

# PSG INSTITUTE OF TECHNOLOGY AND APPLIED RESEARCH

## Quarterly Report July – September 2019

### Events organized:

#### Teaching and Learning Process-Outcome Based Learning

A lecture for PSG CARE Staff was conducted on 4<sup>th</sup> July 2019 at PSGIM on the topic “Teaching and Learning Process-Outcome Based Learning” by Principal, Dr. P V. Mohanram. The lecture also focused on Learning Style Inventory Assessment of faculty members and students.



**Principal Dr. P.V. Mohanram administering Learning Style Inventory questionnaire to faculty members on 4<sup>th</sup> July 2019 at PSGIM**

The Index of learning style questionnaire helps to know the learning preference of the person. The styles of learning are active, reflective, sensing, intuitive, visual, verbal, sequential and global. \* [Learning Style Inventory by Richard M Feder and Barbara A Soloman, 1993]. The learning style inventory was administered to sixty faculty members. The results are tabulated:

Dimension	Active	Reflective	Sensing	Intuitive	Visual	Verbal	Sequential	Global
<b>Total Score</b>	11		11		11		11	
<b>Avg. Score</b>	6	5	5.98	5.01	8.03	2.96	4.76	6.23
<b>Percentage of faculty</b>	67%	33%	62%	38%	87%	13%	28%	72%
<b>Interpretation</b>	Mild preference to active style of learning but essentially balanced on both dimensions.		Mild preference to sensing style of learning but essentially balanced on both dimensions.		Major preference to visual style of learning		Major preference to global style of learning	

The result shows that the most of the group members learning styles and strategies are as follows:

- ❖ 87% percentage of faculty prefer visual input for effective learning instead of lecture mode of teaching-learning process.

- ❖ The holistic learning method was preferred by 72% of faculty when compared to understanding of concepts presented in linear and sequential manner.
- ❖ 62% of faculty prefer to learn the principles through sense perception and visualization rather than relying on intuition.
- ❖ 67% of faculty prefer to learn the subject matter through discussion with peers and applying the principles to practical situations rather than reflecting on the concepts individually.

### **Parent -Teachers Meet**

A Parent-Teachers meeting was held on 5<sup>th</sup> July 2019. The meeting was conducted for all second, third and final year students. The Principal, Vice Principal, Dean and all the Heads of Departments attended.

The Principal, Dr.P.V.Mohanram welcomed the parents and addressed them about the Anna University elective courses for students and their benefits. He introduced the future upcoming plans that are more beneficial for students like biometric attendance for students, compulsory sports activities for second years, student information system-LAUDEA software and also enhancement of college website to capture parent's suggestion. And, he also listed about the new laboratories of various departments and their importance.

Dr. G. Chandramohan, Vice Principal welcomed the gathering and presented a report of the students academic performance and Anna University rank holders of the college; he also touched upon the placement training program and its importance.



**Dr P V Mohanram, Principal welcomed the gathering during Parent-Teachers meeting, held on 5<sup>th</sup> July 2019**

Dr.N.Saravanakumar, Placement Officer and Head of the Department (Mechanical Engg.) welcomed the parents and presented a report of last year placement statistics of the students. He explained about the various industries and opportunities regarding placement training activities planned for the students.

All the Heads of the Departments addressed the parents about the teaching methods and facilities of the laboratory and the events conducted by their departments. It was followed by a very cordial interactive session between the teachers and parents regarding the performance of the students. The parents gave a very positive feedback regarding the activities and facilities provided by the college.

### **Student Project Expo:**

Student Project Expo was conducted on the same day in Mechanical Engineering Department. Students from various departments participated and described their projects to the parents. Two best projects from each department were awarded prizes. Parents gave positive feedback to students about the projects and also appreciated them.



**Student Project Expo held on 5<sup>th</sup> July 2019 in the Mechanical Engg Department of PSG iTech**

### **Major Outcomes of the Parent Teachers Meet:**

- Around 150 parents attended the meeting.
- Future plans of the college regarding improvement of students performance in academics, discipline, sports and placements were explained by Principal and Vice Principal.
- One-to-one interaction between parents and faculty of the college to clarify the doubts of parents was facilitated.
- Discussions were focused on students placements, performance, mobile usage and other facilities.
- Parents visited the Project Expo and appreciated them for their hard work
- The best project in each department were identified and prizes were awarded.
- Parents Feedback was taken for future reference.

### **Programme for the Supporting Staff members**

A Special Programme for the supporting staff members was organized by Wellness Centre along with the Institution of Engineers (India)- PSGI Students Chapter on 8<sup>th</sup> July 2019 in the Civil Seminar Block on the topic "Personality Assessment: Big Five Method". The program started with an overview of the programme by the Principal. The session began with an introduction of personality traits and goals of life. It was followed by the "Assessment of Personality" of the supporting staff and finally the Big Five Factors methods was explained. Six staff members were awarded for their punctuality in reporting to duty and the session ended with a vote of thanks by the Vice Principal.



**Dr.PV.Mohanram, Principal and Dr. G. Chandramohan, Vice Principal honored the supporting staff, Mr Karthick, Technical Assistant, Civil Dept in picture for the punctuality in reporting to duty on 8<sup>th</sup> July 2019**

### **Basics of LabVIEW for Sensor Interfacing**

An one day workshop on “Basics of LabVIEW for Sensor Interfacing” was conducted on 17<sup>th</sup> July 2019 by the department of ECE for the III year students of EEE, CSE, Mechanical and Civil departments as a part of an Open Elective “Sensors and Transducers”. The sessions were handled by Ms.M.Deepa, AP(Sr Gr)/ECE and Dr.G.Santhanamari, Asso.Prof (ECE) of ECE Department. The afternoon sessions were focused on hands-on-training using sensor interfacing. The students were exposed to data acquisition system and signal conditioning. They were introduced to the DAQ hardware and software required to interface the sensors using LabVIEW platform. The students numbering 50 were provided hands-on-training on interfacing the following sensors with LabVIEW.

