

# IEEE Power & Energy Society Bangalore Chapter, India



Submission of 2017 Summary of Activities for "Outstanding Chapter Award 2017" in Large Chapter Category





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# 1.0 EXECUTIVE SUMMARY / NOMINATION

### 1.a EXECUTIVE SUMMARY

2017 has been a significant and eventful year for IEEE PES Bangalore chapter, continuing the momentum gained in earlier years. The activities for the year started with the Annual General Meeting 2017, on 12th March 2017, followed by monthly execom meetings and weekly telephonic conferences specifically for the preparation of organizing IEEE PES Sponsored APPEEC 2017. This year has been very successful for the chapter in organizing the other regular events such as Technical Talks, Young Researchers' Meet, Student Congress, Women In Power Engineering, DLP, in addition to the prestigious APPEEEC 2017. Chapter Chairs' meet held in Bangalore (hosted by Bangalore chapter) was another landmark event for the year. All the events have seen broader outreach and had a large participation-leading to greater networking and enhancing the knowledge in the technical community. The chapter has technically sponsored an international conference i.e. ICSPACE 2017 hosted by Global Academy of Engineering, Bangalore. Several technical talks have been conducted, with active participation from both academia as well as industry. Every event had membership development as a key criterion which helped to maintain and further increase the IEEE PES membership of the chapter. The members of the executive committee have also actively contributed for the benefit of students through the student chapters in the various activities hosted by respective student chapter. Sai Vidya Institute of Technology and Dayananda Sagar College of Engineering were the two new student chapters inaugurated in 2017. An industrial visit was also organized this year which saw great participation from students and professional members.

Following is the summary of the events and recognitions:

- One International Conference: APPEEC 2017 (hosted and organized)
- One International conference: ICSPACE 2017 (technical-sponsored)
- 2 Student branches started
- Industrial visit for students
- Women in Power Engineering
- Young researchers' meet
- Youth Congress
- Technical talks
- DLP
- Extensive support to various activities by student chapters throughout the year
- HPCP (High Performance Chapter Program) award
- IEEE PES Outstanding Chapter Runners up Award Large chapter category
- 215 Professional Members + 184 Student Members as on Dec 2017



# Office bearers (2017):

Chair: **Mr. Sethuraman Ganesan**, ABB Vice-Chairs: **Mr. Suresh V**, POSOCO

**Dr. Kannan Balaraman**, PRDC

Secretary: Dr. Hariram Satheesh, ABB

Joint Secretary: Dr. Ajit Ghodke, Schneider Electric

Treasurer: Mrs. Lakshmi Balaraman, PRDC

Joint Treasurer: Mr. Mahesh G S, Reva College of Engg.



Nagaraja Ramappa IEEE PES R-10 West Chapter Representative nagaraja@prdcinfotech.com

March 30, 2018

To Christopher Diamond The Chair, IEE PES Awards & Resources Committee

Sub: PES Bangalore Chapter Report for Outstanding Chapter Award (Large Chapter)

Dear Mr. Christopher,

Greetings from IEEE PES R-10 West Chapter Representative. In the capacity of Chapter Representative, I am nominating The PES Bangalore Chapter as a probable contender for the PES Outstanding Chapter Award for the work carried out in the year 2017. IEEE PES Bangalore Chapter performance during the calendar years 2017 under the leadership of Chapter Chair Mr. Sethuraman Ganesan and his Executive Committee is to be commended for its excellent service to PES members and society at large.

Highlight of the achievements of the Bangalore Chapter in support of this nomination are:

- IEEE PES APPEEC 2017 conference was hosted and organized, which had overwhelming response.
- International conference ICSPACE 2017 was technical sponsored.
- 2 more student branches were started in the year 2017.
- Programs like Industrial visit for students, Women in Power Engineering, Young researchers' meet, Youth Congress were conducted.
- DLP and several technical talks to benefit the members were conducted.
- Supported extensively the activities by student chapters
- Was well recognised in the year 2017 for HPCP (High Performance Chapter Program) award of 2016.
- IEEE PES Outstanding Chapter Runners up Award under Large chapter category for the year 2017, based on the report of 2016.
- 215 Professional Members + 184 Student Members as on Dec 2017

In summary, the performance of PES Bengaluru Chapter in the year 2017 was extraordinary. I am pleased to recognize the Chapter's excellent performance and the hard works of the Chapter's Executive Committee by nominating the PES Bangalore Chapter for the outstanding Chapter Award (Large Chapter).

