



### Message from the Chairman



#### Dear Members,

It gives me great pleasure to present this issue of IETE Newsletter. With your support and encouragement IETE continues to strive to spread technical thought and build capability through its various initiatives and programmes.

I am very glad to mention that our Knowledge sharing sessions conducted on every Sunday are received very well by the members and students. We have successfully completed in 2020, Weekly Webinars (25 Nos), IETE Foundation Day & Prof Narayana Endowment Lecture, Memorial Lectures (3 Nos). We have conducted Two Days Workshops (2 Nos) in Collaboration with Pantech e-Learning Solutions on Artificial Intelligence & Machine Learning & other with Data Teach Labs on Image Processing using Matlabs. We have also conducted two Cultural Activity Programmes called Wissen-1 on 'Singing & Doodle Art' and the second Programme Wissen-2 on 'Poster Presentation' on the occasions of the 89th Birth Day of APJ Abdul Kalam and Children's Day Respectively.

I am happy to mention that, IETE President Prof Bakal, South Zone Co-ordinator, Prof DC Pandey, Past Presidents and other Governing Council Members, EC Members and Corporate Members participated in the **IETE Foundation Day & Prof S. Narayana Endowment Lecture** conducted on 1st November, 2020 in Virtual & physical modes. We have felicitated some of the senior IETE Members on this occasion. All their participation had enhanced the program and made it a grand success.

On 26th December, 2020, we have conducted Virtual Industry Visit to M/s Kwalify Photonics & LEDchip Indus (P) Ltd, through ZOOM. The Virtual visit is done due to Covid problem as an alternative to physical visit, and the Program was very successful.

The graciousness of Shri Vijay Kumar Gupta, CEO of the Organization is greatly appreciated for giving this Virtual visit opportunity to IETE Students and Members.

Some of the Colleges and Organizations are coming forward to sponsor our weekly webinars, by paying Rs 2500/ per webinar for the benefit of students, faculty and Members. We acknowledge the financial support extended by them.

I am very sure that this newsletter will showcase the prominent happenings in our centre to the outside world. I wish that this will also act as a catalyst in providing an effective interface between the centre and its members

I would like to reiterate that IETE Hyd Centre is fortunate to have huge infrastructure of Auditorium, Conference hall, Class Rooms, R&D Labs, Library, Exhibition halls with Air Conditioners and power backup facility. I request all the members to try for optimum utilization of the facilities by way of collaborations, hiring etc.

The year 2020 has been a tough year with Covid period. It brought some good things also for us in closing, I wish all the negativity and difficulties also end with this year 2020, and 2021 bring success and desired results for all of us. Wish you all a Very Happy, Healthy and Prosperous New Year 2021.

Thank you,

Er. K. Gnaneshwar Rao (Chairman)

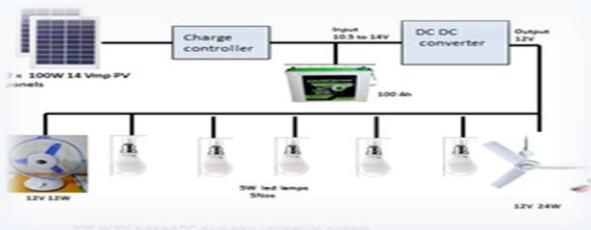
## Article

### Training in Solar Energy: The Need of the Day

Sri D. Bhanumurthy, Former Scientist G, DLRL, Hyderabad

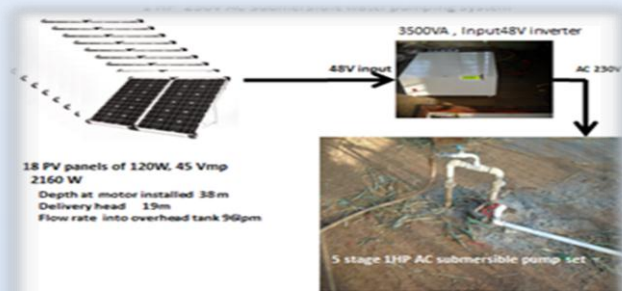
Electrical energy transition from conventional sources to Renewable sources is taking place much faster than anticipated.

