



(Accredited with 'A+' Grade by NAAC)

Rashtriya Uchcharat Shiksha Abhiyan (RUSA) 2.0
Sponsored
NATIONAL WORKSHOP
On

Trends and Issues in the Control of Converter Interfaces for Grid Connected Solar PV Systems

28-01-2023

Organized by

Department of Electrical Engineering
(DST-FIST SPONSORED AND ACCREDITED BY NBA)

&

CENTRE FOR RENEWABLE ENERGY
Faculty of Engineering & Technology
Annamalai University
Annamalai Nagar – 608 002
Chidambaram, Tamilnadu

Organising Committee

Chief Patron
Prof.Dr.RM.KATHIRESAN,Ph.D.,D.Sc.,
Vice-Chancellor
Annamalai University

Patron
Dr.K.SEETHARAMAN,Ph.D.,
Registrar i/c
Annamalai University

President
Dr.A.MURUGAPPAN,Ph.D.,
Dean,FEAT
Annamalai University

Convener
Dr.M.RAMASWAMY
Professor & Head
Department of Electrical Engineering
&
Director, Centre for Renewable Energy, FEAT

Coordinators
Dr.M.MOHAMED THAMEEM ANSARI
Professor in Electrical Engineering
Dr.G.BALAMURUGAN
Professor in Electrical Engineering
Dr.A.EZHILARASI
Associate Professor in Electrical Engineering
Annamalai University

ADDRESS FOR COMMUNICATION
Dr.M.MOHAMED THAMEEM ANSARI
Professor
Department of Electrical Engineering
Faculty of Engineering & Technology
Annamalai University
Annamalainagar 608002
Chidambaram, Tamilnadu
Mobile: 9894795210
Email: auceeseinar@gmail.com



(Accredited with 'A+' Grade by NAAC)

DEPARTMENT OF ELECTRICAL
ENGINEERING

RUSA 2.0 SPONSORED NATIONAL
WORKSHOP
On

**Trends and Issues in the Control of
Converter Interfaces for Grid Connected
Solar PV Systems**

28-01-2023

REGISTRATION FORM

Name :
Class :
Gender : Male / Female
Department :
Institution Address :
Address for Communication:
Contact Number :
E-mail :
Accommodation required : Yes / No
Details of Registration Fee
Amount : DD No:
Date : Bank Name:

Place:

Date :

Signature

ABOUT ANNAMALAI UNIVERSITY

In the early 1920s Rajah Sir S.R.M. Annamalai Chettiar founded Sri Minakshi College, Sri Minakshi Tamil College and Sri Minakshi Sanskrit College at Chidambaram. In 1928, Rajah Sir S.R.M. Annamalai Chettiar agreed with the local Government to handover the above said institution for establishing a University. Thus, on 01.01.1929 Annamalai University was established as per Annamalai University Act 1928 (Tamil Nadu Act 1 of 1929). One of the most significant developments is the enactment of the Annamalai University Act, 2013 (Tamil Nadu Act 20 of 2013), which has come into force from September 25, 2013. Annamalai University is accredited with 'A+' Grade by NAAC in 2022. In 2020, NIRF (National Institutional Ranking Framework) of the Ministry of Human Resource Development, Government of India ranked Annamalai University, category wise as 101-150 band (overall), 12th (Pharmacy) and 35th (Medical). In 2021, Times Higher Education World University ranking placed Annamalai University at 1000+ (overall), 601 (clinical and health subjects), 801 -1000 band (Engineering Sciences) and 1000+ (Physical Sciences). In 2021, U.K. based Quacquarelli Symonds (QS) company has placed Annamalai University at 301 - 350 band (Asia) and 39 (India). In 2019, Centre for Science and Technology studies of Leiden University in Netherlands (CWTS), ranked Annamalai University as 23rd (number of publications) and 7th (frequency of citation). In 2019, Scimago, a research group working on scientific influences in University of Granada, Madrid in Spain ranked Annamalai University as 29th (India) and 9th (Tamilnadu). Annamalai University is one of the largest unitary, teaching and residential Universities in Southern Asia comprising of 10 Faculties and 55 Departments of study. This University has played a pivotal role in providing access to higher education to thousands of youth cutting across the social spectrum, especially from economically and socially disadvantaged classes. In this respect, this University's service to the nation is tremendous.