Sincerely

Nagaraja Ramappa



### 2.a TECHNICAL ACTIVITIES

2.a.1 IEEE International Conference on Smart Grids, Power and Advanced Control Engineering (ICSPACE2017) (17-19 August, 2017)



**Inaugural event of ICSPACE-2017** 

IEEE International Conference on Smart Grids, Power and Advanced Control Engineering (ICSPACE2017) was organized by the Department of Electrical and Electronics Engineering, Global Academy of Technology, Bengaluru, Karnataka, India in association with IEEE Power and Energy Society (IEEE PES), Bangalore Chapter & IEEE Bangalore Section, as the Technical Sponsor during 17 – 19 August 2017. This conference was designed to deliberate on technological advances in Smart grids, Power and Control Engineering. These three areas have major applications in Electrical Engineering. Participation from both industry and academia made the conference a vibrant and successful event. The participants were academicians, researchers, renowned engineers and scientists.

As a part of the conference, a pre-conference tutorial was organized on 17th August 2017 for formal learning and it has created a platform to interact and exchange ideas. The pre-conference tutorials were, "Power Grid Technologies for an energy system with electricity generation from renewable energy sources and new solutions for energy storage and integration of electrical vehicles" by Dr. Lina BertIng Tjernberg, Professor, KTH Royal Institute, Sweden and "Power swing phenomenon and Out of step protection design considerations" by Dr. Nagaraja R., MD, PRDC, Bengaluru. The conference was a blend of keynote address, plenary sessions, panel discussions and paper presentations and has attracted good number of research papers from across the globe.



2.a.2 9th Asia Pacific Power and Energy Engineering Conference 2017 (IEEE APPEEC 2017) (8-10 November, 2017)



Inaugural event (Left to right): Mr. Sethuraman Ganesan (Convener APPEEC2017, Chair IEEE PES Bangalore chapter), Prof. K. Uma Maheswar Rao (Director, NITK Surathkal), Dr. Jim Jefferies (IEEE 2017 President Elect), Dr. Jim Prendergast, (IEEE Executive Director and COO), Dr. Frank Lambert, (IEEE PES, VP Chapter & NEETREAC, Georgia Tech), Mr. S.K Soonee, (Advisor, POSOCO & Chair, APPEEC2017) and Mr. Akilur Rahman, (CTO, ABB India)



**APPEEC 2017 proceedings** 



APPEEC is an annual event organized by IEEE PES in Asia-Pacific region, which provides a premium platform to present research work and share experiences and ideas in the areas of power and energy systems across the globe. This year, the event was held at Hotel Le Meridien, Bangalore, in association with IEEE PES Bangalore Chapter and was co-organized by National Institute of Technology, Karnataka (NIT-K). The event started on November 8th, 2017 with a series of tutorials, followed by two days of talks by eminent speakers, panel discussions, technical paper presentations and poster sessions. As part of the event, a technical visit was also organized to Kolar HVDC station of Powergrid Corporation of India, Kolar on November 11th. More than 200 participants took part in the conference including overseas delegates from Australia, Bangladesh, China, Egypt, France, Malaysia, New Zealand, Philippines, Sri Lanka, Singapore, Sweden, Thailand and USA.

The event was conducted with technical support from IEEE Bangalore section and financial support from various organizations, with NIT-K taking the lead as the Main Supporter followed by ABB as Platinum supporter, BESCOM, CPRI, POSOCO & PRDC as Silver supporters and KPCL as Tutorial Supporter. Opal-RT also supported the event along with a demo of their system. Ministry of Power, Government of India extended non-financial support.