Fast diminishing fossil fuel reserves and ever increasing global warming due to their usage is forcing us to go for renewable energy sources. Coal-fired power stations will officially become things of the past by the year 2030. Among renewable energy sources solar energy has additional advantages like smaller viable units and availability of solar insolation in more and wider areas worldwide.



Per watt cost of photovoltaic panels has significantly come down. Today (June 2020) per watt cost of PV panel is only Rs 22/ which was Rs 70/ a decade back. PV based projects like water pumping systems and domestic lighting are economically viable now , even without subsidies and incentives from government. Early changeover to solar energy can avoid forcible migration in future.

In 2016 Indian government has prepared plans for installing 20 G watts of PV electricity by Dec 2022. The target has been revised and raised to 100 Gw. According to MNRE (Ministry of new and renewable energy) there would be requirement of 7 lakhs skilled personnel in this field by the year 2020.



As such there is a requirement for training centres in this field. Training can be at three levels. First the basics on PV electricity and solar thermal. Second to serve as a guide for technical personnel who chose assembling of PV systems as their career. 3rd level should be helpful to supervisors and designers in selecting various modules used in PV systems. PV based projects 0.5 HP DC motor driven water pumping system for shallow wells, 1 HP AC submersible water pumping system for deep borewells , domestic lighting system, PV powered DC arc welding system and 2000watts induction cook top systems were assembled using locally available components and proven successful.



Tesla has taken the world's largest grid-scale 100 MWh energy storage project in South Australia. Installed it in a record time of 100 days.



Grid-Scale solar farm with Lithium-Ion Battery storage backup.



## 67<sup>th</sup> IETE Foundation Day and 9<sup>th</sup> Prof. S Narayana Endowment Lecture



Lighting of Lamp



Felicitations to Prof. S Narayana  
Past President, IETE Delhi



Felicitations to Dr. Niranjan Prasad  
Governing Council Member, IETE Delhi



Felicitations to Prof. G.V. Anjaneyulu  
Senior Member



Felicitations to Dr. S.R. Ramasamy  
Senior Member



Felicitations to Dr. V Rama Rao,  
Senior Member



Felicitations to Er. K Subbi Reddy  
Past GC Member

## Webinars

### Webinar – 17

67<sup>th</sup> IETE Foundation Day

**TOPIC :** Emerging Technologies for Effective Management of the Pandemic

**DATE:** 01<sup>st</sup> November 2020 (Sunday) at 10.30AM

**Hybrid Mode :** offline & Webinar Session



**Prof. Joy Mammen**

Associate Director, CMC Vellore

9<sup>th</sup> Prof. S Narayana Endowment Lecture

**TOPIC :** High Power Electromagnetics (HPEM) and Intentional Electromagnetic Interference (IEMI)

**DATE:** 01<sup>st</sup> November 2020 (Sunday) at 11.35AM

**Hybrid Mode :** offline & Webinar Session



**Dr. D C Pande**

Former Outstanding Scientist & Associate Director, LRDE Bangalore. Zonal Mentor (South), GC Member IETE

### Webinar – 18

IETE Two Days Workshop No – 01

**TOPIC :** Artificial Intelligence Using Machine Learning & Deep Learning

**DATE:** 07<sup>th</sup> & 08<sup>th</sup> November 2020 (Saturday & Sunday) at 11.00AM to 01.00 PM

**Online :** Through You Tube Channel



**Mr. R. JISHNU**

Senior Project Engineer

### Webinar – 19



Late Prof. ALLADI PRABHAKAR 04<sup>th</sup> Memorial Lecture (ML) – 05

**TOPIC :** A Technical Perspective on India's First Quick Reaction Short Range Surface to Air Missile Trishul

**DATE:** 22<sup>nd</sup> November 2020 (Sunday) at 10.30AM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**Prof. G. Kumaraswamy Rao**

Former Director DLRL DRDO , Chief Designer for Electronic Ground Guidance System TRISHUL , Chief System Integrator AKASH weapon

### Webinar – 20

**TOPIC :** Introduction TO UI/UX Design

(In association with G. Narayanamma Institute of Technology & Science (For Women))