The sessions involved the following topics in LabVIEW software:

1. LabVIEW programming
2. Loops in LabVIEW
3. Conditional statements
4. Graphs and Charts
5. Case study using LabVIEW



**iTech students practicing with thermocouple on 17<sup>th</sup> July 2019**

## **Student Induction Programme 2019**

AICTE has mandated that all the Engineering Colleges in India are to conduct a three week Student Induction Programme for the first year students. In this regard, the Student Induction Programme for the first year students was organized from 22<sup>nd</sup> July to 2<sup>nd</sup> August 2019. The Induction Programme was started with an inaugural function on 22<sup>nd</sup> July, 2019. Mr.A.V.Varatharajan, Chairman, SANDFITS Foundries Pvt. Ltd., Coimbatore and Mr.P.Manikandan, Head of Engineering – Electric Mobility, Bosch Engineering and Business Solutions, Coimbatore were the chief guests of the function.

All the first year students were grouped into four batches in a random basis. The different modules handled during the induction programme included Universal Human Values, Proficiency, Creative Arts and Sports. The daily schedule started with the physical activities in the morning which included jogging and simple stretching exercises.

It was followed by lecture sessions on Universal Human Values (UHV) class by the following team of faculty.

1. Mr P Balakumar, AP (Sr.Gr)/Civil
2. Mr V Navin Ganesh, AP (Sr.Gr)/Civil
3. Ms K Bavithra, AP/EEE
4. Ms Pricilla, AP/Civil &
5. Ms M Sowmiya, AP/ECE

The major topics discussed during the UHV classes included happiness as the goal of life, universal consciousness, harmony in self, family, society and nature, the four orders in existence namely material, plant, animal and human orders, the interactions between the human orders, competition and complementariness, peer-pressure, the need for right understanding to achieve mutual happiness and mutual prosperity, etc. The sessions were handled in an interactive way with students sharing their real life experiences.

At the end of the sessions, the students reflected on the topics discussed in the classes by comparing their real life incidents on how they reacted to the situations at the first instance and how they could have handled the same situation with the proper understanding of the value system. In the proficiency module, the students were provided training for Programming and English language coaching.

The vocational stream students were provided training in subjects mathematics, physics and chemistry. In the creative arts module, the students were divided into various activity groups based on their interest, like tamil mandram, vocal training, dance, drawing & painting and photography & multimedia.

The faculty members involved in the above sessions include

1. Dr S Aramuthakannan, Asso.Prof/Maths & Mr D Venkatesh, AP(Sr.Gr)/ECE
2. Ms K Lakshmi Kalpana Roy, AP (SR.Gr)/CSE & Mr C Gopalakrishnan, AP(Sr.Gr)/Mech
3. Dr R Mangalam, Asso. Prof/Phy
4. Mr J Nagarjun, AP(Sr.Gr)/Mech
5. Mr Aravindhraj, AP/CSE
6. Ms M Deepa, AP(Sr.Gr)/ECE and Ms N Susithra, AP/ECE

The students exhibited their talents in their respective areas of interest. The sports module included yoga sessions, indoor and outdoor activities and the same was co-ordinated by

1. Mr A Robinson, Physical Education Director
2. Mr Eashwar, Assistant Physical Education Director
3. Ms Yogapriya, Physical Education Directress

The students were taken to two industries namely PSG Foundry and Craftsman Automation Limited as industrial visits to expose the students to the advancements and the work culture of the industries. The industry visits were co-ordinated by two teams headed by the following senior faculty.

1. Prof K Anantharaman/ Prof/Mech
2. Dr D Elangovan, Prof/Mech

The valedictory function was held on 2<sup>nd</sup> August, 2019 and the students who performed well in the different modules were awarded with prizes. Students from different batches gave their feedback about the induction programme during the valediction programme.

The general feedback was that all the students had enjoyed the entire two-week programme and they were able to learn about the college, their friends; the UHV classes were very useful for understanding the importance of upholding the value system in the day-to-day life.

The overall co-ordinator of the programme was Mr V Navin Ganesh, AP (Sr.Gr) of Civil Engineering Department and the management appreciated his efforts.





**Dr.P.V.Mohanram, Principal, PSG iTech delivering the welcome address during the inaugural function of the Student Induction Programme 2019 held on 22<sup>nd</sup> July 19**



**A student in Batch A sharing her thoughts during the UHV session in the Student Induction Programme 2019**



**Students exhibiting their talents during the Indoor Session of Sports Module in the Student Induction Programme 2019**



**D - Batch students during their Industrial Visit to Craftsman Automation Pvt. Ltd., Coimbatore as a part of the Student Induction Programme 2019**



**Students exhibiting their talents during the Drawing & Painting session of the Creative Arts Module in the Student Induction Programme 2019**



**A student exhibiting her talent during the Tamil Mandram session of the Creative Arts Module in the Student Induction Programme 2019**



**Dr.P.V.Mohanram, Principal, PSG iTech awarding a student for outstanding performance in the Induction Programme during the Valedictory Function 2019 on 02<sup>nd</sup> August 19**



**Dr.G.Chandramohan, Vice Principal, PSG iTech awarding a student for outstanding performance during the Valedictory Function on 02<sup>nd</sup> August 19**

## Learning Style Inventory- First Year Orientation Program 2019-2020

A similar learning style inventory test was administered for I year students on 15<sup>th</sup> July 2019 and the results are shown below:

### Scores and Interpretation of I-year students:

<b>Department:</b> CIVIL, CSE, EEE, ECE, MECH								
<b>Total no. of students:</b> 205					<b>Date:</b> 15.07.2019			
Dimension	Active	Reflective	Sensing	Intuitive	Visual	Verbal	Sequential	Global
Total Score	11		11		11		11	
Avg.Score	6.04	4.48	6.86	4.01	4.61	6.26	5.76	5.13
Percentage of students	72%	28%	69%	31%	26%	74%	58%	42%
Interpretation	Major preference for an active style of learning		Major preference for sensing style of learning		Major preference for verbal style of learning.		Mild preference for sequential style of learning.	