Recently nominated IEEE Fellows, Dr. K. R. Padiyar and Mr. S. K. Soonee were felicitated at the inaugural function of APPEEC 2017.



Felicitation of IEEE Fellow Dr. K. R. Padiyar in APPEEC 2017





Felicitation of IEEE Fellow Mr. Soonee in APPEEC 2017

Some interesting statistics of the APPEEC 2017 are as follows:

•	Number of Conference Attendees	- 265
•	Number of Reviewers	- 194
•	Number of papers submitted	- 386
•	Number of Accepted papers	- 128
•	Number of Oral presentations	- 84
•	Number of Poster presentations	- 31

The conference also saw extensive volunteer support from IEEE, academia and industry viz. ABB, Amrita, GSSSIETW, GAT, RVCE, REVA, CPRI, IISc, and BEC.

On 9<sup>th</sup> November, the morning session of the conference started with an informative keynote address from Dr. Frank Lambert on 'Smart Cities' which was followed by a plenary panel discussion on 'Big Data Analytics for Power & Energy Sector'. Three more panel discussions were held on the same day on the following topics which witnessed excellent brainstorming within participants from industry and academia:

- WAMS and PMU
- Micro Grid, Storage and LVDC
- Testing, Certification and Compliance Mechanism

On 10<sup>th</sup> November, the morning session began with a keynote address from Mr. Dean Sharafi, IEEE PES Governing board member which was followed by a plenary panel discussion on 'Digitalization of Power System Industry'. Two more panel discussions were held on the same day on the following topics:





Keynote address by Dr. Frank Lambert on November 9th



Plenary panel discussion on 'Big Data Analytics for Power & Energy Sector' on November 9th

- Standards and Standards Development in Power & Energy
- Condition monitoring and asset management in power & energy sector





Panel discussion on 'WAMS and PMU' on November 9th



Panel discussion on 'Micro Grid, Storage and LVDC' on November 9th





Panel discussion on 'Testing, Certification and Compliance Mechanism' on November 9th



Keynote address by Mr. Dean Sharafi on November 10th





Plenary panel discussion on 'Digitalization of Power System Industry' on November 10th



Panel discussion on 'Standards and Standards Development in Power & Energy' on November 10th





Panel discussion on 'Condition monitoring and asset management in power & energy sector' on November 10<sup>th</sup>



# 2.a.3 HVDC Station Visit (Industrial Tour)



**HVDC** station visit

About 50 students including IEEE PES student members of 6th & 8th Semester BE (EEE) of VVCE, visited 2500MW HVDC Power grid in Kolar on 8th April 2017. Flowing above four rivers and 16,000 km of conductors —more than India's land frontier —the first 100 MW reached Southern grid in August 2002 through the 1,400km HVDC line from Talcher in Orissa to Kolar in Karnataka via Andhra Pradesh and Tamil Nadu. The Talcher to Kolar HVDC link is 500kV bipolar line. Karnataka's share is 466MW, Tamil Nadu 636MW, Andhra Pradesh 499 MW, Kerala 330MW and Pondicherry 69MW which adds up to 2000MW, the capacity of the substation. The Kolar substation, spread across 65 acres of land, houses huge equipment like inverters, transformers and cooling systems etc. The visit was sponsored and organized by IEEE PES Bangalore chapter.

# 2.a.4 Student Congress

IEEE Power & Energy Society Christ University Student Branch in association with Department of Electrical & electronics Engineering hosted the IEEE PES Student Congress 2017 at Faculty of Engineering, Christ University on 5 September 2017. It was one of the flagship events of IEEE PES Bangalore Chapter. The event was attended by 73 participants from various Universities and Engineering Colleges. The theme chosen for the Student congress 2017 was "Innovations in Power and Energy Sector".

