



# SATHYABAMA

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| Sl. No. | Title of the collaborative activity                                                                      | Name of the collaborating agency with contact details                                                                                    | Name of the participant                                                  | Year of collaboration | Duration | Nature of the activity            |
|---------|----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------|----------|-----------------------------------|
|         | Development of Regenerative Braking Concept for Electric Vehicle Enhanced with Bidirectional Converter   | International Journal of Power Electronics and Drive Systems (IJPEDS)                                                                    | M.Kavitha, V. Elanangai, S. Jayaprakash, V. Balasubramania n             | 2018                  |          | Research paper publication        |
|         | Performance Evaluation of Fuel Cell based High Efficient Multi Winding Coupled Inductor DC- DC Converter | Journal of Advanced Research in Dynamical and Control Systems (JARDCS)                                                                   | V. Balasubramania n, Jayarama Pradeep, M. Kavitha and V. Senthil Nayagam | 2018                  |          | Research paper publication        |
|         | Green energy based coupled inductor interleaved converter with MPPT technique for BLDC application       | International Journal of Power Electronics and Drive Systems (IJPEDS)                                                                    | Senthil Nayagam, V., Premalatha, L.                                      | 2018                  |          | Research paper publication        |
|         | A Survey on Harmonic Mitigation Technique in Power Systems                                               | 2018 International Conference on Intelligent Computing and Applications (ICICA) and Power, Circuit and Information Technologies (ICPCIT) | P.Abirami, Dr.C. N Ravi                                                  | 2018                  |          | <b>Research paper publication</b> |

|                                                                                                                                                                    |                                                                                                                        |                                                    |             |        |                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------|--------|-----------------------------------|
| Maximum Power Tracking for PV Array System Using Fuzzy Logic Controller                                                                                            | Advances in Intelligent Systems and Computing                                                                          | M. Pushpavalli and N. M. Jothi Swaroopan           | 2018        |        | <b>Research paper publication</b> |
| Performance analysis of hybrid photovoltaic/wind energy system using ky boost converter                                                                            | International Journal of Power Electronics and Drive Systems (IJPEDS)                                                  | M. Pushpavalli and N. M. Jothi Swaroopan           | 2019        |        | <b>Research paper publication</b> |
| Adaptive bacterial foraging algorithm to green energy supported non smooth dynamic power dispatch optimization                                                     | <i>Journal of Green Engineering</i>                                                                                    | <a href="#">Padmanabhan, B., Premalatha, L.</a>    | <b>2019</b> |        | Research paper publication        |
| IOT based Real Time Automation and Practice on Mini Project                                                                                                        | Mr.ChunChun Kumar, Managing Director Vedamrit Technology Solution Pvt Ltd, Chennai                                     | II Year 2018-2022<br>III Year 2017-2021            | 2019        | 3 days | Workshop                          |
| Significance of switchgear in real time applications                                                                                                               | Er.Subramanian, Manager- Training, L&T Ltd., STC, Coonoor.                                                             | III Year 2017-2021<br>IV Year 2016-2020            | 2019        | 1 day  | Guest lecture                     |
| Embedded systems TIVA C processor based IOT applications                                                                                                           | Mr.Raghuram, Proprietor, Manonmani Enterprises, Chennai                                                                | II year 2018-2022<br>III year 2017-2021            | 2019        | 2 days | Workshop                          |
| Solar Photovoltaic Technologies & Entrepreneurship development                                                                                                     | Mr.G.Rajaganesan, Chief Technical officer- Solar Initiatives, TATTI, Chennai.                                          | III Year 2017-2021<br>IV Year 2016-2020            | 2019        | 6 days | Training program                  |
| A statistical analysis in optimization of wind penetrated non convex dynamic power dispatch problem using different strategies of differential evolution algorithm | <a href="#">Journal of Ambient Intelligence and Humanized Computing</a><br><a href="#">this link is disabled, 2019</a> | Padmanabhan, B., Premalatha, L.                    | <b>2019</b> |        | <b>Research paper publication</b> |
| GSM entrenched intelligent phase changer                                                                                                                           | ICMEET 2K18) International Conference on Microelectronics, Electromagnetics and                                        | <a href="#">P.SIVAGAMI and Dr. HARIKRISHNA N.R</a> | 2019        |        | <b>Research paper publication</b> |