The result shows that the preference and strategies of learning style of the students.

- ❖ 74% of students prefer lecture mode of teaching for effective learning than visual inputs for learning process.
- ❖ 72% of students prefer to learn the subject matter by explaining the concepts to others and applying the principles to practical situations rather than reflecting on the concepts individually.
- ❖ 69% of students prefer to perceive the principles through visualization and experimentation instead of focusing on intuitive theoretical aspects.
- ❖ 58% of students prefer to understand the concepts presented in a linear and sequential manner (step by step procedure based learning) instead of holistic learning method(i.e by visualizing the big picture).



## **Guest Lecture on Research scope of MEMS and Nanotechnology**

A guest lecture on “Research scope of MEMS and Nanotechnology” was organized by the Department of EEE, on 22<sup>nd</sup> July 2019. The resource person for the programme was Dr.M.Alagappan, Assistant professor (Senior Grade), from Department of ECE, PSG College of Technology, Coimbatore. Nearly 100 students of II year and III year EEE participated the event.

### **The following topics were discussed in detail:**

- Introduction to MEMS and NEMS
- Applications of MEMS and NEMS
- Research avenues
- Software and Hardware required for designing MEMS and NEMS



**Dr.M.Alagappan, Assistant Professor (Senior Grade)/ Dept. of ECE, PSG Tech, Coimbatore delivered a guest lecture on ‘Research scope of MEMS and Nanotechnology’ on 22<sup>nd</sup> July 2019**

## **Short Term Training Program on Analog and Mixed Signal IC Design**

The Department of Electronics and Communication Engineering organized a five day Short Term Training Program on “Analog and Mixed Signal IC Design using Cadence Tool” from 23<sup>rd</sup> July 2019 to 27<sup>th</sup> July 2019. Eleven participants from different engineering colleges and Ten students of PSG iTech participated in this training program. Mr.Damodara and Mr.Navin Sankar were the resource persons for the workshop from Entuple Technologies, Bangalore.

The major topics covered during the training programme are Digital IC design flow, Analog IC design flow, design of Sample and Hold circuit, Common source amplifier, differential amplifier, Operational amplifier and DAC with Small signal and large signal analysis and Mixed signal design of ADC. On the whole, this 5 day training program provided a deeper understanding on analog circuits and digital circuits design. In addition, mixed signal simulation by combining Analog and digital circuits was performed that will be helpful for developing the projects and doing research works.



**Mr.Navin Sankar of Entuple Technologies, Bangalore addressing the participants during the workshop on 23<sup>rd</sup> July 2019, held in ECE department**

### **Technical Seminar on “Energy Conservation and Management”**

A Technical Seminar on “Energy Conservation and Management” was organized by Indian Society for Technical Education Students’ Chapter with the support from the Departments of Civil, Mechanical, ECE and EEE Engineering. The program was organized on 26<sup>th</sup> July 2019 in association with Petroleum Conservation and Research Association (PCRA). Empanelled speakers Mr. K. Anil Kumar and Mr. S. Siva Kumar from PCRA conducted the Institutional Training Program on Energy Conservation Awareness for 35 students. During the training program, topics on alternative energy sources such as solar and biomass energy were covered.

Electrical and Thermal Energy Conservation measures and basic Energy Calculations were explained. Basic Energy Saving Calculations for industrial utility equipment were also discussed in the session. Dr. P. Subbaraj, Dean Electrical Sciences welcomed the participants. Dr. M.I. Abdul Aleem, Professor & Head, Department of Civil Engineering, proposed the vote of thanks. Dr. T. Hamsapriya, Professor & Head, Department of Electronics and Communication Engineering honored the speakers. The program was useful and informative to the participants.



**Participants of PCRA programme held on 26<sup>th</sup> July 2019 in PSG iTech**

## **“Placement Oriented Programming on Data Structures”**

The session on “Placement Oriented Programming on Data Structures” was held on 27<sup>th</sup> July 2019. It was handled by Ms.Lovelyn Rose from PSG TECH for ECE Students. The session started with the basic concepts of data structures like array, stack, queue, linked list and trees. The basic technique for writing algorithms was emphasized. An algorithm for quick sort was detailed along with its test cases. Next concept that was presented was the linked list. An overview about the creation of a node and the use of pointers was explained. A few programs on linked list were discussed. The session enhanced the knowledge of fifty students on data structures and gave them a kick start for writing algorithms on their own.



**ECE Students working out algorithms during the session “Placement Oriented Programming on Data Structures” on 27<sup>th</sup> July 2019**

## **Inauguration of American Concrete Institute (ACI) - Student Chapter**

The inauguration of Student chapter of American Concrete Institute (ACI) was held on 31<sup>st</sup> July 2019. Ms.Radhika Markan, The President of India Chapter of American Concrete Institute (ICACI), Mumbai Inaugurated the Student Chapter and gave away the Chapter flag received from ACI Head Office, USA to the Head of The Department Dr.M.I.Abdul Aleem. Ms.Radhika Markan insisted that the student should develop Professional behavior, business etiquettes, humbleness for getting a job and sustaining the acquired job. The Office bearers of the Student chapter were introduced to the gathering. Mr.S.Elayaraja, The mentor of the ACI student chapter delivered the vote of thanks. Ten Faculty members and fifty students of the Department of Civil Engineering were present during the function.