**DATE:** 29<sup>th</sup> November 2020 (Sunday) at 10.30AM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**NVS Navadheer**

UI/UX Designer



**T Jai Surya Sandeep**

UI/UX Designer

## Webinar – 21

**TOPIC :** Fractals Modeling Applications in Electrical & Electronics Engineering  
(In association with Sun Gen Solar Pvt Ltd)

**DATE:** 6<sup>th</sup> December 2020  
(Sunday) at 10.30AM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**Mr. ANUPAM TIWARI**  
Senior Member – IETE  
(M-209735)

## Webinar – 22

**IETE Two Days Workshop No. – 02.**

**TOPIC :** Image Processing and Computer Vision with MATLAB

**DATE:** 12<sup>th</sup> & 13<sup>th</sup> December 2020  
(Saturday & Sunday) at 11.00AM to 01.00PM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**Mr. Satya Kumar Palli**  
CEO, Data Teach Labs

## Webinar – 23



**Late Sri Prof. GANTI SUBRAHMANYAM**  
**04<sup>th</sup> Memorial Lecture**

**TOPIC :** Disaster Recovery and Business Continuity Planning

**DATE:** 20<sup>th</sup> December 2020 (Sunday) at 11.30AM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**Mr. Srinivasu Gorti**  
Director - Technical  
Akshara Enterprises India Private Limited

## Webinar – 24

**IETE Virtual Industry Visit No. – 01**

**INDUSTRY:** KWALITY PHOTONICS & LEDchip Indus Pvt Ltd

**DATE:** 26<sup>th</sup> December 2020 (Sunday) at 2.00PM to 3.00PM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**Mr. K Vijay Kumar Gupta**  
CEO, Kwaliti Photonics & LEDchip Indus Pvt Ltd

## Webinar – 25

**TOPIC :** Recent Field - Bus Technologies and its Scope  
(In association with Sree Dattha Group of Educational Institutions)

**DATE:** 27<sup>th</sup> December 2020 (Sunday) at 10.30AM

**ONLINE:** Through Zoom Cloud HD Video Meeting App



**Mr. Christopher John**  
ENGINEER, NAVATEJ  
Technologies, Hyderabad



## Covid Discounts for New Memberships:

IETE is offering Covid-19 discounts till June, 2021, for new memberships of various categories. The table below shows the discounts and fee details for the various categories.

**Total fee for Life Membership including 18% GST (Fee depends on AGE and Category)**

Age	Fellow Member		Member		Associate Member	
	Normal	25% Discount	Normal	25% Discount	Normal	25% Discount
Up to 35	NE	NE	7670	<b>5752.5</b>	6490	<b>4867.5</b>
36to 60	9440	<b>7080</b>	8260	<b>6195</b>	7080	<b>5310</b>
Above 60	7080	<b>5310</b>	5900	<b>4425</b>	5310	<b>3982.5</b>

Existing Corporate Members applying for higher category have to pay as follows:-

Associate Member to Fellow Rs.3000/- + 18% GST

Member to Fellow Rs.2000/- + 18% GST

Associate Member to Member Rs.2000/- + 18% GST.

We hope this Newsletter is useful to the members to know about the activities of the IETE Hyderabad centre and look forward to your feedback and suggestions for further strengthening of the Centre.



## R & D Projects

❖ Mini Projects / Major Projects / Internships / Workshops / Virtual Industry Visits / Short Term Courses

- Diploma/ B.E./B.Tech./ M. Tech (ECE/EEE/CSE/EE/IT/CSIT)
- All Domains of Specializations with Industrial Experts
- Innovative Projects with hands on training
- Project Exhibition

Please visit : [www.ietehyd.org](http://www.ietehyd.org) , email : [info@ietehyd.org](mailto:info@ietehyd.org)



### Editorial Team

Er. K. Gnaneshwar Rao  
Er. Nuli Namassivaya  
Dr. K. Seetha Ram Babu  
Dr. Veluri Rama Rao

IETE NEWS invites from the readers short articles/letters on technological matters for publication in the newsletter not to exceed 300 words

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