|  |                                                                                                             |                                                                                                                             |                                                   |                   |                               |                                           |
|--|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-------------------|-------------------------------|-------------------------------------------|
|  |                                                                                                             | Telecommunication on<br>FEB 2018/Springer<br>Conference/Lecture<br>Series                                                   |                                                   |                   |                               |                                           |
|  | Power Flow Control and Voltage<br>Profile Improvement Using HPFC<br>with Genetic Algorithm                  | 8th International Conference on<br>Computation of Power, Energy,<br>Information and<br>Communication, ICCPEIC<br>2019, 2019 | <a href="#">Murugan, A.,<br/>Ramakrishnan, V.</a> | 2019              |                               | <b>Research<br/>paper<br/>publication</b> |
|  | Soft Computing Technique of<br>Bridgeless SEPIC Converter for<br>PMBLDC Motor Drive                         | International Journal of Power<br>Electronics and Drive Systems<br>(IJPEDS)                                                 | Meena Devi R,<br>L. Premalatha                    | 2019              |                               | Research paper<br>publication             |
|  | Efficient figureconverter fed<br>PMBLDC motor using artificial<br>neural network                            | International journal of<br>electrical and Computer<br>Engineering                                                          | Meena devi<br>,Premalatha                         | 2019              |                               | Research paper<br>publication             |
|  | Modeling of HPFC controller using<br>multi - Machine power system with<br>acting as different control modes | International Journal of Recent<br>Technology and Engineering<br>(IJRTE)                                                    | Murugan, A.,<br>Ramakrishnan, V.                  | 2019              |                               | <b>Research<br/>paper<br/>publication</b> |
|  | Dr W.Abitha Memola                                                                                          | TNSCST                                                                                                                      | TNSCST                                            | 31-01-2019        | 3 days<br>national<br>seminar | 3 days<br>national<br>seminar             |
|  | <b>Dr.SundarSingh Jebaseelan</b>                                                                            | <b>DST</b>                                                                                                                  | <b>DST</b>                                        | <b>March 2018</b> | 5 days FDP                    | 5 days FDP                                |

# Development of Regenerative Braking Concept for Electric Vehicle Enhanced with Bidirectional Converter

*M. Kavitha, V. Elanangai, S. Jayaprakash, V. Balasubramanian*

## Abstract

Due to the increasing concern for environment protection and the uncertainty about oil reserves, nowadays electricity is playing a key role as an alternative energy source in the automotive sector. In this paper, non isolated bidirectional converter is used for electric vehicle application during regenerative braking process. During motoring operation, the converter supplies energy to motor through battery. In regenerative braking action, the converter supplies the available back emf to charge the battery. The recycled energy is effectively stored in the battery. The simulation is carried out in MATLAB/Simulink. The worthiness of simulation is illustrated experimentally by developing a prototype. The simulation and experimental results are presented in this paper.

## Performance Evaluation of Fuel Cell based High Efficient Multi Winding Coupled Inductor DC-DC Converter

**V. Balasubramanian, Jayarama Pradeep, M. Kavitha and V. Senthil  
Nayagam**

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### Abstract:

This paper deals about converting low voltage from fuel cell into high voltage efficiently using multi winding coupled inductor DC-DC Converter. A 60V of fuel cell output will be increased to 400V without approaching the high duty cycle of the switches hence lifetime of the switches are also improved. Moreover Capacitor based clamp circuit will recycle the leakage energy to improves the overall efficiency.

# Green Energy Based Coupled Inductor Interleaved Converter with MPPT Technique for BLDC Application

V. Senthil Nayagam<sup>1</sup>, L. Premalatha<sup>2</sup>

<sup>1</sup>Department of Electrical and Electronics Engineering, Sathyabama Institute of Science and Technology, India

<sup>2</sup>School of Electrical Engineering, Department of Electrical and Electronics Engineering, Vellore Institute of Technology (VIT), Chennai, India

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## Article Info

### Article history:

Received May 11, 2018

Revised Jul 31, 2018

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### Keyword:

MPPT

BLDC

High voltage gain

Interleaved coupled inductor

DC-DC converter

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## ABSTRACT

This paper presents a high step-up converter with combination of battery and solar energy source application. The proposed green energy source boosted by using coupled inductor interleaved converter. The coupled inductor and voltage double circuit can reach the high voltage gain without more stress on the converter circuit as well as much changes in duty cycle. The photo voltaic system maximum output is 12volts it can be varied by changes of irradiation level. The maximum output voltage is tracking by using MPPT and supplies to the coupled inductor interleaved boost converter. The MPPT working based on the P & O algorithm. The output level of the photo voltaic is high then the battery is charging as well as BLDC motor also being driven efficiently. Whenever the irradiation level will be low the output level of the photo voltaic is less than the battery will be charging and then the motor will running by battery power.