The Registration began at 8.30 A.M and the Inauguration was held from 9.30 A.M. The Inauguration ceremony was attended by Rev. Fr. Benny Thomas, Director, Faculty of Engineering, Dr. Joseph Rodrigues, H.O.D Department of Electrical & Electronics Engineering, Dr. S. Suganthi, IEEE Student Branch Councilor,



Madam Inbanila K, Electronics& Communication Engineering Department Co-ordinator, Mr. Vijayashankar A.V, Head of the Department, Basic Sciences & Humanities and Mr. C. Parag Jose, Faculty Advisor, IEEE-PES Student Branch. The Guest of Honor was Mr. Sethuraman Ganesan, IEEE PES Banglore Section Chair and the Keynote speaker was Mr. Ajit Kumar Ega, Execom Member, IEEE PES Bangalore Chapter.

The Events began with an Invocation dance by the IEEE-PES student members. It was a tribute to the Heavenly powers in imbibing the newly formed student branch to excel in its field. Dr. Joseph Rodrigues welcomed all the dignitaries and other faculty members and IEEE delegates who had come and graced the occasion. This was followed by Lighting of the Lamp by the dignitaries and the student representatives.

Mr. Parag Jose, Faculty Advisor IEEE PES SB talked about the activities conducted by IEEE PES SB Christ University over the past year and also about the future aspirations of the Student Branch. This was followed by a video presentation of the promotional video that the students of IEEE PES SB Christ University had developed as part of the Student Congress. Mr. Sethuraman Ganesan delivered the Presidential address and emphasized on the requirement of societies like IEEE PES in forming the future of an engineering graduate. Mr. Kiran Joseph, IEEE PES SB Chair delivered the vote of thanks.

Mr. Ajit Kumar Ega delivered the keynote address. He talked on the modern power systems and the methods undertaken globally to enhance the efficiency of power transmission and distribution. It was followed by a keynote address by the guest of honor Mr. Sethuraman Ganesan. The advances by power system industries in the field of power system reliability and enhancement were touched upon, thus giving the students an industry perspective.

The events for the day began at 12.00 P.M. The different events held under the Student Congress were Startup Pitch, Project Demo Contest, Poster Presentation and Technical Quiz. The areas were in tune with the theme "Innovations in Power and Energy Sector". The students were accompanied to different venues by the volunteers. The events concluded at 4. P.M. The valedictory function was held and the winners for different events were announced. This was followed by prize and certificate distribution. The event proved to be a platform for students and industry representative to interact and network and thereby develop a better perceptive towards Power and energy sector.









**Student Congress at Christ University** 



# 2.b.1 Technical talks

Various technical talks were organized by the chapter in academic institutions and industries and the details are tabulated as under. These talks triggered motivation for the budding engineers to excel their career in Power and Energy sector and spread more awareness on the specific areas for professionals.

S. No.	Venue	Topic	Speaker	Date
1	RVCE (academic)	HVDC Transmission/ FACTS controllers/ Reactive power compensation	Mr. Babu Narayanan, PRDC	28-10-17
2	MSRIT (academic)	Emerging issue in power systems Protection	Dr. Manohar Singh	14-09-17
3	BMS College (academic)	Technological Review on Electrical Generators for Renewable Energy Applications	Dr. Sandeep, KTU	08-06-17
4	PRDC (industry)	SCADA Security in Smart Grid and Relevance of Communication Technologies in Smart Grid	Dr. Ganga Prasad, C- DAC	23-06-17
5	REVA University (academic)	Energy Storage devices	Dr. Kuldeep Rana, CRPI	11-07-17
6	CPRI (industry)	Transformer Testing, Testing & Certification and on Standards/Importance of Standards	Mr. Ravindra Desai	11-08-17
7	Global Inst. of Tech (academic)	Artificial neural networks application in Power Engineering	Mrs. Kusumika Krori Dutta	22-09-17
8	GE (industry)	DC grid, Internet of Energy, Storage technologies, Microgrid	Dr. Priya Ranjan Mishra	11-09-17
9	BEC (academic)	Renewables	Dr. Rajashekar P. Mandi	24-11-17







Technical talk by Dr. Ganga Prasad, C-DAC at PRDC, Bangalore



# 2.b.2 Distinguished Lecture Program (DLP) by Dr. Vahid Madani, 9 November, 2017

The DLP program was graced by an expert lecture from Dr. Vahid Madani, IEEE fellow and technology lead for advanced wide-area warning systems and system integrity protection schemes (SIPS) at Pacific Gas and Electric Co. (PG&E), USA. His presentation was focused upon 'Cascading Failures and Sub-synchronous Oscillation Detection using Synchrophasors'. Dr. Madani also interacted with the EXECOM members and shared his ideas about the chapter activities.