**Ms.Radhika Markan, The President of India Chapter of American Concrete Institute (ICACI), Mumbai along with the faculty of Dept. of Civil Engg. held on 31<sup>st</sup> July 2019**

## **Civil Service Examination Orientation Program**

The Students interacted with Mr. Ramesh Adithya, Strategy Head, Sankar IAS Academy. The event was held on 31<sup>st</sup> July 2019. The Head - Strategy Mr. Ramesh Aditya and Senior Faculty Mr. Dinesh from Shankar IAS Academy were invited as guest of honor. Mr. Dinesh has nine years of experience in coaching the students for Civil Services exams.

The faculty in-charge for Higher Education Forum Ms. Bavithra AP/ EEE Faculty Co-ordinator of higher education forum co-ordinated the programme. The welcome address was given by Vaishali of 2<sup>nd</sup> year CSE. Prayer song was sung by Ms Harshithaa. Ms. Bavithra, AP/EEE introduced the office bearers of Higher Education Forum. Mr. Ramesh Aditya gave an introduction about Civil Services examination. Mr. Dinesh then explained the need of choosing civil services as a career option. And, he gave an overview of jobs/posts available in civil services sector. Vote of thanks was given by Surya Prakash of 2<sup>nd</sup> year ECE.



**Mr. Dinesh, Civil Service Exam Trainer, Sankar IAS Academy interacted with the students on 31<sup>st</sup> July 2019, in Higher Education Forum meeting**

## **“Sensor Interfacing and Automation of a typical Engineering System”**

The session on “Sensor Interfacing and Automation of a typical Engineering System” was conducted by the Departments of Mechanical and Electronics and Communication Engineering on 07<sup>th</sup> August 2019 for the I year students of Mechanical Engineering (as a part of the Value Added Course-Sensor Interfacing) and the III year students of CSE, EEE, Mechanical, Civil Engineering (as a part of open elective - Sensors and Transducers). The session was presided over by Senior Professor Mr.K.Anantharaman, Mechanical Engineering and Dr.G.Chandramohan, Vice-Principial, PSG iTech.

The resource person for the session was Mr.Benedict Biju, General Manager (RMS) Skanray Technologies, Mysore. Mr.Biju has been working in the respiratory systems domain for about twenty years and has successfully built and launched India’s first indigenous state of art ventilator and he is very passionate to build the next generation of ventilators as a robust and a cost effective one.



Mr.Biju started the session by providing a brief glimpse of how the project of indigenous ventilators was conceived, and later launched as a product in the market. He emphasized that almost 80% of the work could be completed in 20% of the time and the rest of the time was involved in fine tuning and getting the best of results. He also insisted that the right guidance received from eminent personalities like Dr.G.S.Umamaheshwara Rao, Ex-Dean NIMHANS, Dr.M.Ravishankar, Dean, Mahatma Gandhi Medical College and Mr. Arun S Joshi, Ex-Scientist, DMRL at the right time helped them in shaping the product to a greater extent. He outlined the step by step development process carried out at PSG Tech (FESTO Lab) under the guidance of Dr.P.V.Mohanram and Dr.P.Radhakrishnan, Professors from the Dept of Mechanical Engg. at PSG Tech.

He also detailed the different sensors that were used in the development of a ventilator, and explained the working principle of the same. He also told that the interfacing of the sensors was carried out using LabVIEW and the students were awestruck to see the project transform from the prototype to a marketable product at the end.



**Mr.Benedict Biju, General Manager (RMS) Skanray Technologies, Mysore handling a session on “Sensor Interfacing and Automation of a typical Engineering System” on 07<sup>th</sup> August 2019 in the ECE Dept.**

The students were able to see a working real time application of the sensors that were taught to them in their classes. They were able to appreciate the importance of the sensor interfacing from the application perspective. This further provoked their thought process towards a real time application development. The students were very eager to interact with the resource person to get their doubts clarified.



**Faculty interaction session with Mr.Benedict Biju, General Manager (RMS)- Skanray Technologies, Mysore, in the ECE Department**

### **“Inauguration of Mechanical Engineering Students Association”**

The Mechanical Engineering Department students’ Association was inaugurated on 7<sup>th</sup> August 2019. The event began with the spiritual invocation song, followed by lighting the lamp by the dignitaries to mark the commencement of the programme. It was followed by the welcome Address by Mr Umasundar, Secretary, MEA. The student introduced the office bearers for the Academic year 2019-20. Mr Bilal Mohamed, Executive member, MEA listed out the activities planned for the current academic year. Mr Anirut, Executive Member gave the introduction about the chief guest. Dr. Santhakumar Mohan, Associate Professor, Mechanical Engineering, Indian Institute of Technology Palakkad took over the stage to inspire the audience about the various career opportunities for Mechanical Engineers. The speaker insisted the students to land a paid or unpaid engineering internship. The students were made aware that an internship can help the student understand the "real world" of engineering and apply the theories and principles that were taught in classrooms.



**Dr N Sarvanakumar, HoD, Mech presenting a memento to the chief guest Dr Santhakumar Mohan of IIT Palakkad during the inaugural function of Mechanical Engineering students Association on 7<sup>th</sup> August 2019**

### **Effective usage of Learning Management System – MOODLE , 2019 – 20, Odd semester**

The effective usage of MOODLE tool for the odd semester 2019-20 was presented by faculty members from all departments commenced on 13<sup>th</sup> August 2019 in presence of Dr.B.Ramamoorthy, Advisor (Academic), PSG Institutions, Dr.P.V.Mohanram, Principal, Dr.G.Chandramohan, Vice Principal and Dr. T. Hamsapriya, Professor and Head, Department of Electronics and Communication Engineering. The primary objective of this exercise was to enhance the teaching – learning process using ICT enabled tools.

Faculty members individually presented their usage of MOODLE in providing students the course related schedules and information, power point presentations and other types of relevant files including posting and replying on forums and creating question items for quizzes using Kahoot or Socrative. At the end of the four days presentation, a common template was created for Course plan and circulated among the faculty members. MOODLE presentation format and faculty preparedness check list was also created and circulated among the faculty members.