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## A Survey on Harmonic Mitigation Techniques in Power System

[P. Abirami](#), [Dr. C.N.Ravi](#)

[Abstract](#)

[Keywords](#)

[References](#)

[PDF](#)

### Abstract

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In recent years, one of the most frightening criteria in power system is the generation of harmonics, due to the advancement in power semiconductor devices. Today most of the commercial, residential and industrial loads include advanced semiconductor technology and the utility of these non-linear loads results in harmonics generation on consumer's premises. These harmonics plays a vital role in polluting the power quality of a distribution network by introducing losses which results in the failure of distribution side electrical equipment like transformer, protection, measuring devices, distribution feeders and so on. Hence to enhance the power quality, harmonic mitigation technique should be implemented in a distribution network. This paper surveys about the availability of various harmonic mitigation techniques with the analysis of its merits and demerits.

# Maximum Power Tracking for PV Array System Using Fuzzy Logic Controller

[M. Pushpavalli](#)  & [N. M. Jothi Swaroopan](#)

Conference paper | [First Online: 09 September 2018](#)

**209** Accesses | **3** Citations

Part of the [Advances in Intelligent Systems and Computing](#) book series (AISC, volume 846)

## Abstract

This paper is to design by adapting the Perturbation and Observation (P&O) algorithm of Maximum Power Point Tracking (MPPT) and intelligent controller to vary the duty ratio of KY boost converter using Photo Voltaic (PV) array as an energy input. This PV system extracts the energy from the sun, after the power converter module energy is fed to the battery for storage. The KY boost converter is used to boost the voltage to a certain level. The switches mainly work on MPPT conditions. This converter has higher voltage conversion ratio, low ripple, and continuous current. This combination makes the integration work perfectly under any transient disturbance condition occurs in the input side and it stays connected to the battery through charge controller. In the charge controller unit, PI controller is used to regulate the battery parameters. MPPT method-based Fuzzy Logic Controller (FLC) is implemented for PV panel by change in irradiance from (600 to 1000 W/M<sup>2</sup>) with constant temperature at 25 °C.

# Performance analysis of hybrid photovoltaic/wind energy system using KY boost converter

*Murugan Pushpavalli, N.M Jothi Swaroopan*

## Abstract

Nowadays tremendous increase in renewable energy technologies available in abounding nature energy extracted from sun, wind etc. This Proposed topology gathered maximum power using multi input ky boost converters for hybrid energy. This hybrid topology operates mainly delivered the power from renewable energy sources solar/wind to dc bus. In the absence of any one source, wind or solar supplies power to the dc bus. Without any renewable energy sources battery deliver the power to dc bus. An inverter type module convert the power from dc bus to ac grid. In this paper effectiveness of hybrid renewable energy is simulated through MATLAB/SIMULINK

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# Adaptive Bacterial Foraging Algorithm to Green Energy Supported Non Smooth Dynamic Power Dispatch Optimization

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<sup>1</sup>B.Padmanabhan, <sup>2</sup>L.Premalatha

<sup>1</sup>Research Scholar, Department of Electrical and Electronics Engineering, Sathyabama Institute of Science and Technology, Chennai, India.

E-mail: padmanabhan.eee@sathyabama.ac.in

<sup>2</sup>Professor, School of Electrical Engineering, Vellore Institute of Technology, Chennai, India. E-mail: premaprak@yahoo.com

## Abstract

This article focuses on the importance of green energy support in the optimization of conventional power generation by satisfying the variable consumer demand. The proposed Adaptive Bacterial Foraging Algorithm (ABFA) is approached to solve a Dynamic Economic Load Dispatch (DELD) in thermal units including non-linearity such as Rectified sinusoidal effect, Ramp rate limits and prohibited operating zones. In order to make the problem more realistic the available wind power support is taken into account for the thermal power generation in order to satisfy the demand. The steps of ABFA is observed from the the natural selection of strategies in favoring the successful foraging and eliminating the poor foraging. To validate the effectiveness of the results obtained from the pro-posed method, two case studies with 13 unit and 10 unit system data is optimized for variable power demand for 24 hours including the wind support and compared with the results from the literature

