

**VIT**Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Virtual International Technical Conference on “Control in Electric Vehicles and Smart Grid with Renewable Energy Synergies for Sustainable Development”

VIT-CES-RES 2022

Organised by
School of Electrical Engineering (SELECT)
Vellore Institute of Technology (VIT) Chennai, TamilNadu, India
28th - 29th October 2022

About VIT

VIT for the past 36 years has made a mark in the field of higher education in India imparting quality education in a multicultural ambience, intertwined with extensive application-oriented research. VIT was established with an aim to providing 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 a 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.12 among the Engineering Institutions (NIRF-2021 ranking). VIT has been accredited as A++ grade by NAAC. VIT Chennai is ably spearheaded by Vice Presidents Mr. Sankar Viswanathan, Dr. Sekar Viswanathan, Mr. G. V. Selvam, Vice-Chancellor Dr. Rambabu Kodali, and Pro- Vice-Chancellor Dr. V. S. Kanchana Bhaaskaran. They share in the mission to make VIT a global center towards academic and research excellence. 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 benefits in areas of research

About School of Electrical Engineering (SELECT)

At VIT Chennai, the School of Electrical Engineering (SELECT) was established in 2010. Since the inception of the institute, the department has developed the state of art infrastructure for teaching and research. Smart Grid lab at VIT is unique of its kind in the country. The school has highly qualified and experienced faculty members. The school offers B.Tech. and Ph.D. programmes in Electrical and Electronics Engineering. 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 members, students and research scholars of educational institutions in and around the region. The school has also signed MoUs with various industries for collaborative working. Eminent professors from reputed Indian and foreign universities share their expertise for the benefit of the students. School of Electrical Engineering has attained the top 251-300 position of QS World Rankings by Subject in 2022 and attained 8th rank in national level.

About the conference

The main objective of VIT-CES-RES Conference 2022 is to provide a virtual platform for the researchers, academicians and industries to exhibit their research outcomes and innovative ideas in specialized fields. The present world is looking for feasible alternatives to conventional fossil fuels. Integrating renewable energy sources with the existing grid has proved to be a viable solution. As the renewable sources are inherently intermittent, energy storage systems are essential to provide reliable power to the consumers. The controllers play a vital role in providing the stable power output to the loads by reducing the variations between the expected and actual parameters. Smart grid is a promising and self-sufficient system which is based on digital automation technologies to monitor, control & provide effective solutions to the utilities and consumers. Now-a-days, to reduce the carbon dioxide gas emission from the motor vehicles and to save mother nature, the electric vehicles are designed to be more practical. This conference aims for motivating researchers in these thrust areas to share their expertise and gain knowledge, besides creating awareness among the people about the energy conservation and alternative energy resources and their utilization. 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 the content areas are not limited to:

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| ❖ Smart Grid Technology | ❖ Renewable Energy Sources | ❖ Industrial Automation |
| ❖ Electric Vehicles | ❖ Energy Storage Systems | ❖ Power Quality |
| ❖ Wireless charging methods | ❖ Control Techniques in Microgrid | ❖ Materials Processing and Characterization |
| ❖ Artificial Intelligence | ❖ Power System Analysis | ❖ Sustainable Environment |
| ❖ Machine Learning | ❖ Optimization Techniques | ❖ Battery management systems |
| ❖ Cyber Physical Systems | ❖ Power Electronic Interfacing for Hybrid Microgrid | ❖ Electric Vehicle Routing Problems |
| ❖ Distributed Generation | ❖ Grid Integration of the Distributed Sources | |

Publication

All the accepted and presented papers will be published in the conference proceedings and published as book with ISBN number. Selected good quality papers will be published in Scopus Indexed Publication (Book Chapter) after peer review process. Acceptance of the paper for conference presentation will not guarantee for the book chapter publication.

Registration Fee

For paper presentation : Rs.2000/paper
For conference participation : Rs.750/participant
Presentation Platform : Zoom

All original and unpublished papers are invited 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 10%. The papers are expected to reach the mail id vitcesres@gmail.com

Important Dates:

Paper submission deadline : 10/09/2022
Paper acceptance date : 30/09/2022
Registration starting date : 01/10/2022
Registration closing date : 20/10/2022

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Keynote Speakers



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