**Dr Mahavishnu, AP (CSE) explaining the usage of MOODLE Platform for class work at PSG iTech**

### **Tree Plantation:**

The Eco Club of PSG iTech conducted a Tree Plantation Programme in the college premises on 10<sup>th</sup> August 2019 and 14<sup>th</sup> August 2019 as part of “One Student One Tree” initiative launched by Dr. Ramesh Pokhriyal, Hon’ble Minister of Human Resource Development to create a green and healthy environment across the country. The Plantation programme was inaugurated by Dr.P.V.Mohanram, Principal and Dr.G.Chandramohan, Vice Principal on 10<sup>th</sup> August 2019 at 2:30 pm near the play ground with a brief introduction on the importance of planting trees. In this programme, Dr.A.Kumaravel, Faculty Coordinator, Eco Club, Mrs.M Devasena, Associate Professor, Department of Civil Engineering, Dr. Sivarajan, Associate Professor, Department of ECE, PSG Tech, Mr. Sainath, Assistant Professor, Department of ECE, PSG Tech, Students of PSG iTech and PSG Tech were present and planted 100 saplings.



**Principal Dr. P.V. Mohanram and Vice-Principal Dr.G. Chandramohan, Faculty and Students participating in “One Student One Tree” initiative at PSG iTech**

After the tree plantation, Principal Dr. P.V. Mohanram and Vice-Principal Dr. G. Chandramohan interacted with the first year students of PSG Tech in the Civil Seminar Hall and emphasized the need for planting trees and create a clean and healthy environment by citing various values that are imbibed by the plants/trees.

As part of the “One Student One Tree drive”, 200 samplings were also planted on 14.08.2019 by the Eco-club volunteers and first year students.





**Eco-club Volunteers and first year students planted 200 saplings on 14.08.2019**

### **Semester Award Function - 2019**

In order to recognize the research contributions and achievements made by faculty for the year 2019 (Odd Semester), a faculty award function was held on 14<sup>th</sup> August 2019. As per norms fixed for each category of awards, the management was kind enough to release Rs. 2,16,250/-. The function was presided over by Dr B Ramamoorthy, Advisor-Academic, PSG Institutions. Around 67 faculty members were honored for their contributions as shown in the following table.



**Dr B Ramamoorthy, Advisor-Academic, PSG Institutions awarding**

**Ms Priya Ponnusamy, AP (Sl.Gr) / CSE**



S. No.	Faculty Accomplishments	1 <sup>st</sup> Dec 2018 to 30 <sup>th</sup> June 2019
1	No of Faculty & Staff Receiving Awards	67
2	Funded Research Projects Sanctioned	
	Applied	12
3	Patents - Applied	3
4	Journal Publications	33
	Indexed in Web of Science	11
	Indexed in Scopus	12
	Non Indexed	10
5	Online Courses Completed	19
6	International Conference Organized	1
7	National Conference Organized	1
7	FDPs/PMKVY/Workshops conducted for Faculty & Staff	18
8	Value added courses conducted for Students	10
9	PhDs	
	Awarded	2
	Guided	3
10	Other Significant Contributions by faculty	
	Punctuality	3
	Max GPA	4
	Video Preparation	1
	TNSTC Project Sanctioned	2
	Best Tutor Award	5

### **73<sup>rd</sup> Independence Day**

The 73<sup>rd</sup> Independence Day was celebrated on 15.08.2019. Dr. H. Venkataraman was the Chief guest who is a retired Chemistry Professor of PSG Tech. The event started with the hoisting of the national flag. He was welcomed with a march past led by Mr. B Aakash and Ms. K K Shreenidhaa. Dr. P V Mohanram, Principal gave the welcome address and introduced the Chief Guest. The Chief Guest gave the Independence Day address. In his address, he emphasized the need for enjoying the freedom without disturbing the peace of others. He commemorated the freedom fighters who served our nation by sacrificing their life. Also, cultural events were organized to develop patriotism among the students. In this wonderful day, “Quiz Club “and the “PUSHTI-Cooking Club” were inaugurated by the Chief Guest. Dr. G Chandramohan, Vice Principal gave the vote of thanks. Faculty, Staff members, Students and workers participated in the celebrations.



**Principal and Vice Principal presenting a memento to the chief guest, Dr. H. Venkataraman, retired Chemistry Professor of PSG Tech on 15<sup>th</sup> August 2019 during Independence Day celebration**

### **Faculty Development Programme on “Oracle Database Foundations”**

The Department of Computer Science and Engineering, PSG Institute of Technology and Applied Research along with ICT Academy organized a one week Faculty Development Programme on “Oracle Database Foundations” from 19<sup>th</sup> August 2019 to 23<sup>rd</sup> August 2019. There were 40 participants from various colleges of Engineering in Tamil Nadu, which included 4 participants from PSG iTech, and were trained by Mr. Senbaga Sundaram, Consultant – Education, Oracle University. The resource person started the programme with an introduction into the basics of Database. Each session was very informative and detailed and all concepts were very well explained.

Some of the significant topics covered in the programme included the following:

- Project work presentation
- Database applications and tools, relational databases
- Oracle SQL developer & data modeler
- Mapping entities and attributes and Introduction to Oracle Application Express
- Creating queries in SQL and applying to extract information from database



**Mr. Senbaga Sundaram, Consultant – Education, Oracle University delivering the inaugural address during the one week Faculty Development Programme on Oracle Database Foundations held in CSE Dept. on 19<sup>th</sup> August 2019**

## Let's Talk

Let's Talk programme organized by the English Literary Forum (ELF) was held on 21<sup>st</sup> August 2019. There were two speakers: Mr Prasanna Rahavendra V (II CSE) and Mr Sanjit M M (II ECE)

Mr Prasanna Rahavendra V delivered a very interesting talk on, "The Scientific God". He spoke about belief system in the past and present. He said whether we believe in God or not, we believe in something. He traced the conflict of science and religion from the ancient times and said science and religion are complementary. Scientific inventions have been reflected in religion too he said. He concluded by saying that whether it is God, truth or anything that we want in life we can get only if we seek for it and go after it. Nothing will come to us, we have to seek.

