

# Department of Electrical & Electronics Engineering Sree Vidyanikethan Engineering College

In Collaboration with



## **All India Council for Technical Education**

## Report

On

# A Two Week AICTE Sponsored National level Faculty Development Program

On

Advances in Power systems Operation, Protection & Control

(15 -27, June, 2015)

The two week AICTE Sponsored national level faculty development program on "Advances in Power systems Operation, Protection & Control" was organized by the Department of Electrical & Electronics Engineering, Sree Vidyanikethan Engineering College from 15<sup>th</sup> June to 27<sup>th</sup> June, 2015. The FDP programme received an overwhelming response with 60 participants from various states like Andhra Pradesh, Telangana, Tamil nadu and Karnataka. The FDP aims to provide opportunities to faculty members, and research scholars to enrich their teaching skill and research in the field of power systems. The Programme also planned to develop the knowledge of participants for simulation with advanced softwares in the field of Power systems engineering for inculcating learning values in students.

The two week AICTE Sponsored national level faculty development program was inaugurated by the following eminent personalities on 15<sup>th</sup> June, 2015.

- 1. Prof.T.Gopalarao, Special officer, Sree Vidyanikethan Educational trust.
- 2. Dr.P.C.Krishnamachary, Principal, Sree Vidyanikethan Engineering College.
- 3. Dr.D.V.S.Bhagavanulu, Director, Sree Vidyanikethan Engineering College.
- 4. Er. Vikram, Divisional Engineer, AP Transco, Tirupati.









Dr.T.Nageswara Prasad, Coordinator of the FDP welcomed all the dignitaries and participants. In the welcome speech, Prof. S.Gopala Rao, Special officer highlighted the objectives of the faculty development program and requested the participants to disseminate the knowledge gained in such type of programs to their students. Dr.P.C.Krishnamachary, Principal and Dr.D.V.S.Bhagavanulu, Director of Sree Vidyanikethan Engineering College appreciated the Department of EEE for organizing such a program and welcomed all the enthusiastic participants. The chief guest of the inaugural program Er.K.Vikram, Divisional Engineer, AP Transco emphasized the benefits of such kind of ingenious activity. He accentuated the need of supplying electric power to consumers with good quality.

## **Technical Sessions:**

## 15-06-2015



Mr.K.Ekambaram, Engineer from POWERGRID, Bangalore has delivered a lecture on **Indian power scenario** & **Real time operation of Indian Grid**.



Er.Chalapathi, DE, AP Transco has delivered a lecture on **Integration of solar power to Electric Grid** on afternoon.



A filed visit was arranged to the solar plant which is located at Nagaiahgari Palli to explore the practical aspects in the construction and maintenance of the solar power plants on second session of after noon.



16-06-2015

Dr.E.Chandira sekaran, CIT, Coimbatore has delivered a series of lectures on **Energy** auditing and management & Power quality issues. He also expressed his consent to guide the participants to initiate consultancy services in their respective colleges.



Dr.B.Kalyan Kumar and Dr.Sriram Srinivas, Associate Professors from IITM, Chennai have delivered lectures on **Modeling and Analysis of Grid Connected wind Generation systems** and **Power Electronics for Power systems** respectively. In these sessions the participants were taught the fundamentals and advances in Wind power systems as well as some significant applications of power electronics in the field of Power systems engineering.



Dr.P.Ramana Reddy, Visiting Professor, SVEC has delivered a lecture on **Power systems Security**. The participants could learn the concepts of security assessment in power systems and contingency analysis.



Dr.T.Gowri Manohar, Associate Professor, SV University college of Engineering, Tirupati, has delivered a lecture on **Restructuring of Power Systems.** 



Dr.K.Vaisakh, Professor, EEE, Andhra University has delivered series of lectures on **Novel algorithms in power systems** like Shuffled frog leaping algorithm etc.





Prof.R.Gnanadas, from Pondicherry Engineering College has delivered a series of lectures on **Transmission and Distribution scenario in Smart grid, Operation of Indian** power exchange, functions of Smart meters and Smart grid pilot project in **Puducherry**.



A field visit was arranged by the organizers to all the participants to the nearest power grid centre located at chittoor. All the participants were happy with this informative field visit.

23-06-2015



Dr. M.Balasubramayam, Divisional Engineer, AP Transco, has delivered a lecture on **load dispatch and advanced protection schemes in power systems.** 



Dr.S.Farooq, Associate Professor, EEE, SVEC has delivered a lecture on **Genetic** algorithms and its applications in power systems.



24-06-2015

Dr.N.M.G.Kumar, Professor, EEE, SVEC has delivered a lecture on **Reliability Evaluation of Electrical Transmission Systems**.



Dr.T.Nageswara Prasad, Professor &Head, EEE, SVEC has delivered a lecture on **Applications of PSO and Firefly algorithms in Electrical Engineering.** 



25-06-2015

Dr.P.Umapathi Reddy has delivered a lecture on **Certain loss minimization techniques in unbalanced radial distribution systems by using PSO techniques**.



Prof.M.S.Sujatha, Professor, SVEC, EEE has delivered a lecture on **Neural Networks** and its applications in **Power systems**.



Mr.S.Hemachandra, Associate Professor, EEE, SVEC has delivered a lecture on **Fuzzy logic and its applications in Power systems.** 



Dr.R.V.Amarnath, Professor&Head, Mahaveer Engineering College, Hyderabad, an enthusiastic participant of the program has delivered a lecture on **Design and development of cluster algorithms for power system problems**.

