# Virtual International Technical Conference on Control in Electric vehicles and Smart grid with Renewable Energy Synergies



### VIT-CES-RES 2020

Organized by

## School of Electrical Engineering (SELECT), Vellore Institute of Technology (VIT), Chennai, Tamilnadu, India 29-30, October, 2020

#### Keynote Speakers



**Dr. AHMED ZOBAA**Brunel University London, United Kingdom



Dr. NOOR IZZRI BIN ABDUL WAHAB Universiti Putra, Malaysia



**Dr.JAHANGIR HOSSAIN**School of Electrical and Data Engineering
University of Technology Sydney



**Dr. MOHAN KOLHE**University of Agder, Norway



**Dr. RAMESH BANSAL**University of Sharjah, Sharjah, UAE



Dr. VIVEK P K
Ibra College of Technology,
University of Technology and Applied
Science, Sultanate of Oman

#### **About VIT**

Founded in 1984, VIT has made a mark in the field of higher education in India imparting quality education in a multicultural ambience, intertwined with extensive applicationoriented research. VIT was established with the aim to provide quality higher education on par with International Standards. It persistently seeks and adopts innovative methods to improve the quality of higher education on a consistent basis. VIT was established by well-known educationalist and former parliamentarian, Dr. G. Viswanathan, Founder and Chancellor, a visionary who transformed VIT into a center of excellence in higher technical education. Govt. of India recognized VIT as an Institution of Eminence (IoE). ARIIA, Govt. of India recognized VIT as a No. 1 Private University for Innovation. MHRD, Govt of India ranked VIT as No.18 among the Engineering Institutions (NIRF-2019 ranking). VIT Chennai is ably spearheaded by Dr. Sekar Viswanathan, Vice President, Dr.Sandhya Pentareddy, Executive Director, Dr. Anand A. Samuel, Vice Chancellor and Dr. V. S. Kanchana Bhaaskaran, Pro-Vice Chancellor. The focus is:

- To maximize the Industrial connectivity
- To create Centers of Excellence in contemporary areas of research.
- To enrich technological and managerial human capital nurtured in a multicultural ambience.
- To provide a common platform for the agglomeration of ideas of personnel from various walks of life for learning enrichment.
- To create opportunities and exploit the available resources to benefit industry/society.
- To encourage participation in the national agenda of knowledge building.
- To foster international collaborations for mutual benefit in areas of research.

#### About School of Electrical Engineering (SELECT)

In VIT Chennai, the School of Electrical Engineering (SELECT) was established in the year 2010. Since the inception of the institute, the department developed the state of art infrastructure for teaching and research. To mention, Smart Grid lab is unique of its kind in the country. The school has highly qualified and experienced faculty. The school offers B.Tech program in Electrical and Electronics Engineering, and Ph.D program. There are four major research groups: Power Systems, Power Electronics, Control & Instrumentation and Electrical Machines & Drives. The research findings of these groups are published in several peer reviewed International Journals with high impact factor. The school has always endeavored to contribute significantly to the growth of technical education. The school has organized several workshops, seminars and guest lectures for the benefit of faculty, students and research scholars of educational institutions in and around the region. The School has also signed MoU with various industries for collaborative works. Eminent professors from reputed Indian and Foreign Universities share their expertise for the benefit of the students.

#### About the conference

The main objective of this VIT-CES-RES 2020 is to provide a virtual platform for the researchers, academicians and industries to exhibit their research outcomes, share their new innovative ideas in their specialization. The present world is looking for an alternative to the conventional fossil fuels, which can be implemented by the integration of renewable energy sources. As the renewable sources are intermittent, the energy is to be stored in energy storage systems to provide reliable power to the consumers. The controllers play a vital role in providing the stable power output to the loads, even though there is variation in the source and the load. Smart grid system is a self-sufficient one based on the digital automation technology to monitor, control and provide the solutions to the utilities.

To reduce the carbon dioxide gas emission from the motor vehicles and to save mother nature, the electric vehicles are becoming more attractive now. To bring awareness among the people about the energy conservation and alternative energy substitute, this conference forum summons the researchers in these thrust areas to share their expertise and gain knowledge. The main area includes controller, Electric vehicle, Smart grid, Renewable Energy Sources and Energy Storage Systems.

#### Call for papers for the conference presentation

We invite the papers in the following areas, but not limited to:

- Power System Analysis
- Optimization techniques
- Renewable Energy Sources
- Energy Storage Systems
- Control Techniques in Microgrid
- Power Electronic Interfacing for Hybrid Microgrid
- Smart grid Technology
- Distributed Generation
- Grid Integration of the distributed sources
- Electric Vehicles
- Wireless charging methods
- Artificial Intelligence
- Machine learning
- Cyber Physical Systems
- Industrial Automation
- Power Quality

#### Publication

All accepted and presented papers will be published in the conference proceedings. Selected good quality papers will be published in Scopus Indexed Publication with additional payment after peer review.

#### **Registration Fee**

For paper presentation : Rs.750 / paper For conference participation : Rs.300 / participant

For Scopus Indexed Publication: Rs.4500

(Exclusive of Taxes) /paper

Presentation Platform : Zoom

All original and unpublished papers must be sent for the conference presentation. The papers should be in word format, Times new Roman font with 12 size, single column with single spacing and minimum of 6 pages. The similarity in the papers should be less than 20%. The papers should be sent to vitcesres@gmail.com

#### **Important Dates:**

Paper Submission deadline : 10/10/2020
Paper Acceptance date : 15/10/2020
Registration starting date : 17/10/2020
Registration closing date : 20/10/2020

#### **Organizers**

Dr.T.Deepa

Associate Professor,

School of Electrical Engineering Vellore Institute of Technology Chennai.

deepa.t@vit.ac.in, +919884168409

Dr.S.Angalaeswari Assistant Professor,

School of Electrical Engineering Vellore Institute of Technology

Chennai.

angalaeswari.s@vit.ac.in, +919841812993