Mr Sanjit M M gave a powerful talk on "Eternal Euphoria". He motivated the students from the beginning of his talk, telling them that everyone is born to create history. He urged students to maintain equipoise in life and take each day as it comes. He further made it interesting by comparing the achievement of happiness to a well cooked meal. He said the key ingredients to a happy life are: positive thinking, good health, time management, developing a sense of humor and helping others. He concluded his talk wishing that everyone will live life to the fullest.



**Mr Sanjit M M (II ECE) delivering a talk on, "Eternal Euphoria" in the Let's Talk programme held on 21<sup>st</sup> Aug 2019**



**Prasanna Rahavendra A (II CSE) delivering a talk on "The Scientific God" in the Let's Talk programme by ELF held on 21<sup>st</sup> Aug 2019**

## Anti-Ragging Meeting

An anti-ragging meeting for the academic year 2019-2020 was held on 22<sup>nd</sup> August 2019 at Administrative Block Board Room at 11.30 am. The meeting was headed by Principal Dr. P.V. Mohanram. Faculty and non-teaching staff members, Deputy Wardens, Psychiatrist, Journalist, Security Manager, Student representatives in the anti-ragging committee attended the meeting. The committee members shared their views and suggestions to ensure that there is no ragging in our institution.



**Anti-Ragging committee meeting held on 22.08.2019**

## **National Science and Technology Fair:**

The student Mr A S Raaghul of final year Mechanical Engineering student along with Electrical and Electronics students and Computer Science students participated in National Science and Technology Fair (NSTF) is an event which is conducted annually by Coimbatore District Small Scale Industries Association (CODISSIA) on 29<sup>th</sup> and 31<sup>st</sup> August 2019. The students demonstrated their science and technology innovations to the industry and to open up prospects of transforming their ideas into startup. In this year's event, around 1200 projects from 76 colleges and 80 schools were displayed. Among the above participants our Mechanical Engineering student's projects entitled "Smart drainage, effluent and sewage pumping system" was displayed in the fair. The proposed system will monitor single phasing fault, stator temperature, vibration, and ambient



temperature, and will dynamically control the speed of the pump and ensure sustained reliable performance of the pump. The users can query the Digital Twin to know the historical performance, and current operating conditions. The proposed system can trigger alarms as early warnings, and also make predictions about possible system anomalies, as and when they occur.

**Students explaining their projects to Dr. Mylswamy Annadurai, an Indian scientist and Vice president for Tamil Nadu State Council for Science and Technology at Codissia on 29<sup>th</sup> & 31<sup>st</sup> August 2019**

## **Vehicle Display for the Launch of Society for Smart E-Mobility:**

To promote development of technologies and products in EV sector, a new forum namely SOCIETY FOR SMART E-MOBILITY-SSEM was formed in Coimbatore by likeminded industries, institutions and professionals working in this sector. This forum is launched on 31<sup>st</sup> August 2019 at the Residency Towers by Tamil Nadu Transport Secretary, Dr.J.Radhakrishnan, IAS and Additional Commissioner for Industries and Commerce, Mr.T.P.Rajesh, IAS in the presence of bureaucrats, administrators. Two electric cars from our Mechanical Engineering Department, one a Formula Race Vehicle and other a Kart Vehicle was kept for display along with the product display of EV components from companies like EMP Pvt Ltd, Selzer Pvt Ltd and Electric vehicles from companies like Ampere Pvt, Surge Pvt Ltd were made available at Residency Towers for the chief guest and delegates to look upon.



**Mr Manhar Parakkal, Mr Arulmozhiselvan, Dr N Saravanakumar HoD/Mech and Mr Senthivel, AP/Mech explaining about the project to the dignitaries at Residency Towers 31<sup>st</sup> August 2019**



## ADVAYA 2K19

The Inaugural function of Culture fest - Advaya 2019 was conducted in the at iTech square on Friday, 30.08.2019 by 4:45 pm. Shri D Muralidhar, Associate Dean, Higher Education and Training, PSG Tech, was the chief guest of the event. The program began with prayer song and a welcome dance followed by the welcome address by Principal Dr. P V Mohanram. In his address, the chief guest lauded the culture of India, which is an amalgamation of unique cultures in different states and communities. The prizes were distributed for few events conducted during the previous week, followed by solo singing, skit and group dance. Then the college magazine – Tarangini was released by the chief guest. The inaugural function was concluded by the Vice Principal, Dr. G Chandramohan with his vote of thanks. In the second day of Advaya 2019 began on Saturday, 31.08.2019, the events started from 9 am onwards. Fun events were conducted from 9:00 am to 10:00 am. At 10:45 am, the Pattimandram was conducted by Tamil Mandram. Then, a short skit by the ELF club was enacted. After this, the promotion of radio club was carried on by the members of the radio club. The prizes were distributed for the events that were completed. The post lunch session started at 2:00 pm with some on stage events and adapt tunes were organized. The final round of Mr. and Ms. Advaya was held. The last session of Advaya started with iTech band performance followed by solo dance, a skit by NSS. The volunteers were appreciated with a memento and a certificate. All the events were well attended by the students, faculty and staff members. Finally, the event came to an end after a dance performance by dance club. The students union team concluded the event with vote of thanks.