Department of Electrical and Electronics organized a Workshop and Certification course on "IOT based Real Time Automation and Practice on Mini Project" from 05th July to 7th July, 2019 for Second and Third Year School of Electrical and Electronics Students by the Coordinators Dr. V. Sivachidambaranathan, Dr. S. Jayaprakash, Dr. S. Radhika, Mrs. M. Kavitha Mr. V. Senthil Nayagam in associaton with Vedamrit Technology Solution Pvt Ltd, Chennai. From the session, students have gained full understanding of IOT based real time Automation and they can construct

### **Workshop-IOT based Real Time Automation and Practice on Mini Project**



**Significance of switchgear in real time applications**  
**Er.Subramanian, Manager-Training, L&T Ltd., STC, Coonoor.**



## SCHOOL OF ELECTRICAL AND ELECTRONICS ENGINEERING

### STUDENT'S CIRCULAR

Ref: SU/EEE/Workshop/Circular/2020

Date : 25.01.2020

We have planned to organize six days workshop on Embedded system TIVA C series processor based IOT application on 29.1.2020 to 31.1.2020 (phase I).

**Time** : 8.30 AM to 3.00 PM  
**Venue** : EEE(Embedded System Lab)

- The workshop is open for the students of School of Electrical and Electronics
- Registration fee : Rs. 450(Max:20)

Interested students are asked to register their names with workshop coordinator Mrs. R. Meena Devi, Assistant Professor, Department of Electrical and Electronics Engineering on or before 28.01.2020.

  
Dean/Student affairs



SINCE 1985

## TAMILNADU ADVANCED TECHNICAL TRAINING INSTITUTE

### Registered Office:

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Tel : +91- 44- 28527579 / 28414736  
E-mail : solartraining@tatti.in

www.tatti.in

**SolarEnergy**  
Institute

2<sup>nd</sup> July 2019

To,

The Head of the Department,  
Dept. of EEE,  
Sathyabama University, Chennai.

Subject: Proposal for conducting 5 days workshop on Solar Photovoltaic Technologies & Entrepreneurship development for your university students – reg.

Dear Sir,

We thank you for your interest shown towards our Institution to offer Solar PV & Entrepreneurship training for your university students. Following to our discussions on 21<sup>st</sup> June 2019, hereby sending the commercial aspects of the training for your further proceedings. The technical aspects are attached for your reference.

| Venue: Sathyabama University<br>Timings: 8.30AM-3.30PM<br>Commitment from SBU – Min 30 Students |                                                                  | Name of the Training: Workshop on Solar PV & Entrepreneurship.<br>No. of Students/Batch: 30 |
|-------------------------------------------------------------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Sl.No                                                                                           | Description                                                      | Cost per candidate (INR)                                                                    |
| 1                                                                                               | Training cost for 5 days programme<br>(Minimum of 60 candidates) | Rs.1,100                                                                                    |
| 2                                                                                               | Assessment fees (optional)*                                      | Rs.1,200                                                                                    |
| 3                                                                                               | Total Training cost/ Student                                     | Rs.2,300*                                                                                   |

\* Any other Taxes applicable as Extra at actuals.

Note: The cost of Travel, Food & Accommodation is not included in the above offer. The above arrangements & costs should be taken care by the Sathyabama University from the date of departure from Chennai to the date of Arrival at Chennai (if outstation).

The above training proposal was designed as per the syllabus suggested by sector skills. We request you to facilitate the proposed training programme from Monday to Friday to plan for a site visit and a training group activity on Saturday. We request you to confirm the training dates as early as possible.

The travel itinerary has to be planned well in advance according to the mutual convenience. We express our sincere gratitude for valuing our institution during scrutiny and we assure our best services at all time. We assure our full support and co-ordination in all the future steps of your training endeavors.

