# One Week National Level Faculty Development Programme on ENGINEERING PHYSICS: BASICS TO ADVANCED CONCEPTS IN ENGINEERING AND TECHNOLOGY

15<sup>th</sup> to 20<sup>th</sup> JULY, 2024 (BLENDED MODE)

## **REGISTRATION FORM**

Name:
Designation:
Department:
College:
Mobile:
Email:
Address for communication

## **DECLARATION**

The information furnished in registration form is true to the best of my knowledge. I agree to abide by the rules and regulations governing by the course. If selected, I shall attend the course for entire duration, I also undertake the responsibility to inform the coordinator sufficiently in advance, in case I am unable to attend the course.

Place: Date:

Signature of Head of the Institution

## Chief Patron:

Sri. Ch. Malla Reddy,

Member of Legislative Assembly, Medchal Constituency, Telangana State
Founder Chairman.

## **Patrons:**

Sri Ch. Mahender Reddy, Secretary Dr. Ch. Bhadra Reddy, President

### Convener:

Dr. Y. Madhavee Latha,
Professor of ECE & Principal

## **Co-Conveners:**

Dr. A. Swarupa Rani, HOD, H&S

## **Coordinators:**

**Dr. K Panduranga Rao**, HOD of Physics **Dr. Ravikiran U** 

## **Organizing Committee, Dept. of Physics:**

Dr. Kapil. I

Dr. Prathap. K

Dr. V.V.S. Ch. Swamy

Dr. Sakshi Sharma

Dr. Rohith Hazra

Dr. K. Sumalya

Dr. Nisha Yaday

## **REGISTRATION**

Registration Fee: Rs. 200/- per Participant

## **Registration Link:**

https://forms.gle/4Gyw9ZhE

Address for correspondence: Dr. K . Pandu Ranga Rao 9849512686

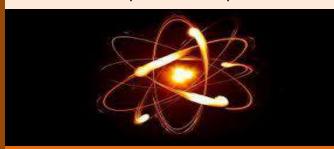
9849512686 pandurangaraokankanala@gmail.com



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Organized by DEPARTMENT OF PHYSICS, H&S.



## MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

## **Autonomous Institution**

Accredited NAAC with 'A+' Grade
Programmes Accredited by NBA

National Ranking by NIRF-Innovation Rand band (151-300), MHRD, Govt. of India Maisammaguda, Dhulapally, Secunderabad-500 100









## **ABOUT MRGI**

Situated away from raucous sounds of Hyderabad city, MRGI epitomizes technocracy at its best. Being one of the largest campuses in Telangana State, MRGI promises eventful student-oriented learning. The founder chairman Sri.Ch.Malla Reddy began the journey as an educationalist to form the bridge between society, industry and academics. He is an unassuming dynamic leader with a keen interest in changing trends of higher education and student's employability in India & abroad. The diverse and enormous growth of the group unravels his realistic vision to cater to the needs of students in all the areas of education. Education at MRGI brings all round and holistic development in students. Today MRGI has become a major learning centre with 35 institutions offering Engineering, Medical, Management, MCA and Pharmacy courses.

## **ABOUT MRECW**

Malla Reddy Engineering College for Women has UGC Autonomous Status by Govt. of India, Accredited by NAAC with 'A+' Grade, Programmes Accredited by NBA, Band (151-300)-National Ranking by NIRF-Innovation-2023, MHRD, Govt. of India, Ranked 9th in Top Engineering Colleges of Eminence by GHRDC Engineering Survey-2024, Ranked 13th in Top Engineering Colleges of Super Excellence by CSR Rankings-2024, ISO 9001:2015 Certified, 2(f) & 12(B) Recognition, UGC, Govt. of India, AAAA Rated by Careers 360 Magazine, AAAA+ Rated by Digital Learning Magazine, 7th in Emerging Private Engineering Colleges in India, THE WEEK Magazine - 2024, MRECW Ranked 83rd in Top Engineering Institute Rankings by Times Engineering Survey-2024, Ranked as Sustainable Institutions of India with the GOLD BAND by Green Rankings-2024, 64th Rank in T-Schools in India by Data Quest Magazine-2024, 44th Rank - Best Emerging Engineering Colleges of India by India Today Rankings 2024, 86th National Ranking by The Week Magazine-2023, Ranked Top 10 Promising Colleges for Data Science in India-2023, by Higher Education Review, 113th in Best Colleges in India, South Asia Award 2023-24 Cambridge under Cambridge Learning Partner-Continuous Learning Excellence, Four Star Rating from Institution Innovation Council(IIC), MHRD, Govt. of India, 16 University Gold Medals (JNTUH University) for Academic Excellence.