#### 26-07-2015

Prof.N.Ammasai Gounden, Professor in EEE, NIT, Trichy has delivered a series of lectures on "Importance of Renewable Energy Sources for Distributed Generation, Wind Electric Generator for DC Load/Grid and its control and Hybrid Distributed Generator and its control aspects.



27-06-2015

Dr.V.Sankarnarayanan, Associate Professor, has delivered a series of lectures on "Components in Micro Grid, Architectures of Micro Grid, Control aspects of Micro Grid and DER Controls".



## **Valedictory Function**

The honorable personalities present in this occasion were Prof. Ammasai Gounden. NIT, Trichy and Dr. V. Sankarnarayanan, NIT, Trichy. The Head of the Department of EEE, Dr. T. Nageswara Prasad summarized the program. All the personalities appreciated the Department for organizing the FDP. The certificates and course material were distributed to all the participants. Finally the participants were asked to come on the dice and share their experience and learning of the whole program. The program was ended with vote of thanks by Mr. S. Hemachandra, Associate Professor in EEE & Co-Coordinator of the FDP.



Prof.D.Anil Kumar, Participant from Telangana has expressed his gratitude to the organizers for providing content rich sessions.



Mr.P.VinodKumar, Assistant Professor, EEE, G.Pullaiah College of Engineering &Technology, Kurnool at the feedback session.

The following feedback was received from the participants:

- 1. 96% of the participants felt that the delivery and presentation of the resource persons were good.
- 2. 90% of the participants felt that the FDP was coordinated very well.
- 3. Participants felt that such FDP should be carried for other subjects in the field of electrical engineering.
- 4. Participants felt that the boarding and lodging facilities were highly satisfactory.





#### **Outcomes:**

All the sessions were very much informative. The discussed areas are of great benefit for the participants as the topics match with the current working domain. Participants were enlightened with the most widely used advance technologies in this domain. This in turn will help in research activity. The content knowledge of the participants in the respective domains is updated. The participants were also given some simulation exercises regarding the contents of the program. Last but not the least when the house was open for questions the participants were keen to ask and with the same level of enthusiasm they were justifiably answered by all the expert speakers. This workshop has not only helped the participants in their curriculum but has also helped them develop their skills and knowledge.

# **Group Photo-APSOPC-2015**



#### **Press Note clippings**

# 'అద్వాన్సెస్ పవర్ సిస్టమ్ అపరేషన్' ప్రారంభం

చండ్రగిరి: మండలంలోని ఎ.రంగంపేట సాయి నాథ్ నగర్లో ఉన్న త్రీవిద్యానికేతన్ విద్యాసం స్థల్లోని ఇంజినీరింగ్ కళాశాలలో ట్రిపుల్ఈ అధ్వర్యంలో 'అద్వాన్స్స్ ఇన్ పవర్ సిస్టమ్ ఆపరేషన్' అనే అంశంపై ఏర్పాటు చేసిన నద స్సు సోమవారం ఘనంగా ప్రారంభమైంది. ఈ నదస్సులో ఏపీ ట్రూన్స్ కో డివిజనల్ ఇంజినీర్ ముఖ్య అతిథిగా పాల్గొని స్వాగతోవన్యాసం చేశారు. ప్పెషల్ ఆఫీసర్ గోపాలరావు, డైరె క్టర్ డాక్టర్ డీవీఎస్ భగవాన్లు, కృష్ణమాచారి, ట్రిన్సిపాల్ సుదర్శనకుమార్ పాల్గొన్నారు.

# ఫవర్ సిస్టమ్ జాతీయ సదస్సు విజయవంతం



రామచండ్రాపురం: శ్రీవిద్యానికేతన్లో గత 15వ తేదీ నుంచి జరిగిన ఫవర్ సిస్టమ్ జాతీయ సదస్సు విజయవంతమైనట్లు డ్రిపుల్ఈ విభాగాధిపతి డాక్టర్ టి.నాగేశ్వర్రప్రసాద్ శనివారం ఒక ట్రకటనలో తెలిపారు. శనివారం ఏఐసీటీఈ, స్పాన్స్టర్ట్ ప్యాకల్టీడెవలప్రమెంట్ పోగ్రామ్, అడ్వాస్స్ ఇన్ఫవర్ సిస్టమ్ అవరేషన్, ప్రొటెక్షన్ అండ్ కంటోల్' ప్రోగ్రామ్ ముగిసింది. ఇంజినీరింగ్ విద్యలో నాణ్యత పెంపొందించడంలో శ్రీవిద్యానికేతన్ ఎల్లప్పటికీ ఆగ్రగామిగా నిలు స్తుందని సదస్సులో పాల్గొన్న డ్రముఖులు అభిప్రాయపడ్డారు. ఈ సదస్సుకు పలు రాష్ట్రాల నుంచి అధ్యాపకులు పాల్గొన్నారని వారికి కళాశాల స్పెషల అఫీసర్ గోపాలరావు అభినందించారు. ఈనద స్పులో డైరెక్టర్ డాక్టర్ డివిఎస్ భగవానులు, ఎన్ఐటి ప్రొఫెసర్లు తదితరులు పాల్గొన్నారు.