IEEE PES Bangalore Chapter

Secretary Report for the section Annual General Meeting, 7th January 2018

This report summarizes activities and initiatives taken by IEEE PES Bangalore chapter during the year 2017.

AGM 2017

2016 was the year of many unique initiatives. These initiatives have paid rich dividends to chapter. The AGM was held on 12th March 2017 between 10 AM and 1 PM at Hotel Chancery, Bangalore. AGM started with welecome address by Vice Chair, Mr. V. Suresh, followed by secretary report. Financial report was presented by the treasurer and few student chapter representatives presented the activities happened as part of their student chapters. Chair of IEEE PES Bangalore chapter outlined initiatives, plans and goals for the chapter. Following that the amendments to bylaws were discussed and the slate committee proposed the new execom and approved. There was a Q&A session in which the student and professional member got few of their questions clarified.

The following were the list of events held in 2016 and were presented by secretary during AGM.

Date	Description / Title		
Jan 03, 2016	AGM		
Jan 03, 2016	Execom Meeting		
Feb 14, 2016	Technical talks in World Utility Summit, Bangalore by Dr. Kannan Tinnium and S. Ganesan		
Feb 16, 2016	Thought Leadership meet with utility and regulatory authorities		
Jan 21, 2016	International Conference PESTSE 2016, 'Power and Energy System: Towards Sustainable Energy'		
Feb 14, 2016	Execom Meeting		
Mar 01, 2016	Execom Meeting		
Mar 12, 2016	Student Chapter inauguration, Reva University, Bangalore		
Apr 02, 2016	Student Chapter inauguration at Vidyvardhaka College of Engg, Mysore		
Apr 12, 2016	Execom Meeting		
May 14, 2016	Execom Meeting		
Jun 11, 2016	Execom Meeting		
Jul 09, 2016	Execom Meeting		
Jul 13, 2016	Student Chapter inauguration at Christ Univesity, Bangalore and a Technical talk by Dr. Balaraman		
Aug 20, 2016	Execom Meeting		
Aug 27, 2016	Student Chapter inauguration at Bagalkot College of Engg, Bagalkot and a Technical talk by S. Ganesan		
Sep 14, 2016	Execom Meeting		
Sep 17, 2016	Student congress at Vidyavardhaka College of Engg (VVCE), Mysore		

Date	Description / Title
Sep 23, 2016	Annual Workshop 2016, Energy Analytics for Smart Cities- Microgrid, Distributed Gneeration and Electric Vehicles at IISc, Bangalore
Oct 07, 2016	Student Chapter inauguration at GSSIET, Mysore and a Technical talk by Dr. Balaraman
Oct 10, 2016	Execom Meeting
Nov 12, 2016	Execom Meeting
Dec 16, 2016	Women in Power Engineering Meet
Dec 17, 2016	Execom Meeting
Dec 17, 2016	Young Research Scholars Meet
Dec 01, 2016	DLP
Oct 10, 2016	Technical Talk, IoT in Power Systems, by Dr. Sudarsan, ABB
Nov 06, 2016	Technical Talk, 'Harmonic Mitigation and Interaction with Power Factor Capacitor', by Dr. Uma Rao, RVCE at RV College of Engineering
Nov 07, 2016	WIPE Talk ,'Work life balance for women', by Dr. Uma Rao, RVCE at RV College of Engineering
Aug 29, 2016	Social Talk, 'Power Engineering and Education' by Prof. S. S. Murthy, at BMS College of Engineering, Bangalore
Sep 30, 2016	Technical Talk, 'Energy Management and Audit' by Dr. Rajashekar P Mandi, at Amrita Univ
Dec 01, 2016	Technical Talk

The following were the list of technical talks organized by the chapter in 2016.

Date	Description / Title
Feb 14, 2016	Technical talks in World Utility Summit, Bangalore by Dr. Kannan Tinnium and S. Ganesan
Apr 02, 2016	Student Chapter inauguration at Vidyvardhaka College of Engg., Mysore along with a Technical talk by Dr. Balaraman
Jul 13, 2016	Student Chapter inauguration at Christ Univesity, Bangalore and a Technical talk by Dr. Balaraman
Aug 27, 2016	Student Chapter inauguration at Bagalkot College of Engg, Bagalkot and a Technical talk by S. Ganesan
Aug 29, 2016	Technical talk, 'Power Engineering and Education' by Prof. S. S. Murthy, at BMS College of Engineering, Bangalore
Sep 30, 2016	Technical talk, 'Energy Management and Audit' by Dr. Rajashekar P Mandi, at Amrita University
Oct 07, 2016	Student Chapter inauguration at GSSIET, Mysore and a Technical talk by Dr. Balaraman
Oct 10, 2016	Technical Talk, IoT in Power Systems, by Dr. Sudarsan, ABB
Nov 06, 2016	Technical Talk, 'Harmonic Mitigation and Interaction with Power Factor Capacitor', by Dr. Uma Rao, RVCE at RV College of Engineering
Nov 07, 2016	WIPE Talk ,'Work life balance for women', by Dr. Uma Rao, RVCE at RV College of Engineering
Dec 27, 2016	DLP program by Dr. Ram Adapa from EPRI at PRDC, Bangalore on 'Role of HVDC and FACTS in future Smart Electric Grid'

Chapter planned the following activities for the year 2017:

- ▶ 9th IEEE Asia Pacific Power and Energy Engineering Conference 2017-APPEEC2017, at Bangalore during November 8th to 10th 2017
- ► IEEE International Conference on Smart grids, Power and Advanced Control Engineering ICSPACE2017 during August 17th to 19th 2017, in association with the Chapter and IEEE Bangalore Section
- ► In addition to the above, the chapter plans to conduct a number of other programs, similar to what is reported for this year, especially student congress, WIPE, YRM etc.