## **ABOUT PHYSICS DEPARTMENT**

The Department of Physics at Malla Reddy Engineering College for Women (MRECW) in Hyderabad excels in both education and research. Offering a robust undergraduate program, it covers core areas like Quantum mechanics, band theory of metal, semiconductors and devices Laser, fiber optics, Dielectric, magnetic materials and nanotechnology complemented by hands-on laboratory sessions. The department boasts a distinguished faculty comprising experienced educators and researchers who actively contribute to advancements in their respective fields. Their guidance not only enriches the learning experience but also encourages students to explore research opportunities early in their academic careers.

MRECW's commitment to research is evident through its state-of-the-art facilities, which include well-equipped laboratories and access to sophisticated instruments. These resources enable students to conduct experiments independently and participate in collaborative research projects, fostering critical thinking and problem-solving skills. Moreover, the department emphasizes interdisciplinary collaboration, encouraging students to engage with other branches of engineering and sciences. This holistic approach prepares graduates to tackle complex challenges and innovate across various industries. Beyond academia, the department organizes seminars, workshops, and industry interactions to broaden students' perspectives and facilitate professional networking. Such initiatives enhance their employability and readiness for careers in academia, research institutes, and industry.

In conclusion, MRECW's Department of Physics stands at the forefront of physics education and research in India, committed to nurturing future leaders in scientific inquiry and innovation. With its robust academic programs, dedicated faculty, and cutting-edge facilities, the department continues to uphold its reputation for excellence and prepares students for successful careers in the field of physics.

## **ABOUT FDP**

A Five Days FDP on Applied Physics from Basics to Advanced Concepts in engineering and technology revisits foundational concepts of Physics, bridging theory with practical applications. It includes hands-on exercises and covers advanced topics in research such as quantum mechanics and semiconductor physics, equipping engineers with updated knowledge to innovate across industries. These courses encourage interdisciplinary collaboration and help professionals integrate physics principles into cutting-edge technological solutions, ensuring they achieve excellence and contribute effectively to research and development efforts.

- Introduction to Quantum mechanics.
- Electron theory of metals.
- Semiconductor Devices.
- Dielectric and Insulating materials.
- Nanoscience, Nanomaterials and Nanotechnology.
- Smart Materials and Fuel cells.
- Lasers and Fiberoptics.
- Wave Optics.
- Acoustics and Ultrasonics
- Crystallography and XRD.
- Advanced Materials.

## **Expected Outcomes**

- Knowledge Enhancements.
- Hands on practices on Applied and Engineering Physics.
- Finding research problems
- Communication with experts

## **Level of Participants**

Faculty working in AICTE approved Institutes, Ph.D. scholars, and working professionals from various organizations/industries can attend.

## **Resource Persons**

- 1.Dr. Saidi Reddy Parne , Assoc. Prof. of Applied Sciences, NIT Goa.
- 2.Prof. N. Narasimhulu, Head & BOS Chairman, Dept. Of Physics, Osmania University.
- 3.Dr. G. Venkatiah, Asst. Prof. in School of Physics, Hyderabad Central University.
- 4.Dr. G. Upender, Asst. Prof. of Physics, Osmania University.

Note: Other subject experts from reputed universities viz. IIT,NIT,IIITs, and Central University of Hyderabad.