DLP by Dr. Vahid Madani, IEEE fellow



# 2.c PES / ENGINEERING PROFESSIONAL PROMOTION

# 2.c.1 IEEE PES R10 Chapter Chairs Meeting

IEEE PES R10 Chapter Chairs meeting for the year 2017 was hosted by IEEE PES Bangalore chapter and held on 7th November 2017 at Hotel Le Meridian, Bangalore. The members discussed the various future plans for the chapter at length in this meeting.



**Chapter chairs meeting** 



# 2.d.1 Scholarship-Plus Initiative

The chapter has contributed to the IEEE PES Scholarship program which is a new initiative from the IEEE PES headquarters to identify and assist bright students. IEEE PES Bangalore Chapter has contributed from its own resources, INR 3 lakh towards IEEE PES India Scholarship Award (IPISA) fund to support one student for 4 years.

# 2.d.2 PES Student Chapters and Student activities

# 2.d.2.1 New PES Student Chapters

Two new PES student chapters were formed at the following educational institutes in 2017.

- Sai Vidya Institute of Technology (SVIT), Bangalore (27<sup>th</sup> September 2017)
- Dayananda Sagar College of Engineering (DSCE), Bangalore (11<sup>th</sup> September 2017)





Inauguration of IEEE PES student chapter at Sai Vidya Institute of Technology





Inauguration of IEEE PES student chapter at Dayananda Sagar College of Engineering



# 2.d.2.2 Workshops, Tech-talks, competitions and other events at Student chapters

Following workshops, tech-talks, competitions and other events were organized at IEEE PES student chapters throughout the year. Photographs taken at various events are also enclosed.

S.No.	Student Chapter	Event	Date
1	Amrita University	Two-day workshop VAWO (Volts Ampere Watts Ohm)	27&28-01-17
		on basic electric circuit analysis and implementation	
2	Amrita University	Tech talk on 'Power Electronics and Drives for Defence	22-02-17
		applications' by Mr. S. Sundaresh (SMIEEE, DRDO)	
3	Amrita University	Knowledge enhancement session: What's Going On?	22-02-17
4	Amrita University	Talk on 'GATE WAY FOR TECHNICAL PRESENT'	20-03-17
5	Amrita University	"Hands on MATLAB" for Matlab beginners	06-03-17
6	Amrita University	Industrial visit: Ashoka Leyland, Bangalore	28-04-17
7	Amrita University	Workshop on 'Career Growth for Budding Electrical Engineers'	29-04-17
8	Amrita University	Industrial visit to Varahi Hydro Power Plant, Hosangadi	05-06-17
9	Amrita University	Tech talk on 'CAN SOLAR, ELECTRIC VEHICLES AND	15-07-17
		BATTERY DISRUPT THE ENERGY INDUSTRY?' by Dr.	
		Kailash Srivastava	
10	Amrita University	Tech talk on PSCAD by Mr. Sai Krishna	20-07-17
11	Amrita University	Tech talk on Power world simulator by Mr. Ajay Kumar	27-07-17
12	Amrita University	Tech talk on 'Industrial Exposure to Electrical Engineers'	29-07-17
		by Dr. Hariram Satheesh	
13	Amrita University	A Hands-on Training Workshop on Matlab simulation	10-08-17
14	Amrita University	Two-day workshop on Electrical Systems by Dr. Raghavan K.	22&23-08-17
15	Amrita University	Energy week	28-08-17 to
			01-09-17
16	Amrita University	Prison break, technical competition	23-03-17
17	Amrita University	Blaze of skills, technical project exhibition	12-04-17
18	Amrita University	Industrial visit to Central Power Research Institute, Bangalore	08-09-17
19	Amrita University	Annual IEEE week	03-10-17 to 06-10-17
20	Amrita University	Tech talk on Wireless power transmission by Mr. Adnan	07-10-17
		Bohori, GE	·
21	Amrita University	Technical game, final destination	12-10-17
22	Amrita University	Distinguished lecture on High frequency soft switching	16-12-17
	·	PWM and resonant dc-dc converter topologies for	
		solar/fuel cell applications by Dr. Akshay Rathore	
23	Christ University	Tech talk on Advances in Electric Vehicles by Mr. Shyam	28-01-17
		Kulkarni, Mahindra Electric	
24	Christ University	Hands-on workshop on Latex by Mr. Venkataswamy R.	11-03-17