**Shri. D Muralidhar, Associate Dean, Higher Education and Training, PSG Tech, addressing the students of PSG iTech on 30<sup>th</sup> August 2019**



**Dr.P.Subbaraj, Dean - Electrical Sciences presenting memento to the chief guest, Shri. D Muralidhar, Associate Dean, Higher Education and Training, PSG Tech during Advaya 2019 held on 30<sup>th</sup> August 2019**



**PSG iTech students performing dance during Advaya 2019 held on 31<sup>st</sup> August 2019**



**iTech Music team performing duet song during Advaya 2019 held on 31<sup>st</sup> August 2019**

## **Industry-Academia Conclave (2019-20)**

Industry-Academia Conclave (2019-20), with the theme ‘New Age Business and Engineering Education’, organized by PSG Institute of Technology and Applied Research, Neelambur, Coimbatore was inaugurated on 03<sup>rd</sup> September 2019. The Chief Guest, Dr. V Kovaichelvan, Director of TVS Institute for Quality and Leadership, Bengaluru addressed the students with thought-provoking facts. He pointed out that only 5% of what one learns from school and college is being used in the industry. He further added that everything is possible, when intellect is given the highest priority. He further added that one attains wisdom only when he/she realizes the strengths and limitations of the intellect.

He cautioned that the present sedentary lifestyle affects our health and results in a lot of health issues. Most of us may be highly educated and may also have a successful career but due to the current lifestyle we suffer from both mental and physical ailments. He stressed on the importance of yoga and other traditional practices which can easily help us maintain a sound body and mind. He emphasized that the 17 sustainable goals put forth by the United Nations must be enforced and practiced in every institution.

He suggested to the faculty to shift the focus from the idea of preparing the students just for a job, to mould them as a complete and responsible human beings. He regarded the human potential to be a blend of aspiration, ability and engagement. Finally, he instilled the thought of giving more to the society and striving hard to accomplish greater achievements and to focus towards an outcome-based education. The Principal, Dr. P V Mohanram, the Vice Principal, Dr. G Chandramohan, the Dean Dr. P Subbaraj, Dr. R Manimegalai, the Co-ordinator of the Conclave, Heads of various Departments, faculty members and students graced the occasion. The conclave concluded on 04.09.2019 with 20 individual technical sessions on recent and emerging topics handled by the experts from various industries and organizations covering several core disciplines of engineering.



**Dr. V Kovaichelvan delivering the inaugural address in the Industry-Academia Conclave 2019-20 on 03.09.2019**



**Dr. V Kovaichelvan being felicitated by Dr. P Subbaraj, Professor and Dean (Research) along with Dr. G Chandramohan, Vice Principal, Dr. P V Mohanram, Principal and Dr. P. Perumal, Professor of Civil Engineering on 03.09.2019**

## Medical Camp

As a part of “Fit India Movement”, Youth Red Cross (YRC) Society and National Service Scheme (NSS) jointly organized a medical camp in association with PSG Institute of Medical Science and Research (PSG IMSR) on 4<sup>th</sup> and 7<sup>th</sup> September 2019. Dr. P V Mohanram, Principal, PSG Institute of Technology and Applied Research, Coimbatore inaugurated the camp. Dr. P. Chinnaraj, Assistant Professor (Sl. Gr.)-Mathematics, NSS Programme Officer and Mr. M. Sathiyathan, Assistant Professor (Sr. Gr.)-EEE, YRC Programme Officer have coordinated the above programme. 63 students from first year (Batch: 2019-23) got benefited. The doctors examined the anthropometric details, dietary and stress level of the students and proper counseling has been given to the students.



**Doctors team collecting blood samples and examining the students on 4<sup>th</sup> Sep 2019**



**Dr Rajendran, of PSGIMSR explaining a faculty member about the food habits on 7<sup>th</sup> Sep 2019**

## World Physiotherapy Day Celebration

Faculty and students were trained in physical exercises and a lecture on importance of physical exercise was arranged by doctors of PSGIMSR.



**Dr.R.Subash from PSGIMSR teaching physical exercises to the faculty and staff members of PSG iTech as a part of World Physiotherapy day on 7<sup>th</sup> September 2019**



**Dr T Hamsapriya presenting a memento to Dr. V Ramamoorthy, Professor and Head, Physical Medicine & Rehabilitation, PSGIMSR on 7<sup>th</sup> September**



## **Inauguration of Polymer Engineering Laboratory**

Polymer Engineering Laboratory of PSG Institute of Technology and Applied Research was officially inaugurated by Shri. G.R.Karthikeyan, Founder Trustee of PSG Sons and Charities in the presence of Mr. L.Gopalakrishnan, Managing Trustee, Dr. B.Ramamoorthy, Academic Advisor, PSG Institutions, Dr.P.V.Mohanram, Principal, Dr. G.Chandramohan, Vice Principal, Dr.M.Alagar, Research Consultant and other heads of departments on 5<sup>th</sup> September 2019.



**Inauguration of Polymer Engineering Laboratory in the Dept. of Civil Engg. on 5<sup>th</sup> September 2019**

## **Scholarship Distribution**

Typical alumni of PSG Tech as well as PSG iTech from abroad and India, friends from industries like Guru Engineering, BULLS, etc., faculty of PSG iTech and PSG Tech and their known friends had donated money in the form of cash or cheques to few financially needy students, recommended by a committee headed by Dr.P.Subbaraj, Dean (Electrical Sciences) and Prof K Anantharaman/Mechanical Engg.

Scholarship distribution function was held on 5<sup>th</sup> September 2019. Shri.G R Karthikeyan, Founder Trustee and Shri.L.Gopalakrishnan, Managing Trustee participated and handed over cheques & letters of scholarships to the students. Dr.B.Ramamoorthy, Advisor (Academic) also participated along with Principal, Vice Principal, Dean, HoDs, faculty and students. Shri.G.R Karthikeyan, Founder Trustee handed over cheques to three students which cover up the entire tuition fees for this



year. Mr.Baskaran R Tranquebar, 1988 production batch PSG Alumnus, from US contributed the above amount through Dr.J.Kanchana, Professor, PSGIAS. Shri.L.Gopalakrishnan, Managing Trustee, handed over letters of scholarships to 30 students of all engineering branches. Each student got Rs.10000/- which would definitely help them to meet out some short falls in their college fees and other expenses.

