#### REGISTRATION AND CERTIFICATION

- No registration fee.
- The brochure of the program can be downloaded from the Institute website www.nitk.ac.in
- Link for registration: https://forms.gle/qNByBRUQuk2iyCWU7
- E-mail the scanned copy of the signed registration form to powernitk@gmail.com.
- Maximum seats: 80 (on first come first served basis).
- This FDP will be on virtual mode, the coordinator(s) will send the details for joining the online sessions to the email ID of the registered participants.
- E-Certificate will be provided to all the participants after the successful completion of the course.

#### **IMPORTANT DATES**

**Duration of FDP: 25.01.2021 – 29.01.2021** 

Last date for registration: 22.01.2021

Confirmation by E-mail: 23.01.2021

**VENUE:** 



 $\underline{https://meet.google.com/}$ 

# **CHIEF PATRON & CHAIRMAN**

Prof. Karanam Umamaheshwar Rao Director, NITK, Surathkal

# **CO-CHAIRMAN**

**Prof. Ravikiran Kadoli**Coordinator, TEQIP-III, NITK, Surathkal

Prof. K. N. Shubhanga Head, E & E Eng., NITK, Surathkal

## ADDRESS FOR CORRESPONDENCE

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Website: <a href="https://www.nitk.ac.in/">https://www.nitk.ac.in/</a>

# TEQIP-III Sponsored Five days [online]

Faculty Development Program (FDP) on

Power Electronic Applications in Electric Vehicles and Energy Storage (25 – 29 January 2021)





#### **COORDINATORS**

Dr. Dharavath Kishan, Assistant Professor,
Dr. Md Waseem Ahmad, Assistant Professor,
Dr. Nagendrappa H, Assistant Professor,
Mr. H Girisha Navada, Assistant Professor,
Dr. B Venkatesa Perumal, Professor,

## Organised by

Department of Electrical and Electronics Engineering,
National Institute of Technology Karnataka,
Srinivasnagar, Surathkal, Mangalore, Karnataka 575025
<a href="https://eee.nitk.ac.in/">https://eee.nitk.ac.in/</a>

# **ABOUT NIT KARNATKA**

National Institute of Technology Karnataka (NITK), Surathkal (formerly KREC), is one of the Institute of National importance in our country funded by MHRD, Government of India. Since its inception in 1960 as the Karnataka Regional Engineering College, the Institute has established itself as a premier centre engaged in imparting quality technological education and providing support to research and development activities. NITK has fourteen departments, and twelve supporting centres. The Institute has a long tradition of research for several decades in both traditional and modern areas of Engineering and Sciences in all Departments.

## ABOUT DEPARTMENT

Department was established in year 1960 with the under-graduate programme in Electrical and Electronics Engineering. The postgraduate programme in Power and Energy Systems was introduced in year1992 and research programmes leading to Ph.D. Degree started in the year 2003. It has a well-qualified and experienced faculty team actively engaged in the research and development activities. The department is continuously fulfilling its role of producing qualified Electrical Engineers suited for current scenario of industrial growth. Many of our Ph.D. graduates have taken up faculty positions in other NITs, IITs, State and Central universities.

#### **PREAMBLE**

Increasing public awareness of the environmental impact of greenhouse emissions coupled with the development of efficient battery technology has pushed for the accelerating research and development activities in electric vehicles. This program will focus on need of power electronics for improving the performance of Electric Vehicles and Energy Storage System. This FDP will also emphasis on recent advancement in charging infrastructures, battery/energy management approaches and motor drives of the electric vehicles.

Overall, this FDP will serve as a platform to upgrade the knowledge of Power Electronic applications in electric vehicles and energy storage systems.

## **COURSE CONTENT**

- Automotive Power Electronics.
- Fault Detection in Power Converters for Battery charging Systems.
- Power Converter Design for Battery Charging and Battery Management System.
- Design of Efficient and Reliable Electric Drives for EV.
- Condition monitoring of propulsion motors used in EV.
- Bidirectional Power Converters for V2G and G2V Applications

# **RESOURCE PERSONS**

- Prof. Panduranga Vittal KDept. of EEE, NITK, Surathkal.
- Prof. B Venkatesa Perumal Dept. of EEE, NITK, Surathkal.
- Dr. Chandrashekhar Narayan Bhende, Associate Professor, IIT Bhubaneshwar
- Dr. B. L. Narasimha Raju
   Associate Professor, Dept. of EEE, NIT Warangal.
- Dr. Dattatraya N Gaonkar, Associate Professor, NITK, Surathkal.
- Dr. T. Ilamparithi,
   Assistant Professor, University of Victoria, Canada.
- Dr. Sathish Naik
   Assistant Prof., Dept. of EE, IIT Dharwad.
- Dr. Tejavathu Ramesh,
   Assistant Prof., Dept. of EE, NIT Andhra Pradhesh.
- Mr. Swaminathan,
   Infineon Technologies India Pvt Ltd.
- Dr. Naga Brahmendra Gorla, Research Fellow, NTU, Singapore.

## WHO CAN PARTICIPATE?

- Faculty members of AICTE recognized Universities and Engineering colleges.
- Research scholars, UG and PG students.
- Industrial personnel.