Every event had membership development as a key criterion which helped to maintain the IEEE PES membership of the chapter. Following the AGM the first newly inducted execom meeting held. The following members were the elected members of the new execom 2017.

Name	Affiliation	Designation
Mr. Sethuraman Ganesan	ABB	Chair
Mr. V. Suresh	Powergrid	Vice Chair
Dr. K. Balaraman	PRDC	Vice Chair
Dr. Hariram Satheesh	ABB	Secretary
Mrs. Lakshmi Balaraman	PRDC	Treasurer
Dr. Ajit Ghodke	Schneider Electric Young Professional	Joint Secretary
Mr. Mahesh G. S.	Reva College of Engg.	Joint Treasurer
Prof. Suresh H. Jangamsetti	Bagalkot College of Engg.	Member
Dr. Kasi Vishwanadha Raju	GE	Member
Dr. K. Uma Rao	RVCE	Member
Mr. Deepak Sriram Krishnan	World Resources Institute Young Professional	Member
Dr. Priya Ranjan Mishra	Philips	Member
Mr. Ajithkumar Ega	Atkins Young Professional	Member
Dr. Manohar Singh	CPRI Young Professional	Member
Mr. Narsimha Pandit	BESCOM	Member
Dr. Vidya H. A.	Global Academy of Technology	Member
Dr. Gurunath	IISc Young Professional	Member
Dr. Kannan Tinnium	GE	Immediate Past Chair

In the execom various activities and responsible members were nominated.



ICSPACE2017

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 preconference 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 Bertlng 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 presented.



APPEEC 2017 (9th Asia Pacific Power and Energy Engineering Conference 2017)

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 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.



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)

Awards: OEA, OSA and OCVA

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 feliciated as part of APPEEC 2017 inauguration. OSA and OEA awardees were Professor Suresh H. Janghamshetti and Professor D. Thukaram respectively.





Felicitations: IEEE Fellows

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





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 chapter at length in this meeting.



Distinguished Lecture Program

One DLP held on 9th November 2017 at Hotel Le Meridian and the talk was given by Dr. Vahid Madani, IEEE Fellow on wide area monitoring systems.



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 Councillor, 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 Eega, 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 Eega 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.







WIPE 2017

A panel discussion on 'Women in Power Engineering' is scheduled on 8th Nov 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. It is meant to provide a platform for networking and share the issues and challenges faced by women professional.



YRM
2017 Young Researcher's Meet (YRM), 7, October 2017, Manipal University, India







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 the area of Power and Energy Systems. The afternoon session focused on mentoring of young researchers. A mentor worked with a group of researchers in a particular 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 had 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 participated 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.

Executive Committee Meetings

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.





Industry Visit

About 50 students and few IEEE PES student members of 6th & 8th Sem BE (EEE) of VVCE, visited 2500MW HVDC Power grid in Kolar on 8th April 2017.



Membership

The IEEE PES Bangalore chapter member ship has significantly increased from the start of this year. From March 2017 to August 2017 there was a dip in the membership total while 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.

New Student Branch Chapters

Following Student Branch Chapters were opened in the year 2017:

- 1. Sai Vidya Institute of Technology, Bangalore
- 2. Dayananda Sagar College of Engineering, Bangalore

Tech Talks

Various technical talks were organized by the chapter in academic institutions and industries and the details are tabulated as under.

CI				Date(ten
SI No	Venue	Tonic	Speaker	tative)20 17
INO	venue	Topic	Shri Babu	1/
	DVCE/acad	HVDC Transmission/ EACTS controllers/		39 Oct
1	RVCE(acad	HVDC Transmission/ FACTS controllers/	Narayanan	28-Oct-
1	emic)	Reactive power compensation	M.M, PRDC	17
_	MSRIT(aca	Emerging issue in power systems	Dr Manohar	14 Sept.
2	demic)	Protection	Singh	2017
		Technological Review on Electrical		. (0.1
	BMS	Generators for Renewable Energy	Dr Sandeep,	June(2th
3	College	Applications	KTU	week)
		SCADA Security in Smart Grid and		
	PRDC(indu	Relevance of Communication	Dr/Mr Ganga	23-Jun-
4	stry)	Technologies in Smart Grid	Prasad,C-DAC	17
	REVA			
	University(Dr Kuldeep	July(2 nd
5	academic)	Energy Storage devices	Rana, CRPI	week)
		Transformer Testing, Testing &		
	CPRI(indust	Certification and on	Mr Ravinder	11/8/201
6	ry)	Standards/Importance of Standards	Desai	7
	Global Ins			
	of			
	Tech(acade	Artifical neural networks application in	Mrs.Kusumika	22-09-
7	mic)	Power Engineering	Krori Dutta	2017
	-			Sept.
	GE(industr	DC grid, Internet of Energy, Storage	Dr Priya	(2nd
8	y)	technologies, Microgrid	Ranjan Mishra	week)
	Bagalkot ,		Dr. Rajashekar	Nov.(4th
9	BEC	Renewables	P. Mandi	week)
	Amrita		Dr Pramila	Dec.(2 nd
10	University	Dr Pramila Manohar	Manohar	week)