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S.No.	Student Chapter	Event	Date
25	Christ University	Technical talk on Synchro-phasors by Mr. Vineeth Vijayan	30-06-17
26	Christ University	Hands-on workshop on Matlab by Mr. Venkataswamy R.	10-08-17
27	Christ University	Networking Event: Meet and Christmas celebration	19-12-17
28	DSCE, Bangalore	Linked, technical quiz competition	17&18-08-17
29	GAT, Bangalore	Tech talk on 'Artificial Neural Networks and Its Applications in Engineering' by Mrs. Kusumika Krori Dutta, MSRIT	22-09-17
30	GAT, Bangalore	Technical quiz competition	07-11-17
31	GSSIETW, Mysore	National level competition on 'Energy Innovation -2017'  1. Idea presentation 2. Circuit detective 3. Technical quiz	03-11-17
32	GSSIETW, Mysore	National level competition on 'New Ideas in Power and Energy Sector'	05-05-17
33	SVIT, Bangalore	Technical Poster Presentation	12-09-17
34	SVIT, Bangalore	Technical quiz	12-09-17
35	VVCE, Mysore	Two-Day Practical Training on 'Electrical Switchgear & its Application'	31-01-17 to 01-02-17
36	VVCE, Mysore	Bright Sparks (Technical Quiz)	13-05-17
37	VVCE, Mysore	Electra (Circuit Building)	13-05-17
38	VVCE, Mysore	Eye Spy (Technical Treasure Hunt)	12-10-17
39	VVCE, Mysore	Barcamp: an ad-hoc unconference on artificial intelligence	12-05-17



















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# 2.e.1 Young Researchers' Meet (YRM) at Manipal Institute of Technology

The Department of Electrical and Electronics Engineering of Manipal Institute of Technology, Manipal University, India, organized the "2017 Young Researcher's meet (YRM)", an annual event of IEEE Power and Energy Society, Bangalore Chapter. The event was organized by Dr. Vidya H.A., Professor and Head, Dept. of E&EE, Global Academy of Technology, Bangalore also the Joint Treasurer of IEEE PES Bangalore Chapter, Dr. Ciji Pearl Kurian, Professor Dept. of E&E, MIT and Dr. Jayalakshmi N.S., Professor, Dept. of E&E, MIT. This event was conducted as a part of Diamond Jubilee celebrations of MIT, Manipal. The event was inaugurated by the chief guest of the function, Dr. B.H.V Pai, Joint Director MIT. Dr. Savitha G. Kini, HOD department of E&E, Dr. Vidya H.A, Dr. Ramesh, Chairman, Diamond Jubilee Celebrations and Dr. M.M. Pai, Associate Director, Research & Consultancy, MIT graced the inaugural function.