Thanks & Regards,

G.Rajaganesan,

Chief Technical Officer - Solar Training

# A statistical analysis in optimization of wind penetrated non convex dynamic power dispatch problem using different strategies of differential evolution algorithm

B. Padmanabhan<sup>1</sup>  · L. Premalatha<sup>2</sup>

Received: 18 March 2019 / Accepted: 22 October 2019

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## Abstract

Economy plays a major role in almost all areas of engineering and hence it is necessary to plan for the proper allocation of generating units for the variable power demand. It is also important to look forward to the renewable energy support for satisfying the power demand which is more economical. Here in this article proposed a statistical analysis of Dynamic power dispatch considering wind power penetration under uncertainties. In order to frame the problem to be more realistic, various non smooth constraints like valve point loading, Ramp Rate limits and Prohibited Operating Zones were included. The optimization is performed using various strategies of Differential Evolution Algorithm and the validation of results was achieved by comparing the results with other methods for 10 and 15 unit system.

# GSM Entrenched Intelligent Phase Changer

[P. Sivagami](#) & [R. Harikrishnan](#) 

Conference paper | [First Online: 03 November 2018](#)

**668** Accesses

Part of the [Lecture Notes in Electrical Engineering](#) book series (LNEE, volume 521)

## Abstract

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Generally, the power fluctuations in the distribution system and its percentage of occurrence will be higher in one or two phases compared to all the three phases. Thus, in any commercial or domestic power supply system where three phases are available, it is advisable to have an automatic changeover to the healthier phase for the single-phase critical loads. A microcontroller-based intelligent circuit is designed by using embedded system technology, to monitor and compare the voltage, frequency, and current with the predefined reference values. A single-phase critical load will be operational in any one of the phases. If the parameters monitored fall below or above the reference value in the loaded phase, then the load will automatically switch over to the next available healthier phase. A fault message will be sent to the intended recipients through SMS using GSM technology. An LCD display will show all the values including healthier also. Provision for an inverter backup is provided to give continuity of power to the critical load if in case all the three phases have fluctuations or power failures. Options are provided to control the phase changer by an authorized person through SMS also. Further, the under or overvoltage can be automatically controlled to a stable reference voltage level by means of SMS.

# Power Flow Control and Voltage Profile Improvement Using HPFC with Genetic Algorithm

Publisher: **IEEE**

[Cite This](#)

[PDF](#)

A. Murugan ; V. RamaKrishnan [All Authors](#)

1

Paper  
Citation

40

Full  
Text Views



## Abstract

### Document Sections

» Nomenclature

» Symbols:

I. Introduction

II. Power Flow System

III. UPFC Structure

Show Full Outline ▾

## Abstract:

Power flow control is the critical factor affecting power transmission system. In power transmission line the Hybrid Power Flow Controller (HPFC) is applied for standardize the power flow control. Then the results presented using UPFC and HPFC equations. So these equations of HPFC power balance equations of network are united in to only one set of non-linear algebraic equations. The UPFC and HPFC are calculated primarily with the help of Neuton Raphson Method. Even though this kind of controller is a very expensive controller it provides about its arrangement. The performance evaluation of various FACTS controllers in a wide selection of working and blame circumstances has been completed. Then UPFC has a better quality power flow control attribute when contrasted or balanced with different FACTS controllers. The distinctive HPFC designs intended by the specialist have been executed on a MMIB framework. A power system of UPFC and HPFC are produced utilizing limitation conditions and target capacities. Here ideal situation of UPFC and HPFC are acquired by utilizing Genetic Algorithm (GA) based approach. A power system model of UPFC and

# Soft Computing Technique of Bridgeless SEPIC Converter for PMBLDC Motor Drive

Meena Devi R<sup>1</sup>, L. Premalatha<sup>2</sup>

<sup>1</sup>Department of Electrical and Electronic Engineering, Sathyabama Institute of Science and Technology, Chennai, India

<sup>2</sup>School of Electrical Engineering, Vellore Institute of Technology (VIT), Chennai, India

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## Article Info

### *Article history:*

Received Apr 3, 2018

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### *Keyword:*

PMBLDC

PFC

SEPIC

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## ABSTRACT

A novel speed controller for the three-phase Brushless DC (BLDC) Motor Drive is proposed using a closed-loop AC-DC Bridgeless SEPIC Converter in continuous Conduction mode. This design proposes a single stage AC-DC converter with ON and OFF state equivalent circuits for 400W, 48V at 2450 rpm PMBLDC motor drive. The Fuzzy based voltage and current controlling method is proposed in this design. The voltage controlling method is used to control the speed for BLDC motor and the current controlling method is used to improve the power factor in AC supply. The speed of BLDC motor is observed with voltage disturbance and the constant motor speed is maintained. The proposed control method on SEPIC converter fed PMBLDC motor drive is modeled by Simulink/Matlab.

