











# **INTEGRATION OF RENEWABLE ENERGY AND SMART GRIDS FOR SMART CITIES**

June **14**<sup>th</sup> - **19**<sup>th</sup>, 2021

Organized by

Department of ECE

(DST - FIST Sponsored Department)

In Association with

The Institution of Electronics

and Telecommunication Engineers (IETE)

Vijayawada Chapter





https://forms.gle/f6uiSFad3xepkduH9

E-Certificate will be provided to all the participants

www.kluniversity.in

#### **OBJECTIVE OF THE PROGRAM**

This FDP aims to provide a platform for the academicians, engineers, researchers to learn present technologies in the areas of renewable energy, solar power systems, wind energy, integration of distributed generation, smart grids and energy storage form the model of a smart grid to ensure high-efficiency and high-performance operation in smart cities. This FDP create the opportunity to put together the speakers from these areas to disseminate knowledge their and experience for the listeners to work in years to come, which will also be useful for the development of the country. The ideas on operation of centralized and decentralized control, forecasting, and evaluation of different market policies may be highlighted through case study.

## **ABOUT THE INSTITUTION**

The Koneru Lakshmaiah Charities was established as a trust in the year 1980 with its official address at Museum road, Governerpet, Vijayawada and started KL College of Engineering in the Academic year 1980-81. KLEF was established in 1980-81, as KL College of Engineering, which was upgraded to KL College of Engineering Autonomous in 2006 by UGC, and was declared as a Deemed to be University in 2009 by UGC, MHRD Govt. of India. In 2012 as a Deemed to University the institution accredited by NAAC with A Grade and later in 2018, was re-accredited by NAAC with A++ grade. In 2019 UGC, MHRD declared this intuition as Category I. The university was also ranked 41 under NIRF 2020.

#### **ABOUT THE DEPARTMENT**

Department of ECE was established in 1983. The department has strong back-up of 234 faculty members, specialized in core areas of ECE. Among 87 faculty members are PhD holders and 121 faculty members are pursuing PhD. Department houses several rich industry experience faculties to cater the industry needs into academics. The Department has a total of 7 State of the Art laboratories, 2 Centers of Excellence and 8 Research Centers which are well equipped to the highest level sophistication and cater to the needs of UG, PG and PhD students. These labs have specific emphasis on Research and Development activities. The Department has 12 Crores worth of Sponsored projects from DST, DLRL, ISRO, DEAL etc. 2000+ International Journal papers, 600+ International Conference papers and 150+ National Conference papers by the faculty. Faculties from Foreign universities are involved in regular teaching activity. Department's academic calendar is highlighted by regular seminars, group discussions, student paper contests, Industry Alliance and Student Personality Development programs for all round development of students in National & International events. Student associations namely 'Pulse' to conduct technical events and to conduct social 'Hope' service activities. Placement in leading core communication companies like Amphenol BSNL, MTNL, Reliance Antennas, Communications, Tata Telecom, Hutch, Bharti Telecom, Nokia, CISCO, IBM, Intel, Agilent, Alcatel, AT & T Ericsson, Honeywell, Bosch, National Instruments, Texas Instruments, HCL and others.

## **CONTENT OF FDP TO BE COVERED**

- ✓ Importance and Recent Challenges in Renewable Energy Sources.
- ✓ Solar Photovoltaic cells and solar power system.
- ✓ Wind energy and other renewables.
- ✓ Grid Integration, Renewable energy sources, and storage
- ✓ Introduction to Smart Grid.
- ✓ Challenges in implementing Smart Grid Technologies in India.
- ✓ Smart Grid Technologies and its Applications.
- ✓ Role of IoT in smart grids & smart cities.
- ✓ Smart Grid and Eclectic Vehicle (EV) Technologies.
- ✓ Hands-on Sessions in relevant topics.

## **RESOURCE PERSONS**

The sessions will be delivered by eminent professors from IIT, NIT, NISE, CSIR, Foreign Universities, Central Universities, and Industrialists.

# REGISTRATION AND PARTICIPATION DETAILS

- ✓ This FDP is only for faculty members of the AICTE approved institutions, research scholars, PG Scholars, participants from Government and Industry.
- ✓ Platform: The FDP will be conducted in Online mode (webex).
- ✓ Certificate: On completion of the course, all participants will be receive a digital certificate.
- ✓ Participants interested to attend this program should register online in the below mentioned links:

https://forms.gle/f6uiSFad3xepkduH9

- ✓ Seats are limited (only 250) and the participants are selected by organizers on first come first serve basis.
- ✓ Last date for registration:10.06.2021

#### **REGISTRATION FEE**

	Indian	Foreign
Industry	Rs. 500/-	10 USD
Faculty Member /		
Scientist	Rs. 300/-	8 USD
Research Scholar		
and Student	Rs. 200/-	5 USD

#### WIRE INFORMATION

Account Name : Registrar, KLEF
Account Number : 62310916292
IFSC Code : SBIN0021361

Bank Name : SBI, K L University

Vaddeswaram

## **ORGANISING COMMITTEE**

## **GENERAL CHAIRS**

Dr. V. K. Mittal, Professor & Chair, ECE, KL Dr. L Koteswara Rao, Principal, Engineering, KLH