Forenoon session had several invited talks by experts from prestigious organizations like POSOCO, PRDC, ABB, and reputed academic institutes. Experts spoke about ongoing research as well as proposed research work in Power and Energy Systems. The afternoon session focused on mentoring of young researchers. A mentor worked with a group of researchers in a peculiar area on ways to tackle various challenges encountered in research. Mentors were devoted to active research in the field of Power and Energy Systems such as Smart Grids, Micro Grids, Power Quality and Reliability, Power System Planning & Operation, Power System Dynamics, FACTS, Renewable Energy Integration, Solid State Lighting and Controls, Energy Management etc.

The keynote speech on 'Research Methodology' was delivered by Dr. Suresh Jangamshetti, Senior Member IEEE & Fulbright Alumni, Professor, BEC Bagalkot. The experts addressed future challenges in Power and Energy research; various topics for discussion were PMUs, Emerging Trends in Power System Planning/ Operation with Renewable Energy Sources and Micro Grids as fundamental Building blocks and enablers of natural energy. The mentoring session was chaired by Senior IEEE PES Members from Bangalore and South Canara region. Dr. K.P. Vittal, (NITK), Dr. D.N. Gaonkar (NITK), Dr. Nagesh Prabhu (NMAMIT), Dr. Vidya H.A (Global Academy of Technology), Dr. Suresh Jangamshetti (BEC), Dr. Ciji Pearl Kurian (MIT), Dr. Jayalakshmi (MIT), Mr. Muthukumar (POSOCO), Mr. Abhilash ET Nair (ABB) and Dr. Chandrashekhar Atla (PRDC) were the prominent mentors. Finally, there was an open house presentation session for the participant mentors and researchers in which Mr Shailesh K.R, research scholar of MIT Manipal highlighted his research. The event was sponsored by IEEE PES Bangalore chapter and Manipal University.











YRM at Manipal Institute of Technology

# 2.e.2 Women in Power Engineering (WiPE) program

A panel discussion on 'Women in Power Engineering' was scheduled on 8th November from 14:00-17:30. The panel consisted of invited women achievers from Power & Energy Industry. Each panelist spoke on the different themes and shared their success stories. This was a great opportunity for women professionals from academics, industry, research organizations, entrepreneurs and students to network with successful women in the field of power and energy. This event provided a platform for networking and sharing the issues and challenges faced by women professionals in power engineering.







Women in Power Engineering (WiPE) program







Women in Power Engineering (WiPE) program



# 3.a MEMBER AWARDS / RECOGNITION / NOMINATIONS

# 3.a.1 Outstanding Service Award

Outstanding Engineer Award (OEA), Outstanding Service Award (OSA) and Outstanding Chapter Volunteer Award (OCVA) are presented to nominated members every year by IEEE PES Bangalore Chapter. This year OSA and OEA awardees were felicitated as part of APPEEC 2017 inauguration. IEEE PES Bangalore chapter recognized the services of **Prof. D. Thukaram**, in the power engineering field and presented him with "Outstanding Service Award". This is an annual award which is given to an eminent engineer for the services in the field of Power Systems in Karnataka (under the jurisdiction of Bangalore chapter).



Prof. D. Thukaram, Recipient of the Outstanding Service Award

### 3.a.2 Outstanding Engineer Award

**Prof. Suresh H. Jangamshetti** was presented with the "Outstanding Engineer Award" for his immense contribution to Power and Energy engineering field and his leadership role in the growth of IEEE PES Bangalore chapter.

# 3.a.3 Outstanding Volunteer Award

The "Outstanding Volunteer" award has been bestowed upon **Prof. K. Uma Rao** for her exceptional and wholehearted voluntary services to IEEE PES Bangalore chapter.





Prof. Suresh H. Jangamshetti, Recipient of the Outstanding Engineer Award

# 3.a.4 Other awards received by the chapter

The chapter was awarded a **Runner-up position at 2016 IEEE Outstanding Chapter Awards**. It also received the **HPCP Award – 2016**.