# Efficient bridgeless SEPIC converter fed PMLD motor using artificial neural network

*Meena Devi R., L. Premalatha*

## Abstract

In this paper, a new design of Bridgeless SEPIC (Single Ended Primary Inductance converter) with Artificial neural network (ANN) fed PMLD Motor drive is proposed to improve Power Factor. The proposed converter has single switching device of MOSFET, so the switching losses is reduced. ANN is used to achieve the higher power factor and fixed dc link voltage. Also the ANN methodology the time taken for computation is less since there is no mathematical model. The output voltage depends on the switching frequency of the MOSFET. The BLSEPIC act as a buck operation in continuous conduction mode. Detailed converter analysis, equivalent circuit and closed-loop analysis are presented for 36V, 120W, 1500rpm BLDC Motor drive. This proposed converter produces low conduction loss, low total harmonic reduction, low settling time and high power factor reaching near-unity. All the simulation work is verified with MATLAB – Simulink.

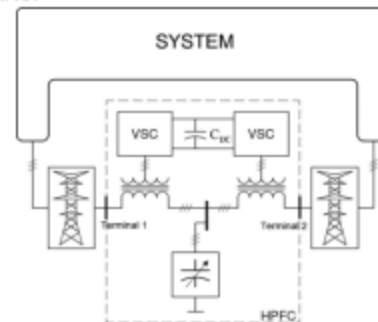
# Modeling of HPFC Controller Using Multi - Machine Power System with Acting as Different Control Modes

A. Murugan, V. Ramakrishnan

**Abstract**— Mainly this paper is focusing about the power flow model of the HPFC created for insistent state investigations of intensity frameworks with the help of different control system model. Then numerical investigations exhibited here are completed utilizing a two-area network model. This HPFC controller is using for controlling Real Power, Voltage control, Power Changes from the system parameters. In FACTS device the HPFC controller has been multitallented to its capability control of Real and Reactive Power. Also HPFC controller modeling has been done with the help of mathematical equations for different modes of operation as per kundur 2 area 4 machine 12 bus system. With the help of 2 area power system model is shown about PVV, PQQ, shunt Susceptance and Impedance control of system model. Each and every method is showing different kind of performance including of HPFC Controller. For better performance of power system only has been used the HPFC Controllers comparing other Controllers in FACTS Device. These and all is considering about different modes of operation. With the help of MATLAB Software different modes of modeling has been simulated. Transmission frameworks are normally substantial and complex electrical circuits consisting of several age/utilization hubs and a large number of transmission lines. Controlling the flow of intensity between the hubs in such complex circuits is a testing issue. It is additionally confused by the need to control the voltage at every hub to inside a little resistance of the appraised esteem. The strategy is approved by multi-machine-9 bus system utilizing MATLAB content record.

**Keywords**— FACTS, UPFC, HPFC, Power Flow, Voltage Magnitude, PVV, PQQ, Modeling of HPFC.

Previously mechanical relay, contactors etc are using to control the power flow in transmission line for security of overhead transmission system. The shunt converter and series converter of UPFC is controlling of synchronizing with the help of active and Reactive Power. This control approach is uses for achieving power flow control and damping improvement of a multi machine power system. As well as the HPFC controller internal variables are characterized in this system and it allowing exact devices limit. Along with this HPFC Controller is includes the different multiple control Modes.



**Fig.1: Structure of HPFC System**

The system point of view HPFC controller circuit model has been shown. It shows that two series Voltage sources correspond to the important components of the controller because of its have a variable susceptance. Along with volt-



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**DR. R. SRINIVASAN**, M.Sc., Ph.D., F.I.C.S., M.A.C.S. (USA),  
Member Secretary

Ref: TNSCST/PFA/SSW/VR/2019 5701

31.01.2019

To  
The Principal  
Sathyabama Institute of Science and Technology  
Jeppiar Nagar, Rajiv Gandhi Salai  
Chennai-119

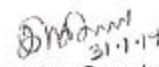
Sir/Madam,

Sub: Partial Financial Assistance – Seminar / Symposia / Workshop –  
"National Level Seminar on Opportunities and Challenges of  
Renewable Energy in Smart grid system" – Chennai – 31.10.2018-  
02.11.2018 - Release of Grant – Reg.