ABOUT THE DEPARTMENT

The Department of Electrical Engineering was established in the year 1945 under the Faculty of Engineering and Technology, and is well known for providing quality technical education to the students through Undergraduate, Postgraduate and Doctoral programs under Full-time, Part-time and External streams.

The Department comprises of 27 qualified and experienced teaching faculties; 25 of them possessing Ph.D. Degree and have proven record of meritorious accomplishments to their credit.

The Department conducts short-term programs, workshops, national and international conferences regularly with a view to provide a platform for exposing the contributions made by researchers. The Department organizes students' level technical symposium, intradepartmental sports meet and extra-curricular activities every year for bringing out their knowledge in the emerging areas, promoting the technical skills besides patronizing their interest in sports and cultural arenas. It arranges personality development and counseling classes to the students every week to shape their character.

This Department has obtained the following distinctions

- ❖ DST FIST Sponsorship
- ❖ OBAMA-SINGH 21st century knowledge initiative INDO-US award
- ❖ Visvesvaraya Ph.D scheme
- ❖ TANSHI and TANII Projects

VISION OF THE DEPARTMENT

To develop the Department into a Centre of Excellence with a perspective to provide quality education and skill-based training with state of the art technologies to the students, thereby enabling them to become achievers and contributors to the Industry, Society and Nation together with a sense of commitment to the profession.

CENTRE FOR RENEWABLE ENERGY

The Centre for Renewable Energy (CRE) established in the year 2017 is one among the eight centres in the Faculty of Engineering & Technology. It envisages planning, coordinating, demonstrating and undertaking extension activities in popularizing the need and effectiveness of renewable energy. The focus endeavours to provide advanced knowledge and know-how to the industry in the area of renewable energy through short term training and continuing education programmes.

OBJECTIVES OF THE SEMINAR

The nation appears to confront with the challenges of aggregating energy crisis and the associated economic growth while being environmentally responsible. The country strives to meet the energy needs while being cognizant about climate change by advocating sustainable energy alternative to fossil fuels and adopting ambitious targets for reducing the greenhouse gas emissions through climate change policies. It engages for using renewable in electricity production to about 15% in 2016 and aims to increase the share to 40% by 2030.

The rural India offers cleaner forms of energy like solar at the decentralized level even though the key considerations facing the growth and development of PV include land scarcity and reduced interest on the research and development in the PV panel manufacturing technology.

The immediate consequences enumerate an investigate exercise of the trends and issues governing the exploitation of the available solar power. The major functions include interconnecting the PV panels in multiple configurations and allow them to operate at MPP. It further gathers the onus on the part of the power electronic converters to act as a charge controller for storage systems besides essaying as an interface between the dc output of the PV panel and the ac grid.

The primary attempt incites a focus on introducing the emerging architectures of solar PV system and emphasizing the significance of power converter technology. The next in line owes to

discuss on the issues relating to the topological choice of both dc-dc and dc-ac converters which become necessary to comply the successful transfer of the power at either ends.

The other major emphasis orients on the challenges in the control aspects of these converters for MPPT, stand alone and on-grid operation and explore better techniques for grid synchronization. It impinges to touch upon the influence of the high penetration of PV systems that demand additional reactive power support and efforts to prorogue on islanding detection.

RESOURCE PERSONS

Dr.B.Hariram Selvamurugan Satheesh
R&D Team Manager
ABB Global Industries and Services Private Ltd.,
Bengaluru

Sri.A.G.Vishal Anand
Principal Engineer
Bloom Energy(I) Private Ltd.,
Bengaluru

ELGIBILITY

Research scholars, Postgraduate and Undergraduate students from all branches of Engineering.

REGISTRATION

The participants are requested to register themselves by sending the duly filled in application form along with the registration fee in the form of a Demand Draft drawn in favour of The Registrar, Annamalai University, payable preferably through ICICI or Indian Bank, Annamalai Nagar. The Registration Fee is Rs.200/- (Rupees Two Hundred only) for all participants.

MAXIMUM NUMBER OF PARTICIPANTS

Sixty participants will be selected on first-come first-served basis

IMPORTANT DATES:

Registration last date : 20-01-2023
Intimation to participant : 23-01-2023
Confirmation of participation : 24-01-2023

GENERAL INFORMATION

The participant will not be paid any TA/DA. Accommodation and travelling expenses are to be borne by the participants or their respective institutes. Limited accommodation may be available at University Guest house/ Hostels by payment basis. A request for this need is to be made well in advance.