## **PROGRAM CHAIR**

Dr. Suman Maloji, Professor & Hod, ECE, KL

Dr. M. Goutham, Associate Professor & Hod, ECE, KLH

Dr. D. Venkata Ratnam, Professor & Hod(Research), ECE, KL

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#### **CO-CONVENER**

Dr. Lakshman Pappula, Associate Professor, Dept.of ECE,KL Dr. Sai Krishna Santosh G, Associate Professor, ECE, KL Dr. C. Santhosh, Associate Professor, Dept. of ECE, KL

## **COORDINATORS**

Dr. Sunithamani, Associate Professor, Dept. of ECE, KL
Dr. Bhanu Chandra, Associate Professor, Dept. of ECE, KLH
Dr. Sd. Inthiyaz, Associate Professor, Dept. of ECE, KL
Dr. Biswajit Jena, Associate Professor, Dept. of ECE, KL
Dr. Atul Kumar, Assistant Professor, Dept. of ECE, KL
Ms. Lakshmi Prasanna, Assistant Professor, Dept. of ECE, KL

#### **GUEST & EMINENT SPEAKERS**

## **Inaugural Function**







**Chief Guest** 

Dr. N. Sundararajan rofessor (Retd.), EEE, NTU Singapore



DAY-1 - 14th JUNE 2021

**SESSION-I** 



SESSION-II

Dr. Mustafa Alkhusheiny CEO, Silicon Valley for Nanotechnology Co

Saudi Arabia

Topic: "Business and implementing best development strategies for operational excellence"



SESSION-III

Dr. Senthilarasu Sundaram

Senior Lecturer
Renewable Energy University of Exeter, Uh
Topic: "A Third Generation Photovoltaic Systen

DAY-2 - 15th JUNE 2021

#### SESSION-I

## Prof. Chetan Singh Solanki

Professor, IIT Bombay
Founder, Energy Swaraj Foundation
Topic:
"Energy Swaraj Foundation of Swaraj Swaraj Foundation of Swaraj Swaraj Foundation of Swaraj S



SESSION-II

#### Dr. S. N. Karthick

Assistant Professor, Department of Chemistry
Bharathiar University, Coimbatore
Topic: "Recent Trends in Solar Energy Harvesting"



## Er. Christie Fernandez

Founder, Sooorya EV Pte Ltd., Singapore

ring Electric Vehicles with Solar En



DAY-3 - 16th JUNE 2021

#### SESSION-I

#### Dr. Dipankar Debnath

Topic: "Challenges of grid integration o

#### SESSION-II

#### 3E3310N-1

Senior Scientist
Electrochemical Power Sources Divisior
CSIR-CECRI, Karaikudi

CSIR-CECRI, Karaikudi ppic: "Recent Trends in Energy Storage Syster



#### SESSION-III

#### Er. Vijay Kumar

Sr Design Engineer, Green Cubes Technology Corporation, Bangalore Topic: "Electric vehicle batteries"

sion-I: 10am to 11.30am; Session-II: 12pm to 1.30pm; Session-III: 3pm to 4.30pm



#### **Hands on Training & Demo Session**

DAY-6 19<sup>th</sup> JUNE 2021

# Dr. Yogesh Kumar Singh Ex Senior Research Scientist National institute of Solar Energy Gurugram Haryana Indi Tools:



#### **Yoga and Stress Management Sessions**



Sri. A. Venkateswalu

Principal and Chairman

VTJM&IVTR Degree College

VTJM&IVTR Degree College
Topic: "Yoga and Stress Management"

DAY - 2 to 5 15<sup>th</sup> to 18<sup>th</sup> JUNE 2021

#### DAY-4 - 17th JUNE 2021

#### SESSION-I

## Er. Ramchander Nirudi Associate professor & Consultant Solar & EV projects

Associate professor &
Consultant Solar & EV projects
Topic: "Best practices in operation &
maintenance of solar systems with case study"



SESSION-II

## Dr. V. Mayilvelnathan

Professor & Head, Mohamed Sathak Engineering College opic: "Microgrid & Solar Thermal Power plants

#### SESSION-III

## Er. Sharda Jadon Product Development Engineer

LM Wind Power (GE Renewable), Bangalo Topic: "Design and Development of Wind Energy System"



## DAY-5 - 18th JUNE 2021

#### SESSION-I

## Dr. M. Venkateshkumar

Amrita Vishwa Vidyapeetham
Chennai Campus

Topic: "Al based Smart Grid Integration of Renewable Energy System"

#### SESSION-II

## Dr. Pierluigi Siano

Smart Grids and Smart Cities Laboratory University of Salerno, Italy Topic: "Scalability and Privacy Issues of an



## SESSION-III

Dr. Imayavaramban Munuswamy
President and CTO - IC Tech Puducherry

Topic: "Trends in EV Technology



"Registrations are on a first-come,

First-served basis... So register early"

## **For Further Correspondence**

Convenor

#### **Renewable Energy FDP**

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#### **KONERU LAKSHMAIAH EDUCATION FOUNDATION**

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