Ref: Approval letter dt. 02.11.2018

With reference to the above, please find enclosed herewith a  
Cheque (No.794864 dt.25.01.2019) for Rs.25000/- (Rupees Twenty five thousand  
only) sanctioned towards the above programme to Dr.W.Abitha Memala  
Dept. of EEE, Sathyabama Institute of Science and Technology, Jeppiar Nagar,  
Rajiv Gandhi Salai, Chennai-119. A Stamped receipt may be sent in  
acknowledgement.

Yours faithfully,

  
31.1.19  
Member Secretary

FILE NO. SSY/2017/001796  
**SCIENCE & ENGINEERING RESEARCH BOARD(SERB)**  
(a statutory body of the Department of Science & Technology, government of India)

5 & 5A, Lower Ground Floor  
Vasant Square Mall  
Plot No. A, Community Centre  
Sector-B, Pocket-5, Vasant Kunj  
New Delhi-110070

Dated: 12-Mar-2018

**ORDER**

Subject: Financial assistance for the organizing National Seminar on "Five Days National Level Seminar on "Integration of Green Energy with Smart Grid through IOT" (IGESGIOT - 2018)" by Dr. SD Sundarsingh Jebaseelan, Sathyabama Institute Of Science And Technology, Sathyabama University, Jeppiar Nagar, Rajiv Gandhi Road, Chennai, Chennai, Tamil Nadu-600119 being held from 11-Jun-2018 to 15-Jun-2018 (5 days).

Sanction of Science and Engineering Research Board (SERB) is hereby accorded to the above mentioned project at a total cost of Rs. 100000/- (Rs. One Lakh Only) to Sathyabama Institute Of Science And Technology, Sathyabama University, Jeppiar Nagar, Rajiv Gandhi Road, Chennai, Chennai, Tamil Nadu-600119 during the financial year 2017-2018 to meet the expenses related to TA/DA to Young and Senior Indian Scientists, Pre-conference printing and Contingencies in connection with the above event.

2. The amount of Rs. 100000/- (Rs. One Lakh Only) will be drawn by Under Secretary, SERB and disbursed by the means of Cheque or Electronic Fund Transfer (NEFT/RTGS) as beneficiary's Bank Details given below.

|                        |                                                                                                                               |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Account Name           | Sathyabama Institute of Science and Technology Research                                                                       |
| Account Number         | 6089858032                                                                                                                    |
| Bank Name & Branch     | Indain Bank Indian BankSathyabama Institute of Science and Technology BranchJeppiaar Nagar, Rajiv Gandhi SalaiChennai -600119 |
| IFSC/RTGS Code         | IDIB000S201                                                                                                                   |
| Email id of A/C Holder | provoc@sathyabama.ac.in                                                                                                       |
| Email id of PI         | sundarjeba@yahoo.co.in                                                                                                        |

to Registrar, Sathyabama Institute Of Science And Technology, Sathyabama University, Jeppiar Nagar, Rajiv Gandhi Road, Chennai

3. The expenditure involved is debit to Fund for Science & Engineering Research (FSER)  
This release is being made under Seminar/Symposia. (Internal Committee)

4. The Sanction has been issued with the approval of competent authority under delegated powers and vide sanction number to Sathyabama Institute Of Science And Technology, Sathyabama University, Jeppiar Nagar, Rajiv Gandhi Road, Chennai with the approval of the competent authority under delegated powers on 08 March, 2018 and vide Diary No. SERB/F/10067/2017-2018 dated 09 March, 2018

5. As per Rule 211(1) of GFRs, the accounts of the Grantee Institution shall be open to inspection by the sanctioning authority/audit whenever the institute is called upon to do so.

6. It is mandatory that the grantee institution is required to submit to this office, audited Statement of Income-Expenditure, Utilization Certificate (in duplicate as per prescribed format) and brief report of above event (max. 04 pages) within three months after the date of completion. .

7. The balance amount, if any, may be returned through DD in favor of "Fund for Science & Engineering Research" payable at New Delhi.