### 3.b MEMBERSHIP ADVANCEMENT

Two of the Execom members have been entrusted with the responsibility of membership advancement activities. In order to encourage students to take active role in IEEE/PES for sustainable growth of membership in PES in the long run, we have encouraged actively the formation of student chapters in Bangalore chapter with formal inauguration done in 2 colleges / universities, viz., Sai Vidya Institute of Technology, Bangalore and Dayananda Sagar College of Engineering, Bangalore. While the existing members are from Academic institutions and industries, it is recognized that a large number of engineers in utilities are not taking active roles in IEEE PES. Hence we have initiated dialogues with major utilities like KPTCL, BESCOM etc. to enroll themselves in IEEE/PES.

### 3.c MEMBERSHIP GROWTH / RETENTION

The IEEE PES Bangalore chapter membership has significantly increased from the start of this year. Though from March 2017 to August 2017, there was a slight dip in the membership total; in October 2017, the membership has seen an increase and this is also due to the contributions from ExeCom members and student chapters through various events. The chapter has actively participated in the IEEE Bangalore chapter's initiatives for Senior Member Elevation (Simple-8) and fellow identification. The chapter has prominently promoted and endorsed IEEE at every major technical and student chapter event to attract

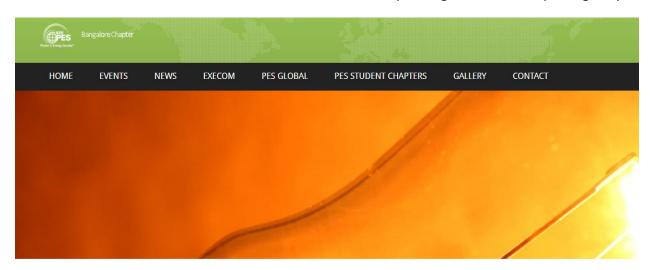


undergraduate students as well as experienced engineering professionals. Two recently nominated IEEE Fellows, Mr. Soonee and Dr. Padiyar were felicitated during the APPEEC 2017 inauguration on 8th November 2017. More than 50 of the chapter members are senior members.

# **4 CHAPTER OPERATIONS**

### **4.a CHAPTER WEB PAGE**

IEEE PES Bangalore has an active web page, which is continuously updated under the guidance of one of the Execom members (Link: <a href="http://www.ieeepesbangalore.org">http://www.ieeepesbangalore.org</a> ). Major contents of the website are current execom with their contact details, announcements for upcoming activities and a photo gallery.



**Upcoming Events** 



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2017-18 IEEE PES SCHOLARSHIP



**APPEFC 2017** 

AGM2018



In addition to the chapter webpage, IEEE PES Bangalore also maintains an Execom mailing list (ieeepesblrexcom@listserv.ieee.org). It also notifies the chapter members regularly about the upcoming activities.

# 4.b PES ONLY (non-joint) CHAPTER

Bangalore Chapter with nearly 215 members is a PES only chapter and falls under large chapter category.



The ExeCom meets every second Saturday at designated venues for a F2F meeting. In the same duration, WebEx meetings were made available for members who wanted to join from outside. In addition, due to APPEEC 2017 every week (Monday and Wednesday evening), WebEx calls were set to discuss action items exclusively for APPEEC 2017. Moreover, in the month of October the team met every weekend Saturday for successful conduct of APPEEC 2017. All the WebEx meeting creations were supported by IEEE. The communications were facilitated through listserv accounts and all the events were reported in vTools and all the group publicity was done through eNotice.



**Execom meeting** 

IEEE PES Bangalore chapter looks forward to sustained growth in its activities in the years to come, helping the country take 'Power to People through the Power of Knowledge'.

The chapter has some significant plans for the year 2017:

- PESTSE-2018 is a biennial international conference conceptualized and organized by Amrita School of Engineering, Bengaluru in the field of Power and Energy. The conference is technically co-sponsored by IEEE Bangalore Section and IEEE PES Bangalore Chapter.
- Annual Workshop 2018
- Rural Development Program
- Membership Development Drive

In addition to the above, the chapter plans to conduct several other programs, like what have been reported for the year 2017, especially student congress, WIPE, YRM, DLP, tech talks etc.



Power & Energy Society™ Submitted on behalf of IEEE PES Bangalore Chapter by:

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