENGES AND OPPORTUNITIES IN UPCOMING YEARS

### About the FDP:

The rapid development in materials science and engineering requests the advanced materials in a more rational and designable manner. Beyond traditional synthesis techniques, control of material morphology, composition, and structure represents a highly integrated and versatile approach for device applications. Use and commercialization of advanced materials can help us tackle challenges and even improve the human life style. More recently, digital printing of chemically synthesized colloidal nanoparticles has paved the way towards manufacturing. Advanced materials are revolutionizing the way companies do business, demanding new types of R&D and engineering teams setup. Due to reduced costs and increased profitability, the companies focus on advanced materials development or applications. In views of this, the present FDP focuses on the understanding and assimilation of the rapid technological advances being made by academic/research institutes and industries in advanced materials for the near future. Focus is also made on opportunities available under NEP-2020 for promoting research in the field of advanced materials.

Following are the few of the areas which this FDP addresses

- ⇒ Advanced materials for energy storage and optoelectronic devices
- ⇒ Advanced materials for sensors
- ⇒ Advanced materials for battery and super-capacitors
- ⇒ Advanced materials for EMI shielding
- ⇒ Advanced phosphor materials for display and dosimetry applications
- ⇒ Eco-friendly materials.
- ⇒ Materials for 3D Printing.
- ⇒ Materials for medical and bio-technological applications.
- ⇒ Opportunities available under NEP-2020 for promoting research