**Shri.G R Karthikeyan, Founder Trustee distributing scholarship amount to the financially needy students on 5<sup>th</sup> September 2019**



## **Feminine Hygiene Awareness**

A “Feminine Hygiene Awareness” Session was organized by PSG iTech – Ladies hostel and Wellness Centre on 6<sup>th</sup> September 2019 by Ms.K.Jarina, Manager-operation for TN, Rentokil Initial Hygiene India Pvt. Ltd. Few staff members and 120 hostel students participated in the Programme. The program started with the introduction of the facilitator by Dr. G Santhanamari, Warden. The facilitator Ms.Jarina outlined the importance of hygiene and discussed the ways of disposing off sanitary napkins through videos. Subsequently, she explained about the usage of Vending machine in detail, and, the machine was installed in the girl’s hostel. The session ended with her observation that “PSGiTech is the first college to have an incinerator in girls hostel among other colleges in Tamil Nadu”



**The speaker Ms. Jarina, Manager-operation for TN, Rentokil Initial Hygiene India Pvt. Ltd explaining the ways of using incinerator to the hostel students and faculty of PSG iTech on 06<sup>th</sup> September 2019**

## **Onam Celebration - 2019**

Onam celebration was arranged on 13<sup>th</sup> September, 2019. Floral decorations were done in the morning. The cultural program started at 3 pm with solo singing, group singing and thiruvathirakali performance. Followed by the cultural programs, there were some traditional games like ‘Onathallu’, ‘Uriyadi’, ‘tug-of-war’ etc. Refreshments (banana chips and paalada payasam) were also provided to the participants during the program.



**Onam celebrations 2019 at PSGiTech held on 13<sup>th</sup> September 2019**



**Students dance performance during Onam celebrations 2019 held on 13<sup>th</sup> September 2019**

## German Language Certification Course

The inauguration for the 5<sup>th</sup> Batch of German Language certification course (Start Deutsch – Level A1) was inaugurated on 11<sup>th</sup> September 2019. Dr P V Mohanram, Principal and Dr R Manimegalai, HoD/CSE presided the event. A total of 29 students were enrolled and attended the inaugural function. The program is offered on all Wednesdays from 4.45 – 6.15 pm. The total duration of the program is 40 hrs. The certification course is offered by Mr. S. Thivaharan, Asst. Prof (Sel. Grade)/CSE.



**German Language certification course (Start Deutsch – Level A1) was inaugurated on 11<sup>th</sup> September 2019**

## Awareness Programme

An awareness programme was organized by the NSS volunteers on 14<sup>th</sup> September 2019 with strength of 35 members. It was organized in three villages namely Andipalayam, Kondampatty and Sirukulandai. The main idea to be conveyed was water conservation, effects of using plastics & the need for afforestation. The programme was well organized by the NSS programme officer, Dr.P.Chinnaraj. At First, Rally was started in the village Kondampatti. Various thought provoking quotes were written on the placards. Secondly, the team started the rally in Andipalayam village by 12.00 Noon and finished it by 1.30 pm. Finally the volunteers reached Sirukulandai Village. All were segregated into two teams and Dr.P.Chinnaraj conducted a debate over the topic ‘Technology is Boon or Bane’. The team discussed various points on advantages and disadvantages of technology. Dr.P.Chinnaraj thanked the volunteers for their co-operation and making the awareness programme, a grand success.



**Awareness programme on Water Conservation and the ill effects of using plastics was held on 14<sup>th</sup> September 2019 at three villages in Coimbatore, co-ordinated by the NSS team of PSG iTech**

## **IUCEE International Engineering Educator Certification Program (IIEECP) - Phase I**

The IIEECP- Phase I program was organized by PSG CARE at PSG Institute of Technology and Applied Research during 16<sup>th</sup> to 18<sup>th</sup> September 2019. The resource person for the program was Dr. Claire Komives, San Jose University. 31 participants from PSG Institutions (PSGCT, PSG PTC, PSG iTech) attended the three day programme. The programme started with a webinar delivered by Dr. Veena Kumar, Director (IIEECP).

**Day 1:** In the first session, the analysis and strategies to teach the millennial generation students was discussed. The mantra for the entire programme was “I am teaching, are they learning?”. The session also reviewed the learning and employability needs of the millennial learners.

In the second session, various domains like cognitive, psychomotor and affective domains were discussed. Motivating students has become a universal problem and ARCS- Attention Relevance Confidence Satisfaction Model was recommended for managing student motivation. The last session on day 1 ended with hands on session to online learning resources. The CANVAS learning management system was introduced to the participants.

**Day 2:** The first session of day 2 started with the discussion on the effective method of designing curriculum. The backward design starting from outcomes, assessments and ending with content plan was recommended. The emphasis is to be on having outcomes clearly measurable. The second session was about effective lecture delivery.

Dr.Claire suggested that the lectures are to be planned well in advance and every class should start with a quick review of previous lecture and learning outcomes of current lecture had to be clearly stated. She also said that the content had to be delivered in small packets and the packets had to be interspersed with active learning methods.

In the third session different active learning methods like flipped classrooms, JIGSAW, Think share and pair, Think Aloud pair problem sharing (TAPPS) were demonstrated.

**Day 3:** The third day of the programme started with a session on effective assessment methods. The Summative and formative assessment methods were discussed. In second session, the speaker discussed the rubrics for assessment. The Assessment rubrics would be helpful in improvement of student performance in specific areas. Plagiarism and academic integrity were discussed in the third session.



**Dr. Claire presenting about millennial learners and their needs in the IUCEE Certification Programme – Phase I which was held on 16-09-2019**



**Dr R Rudramoorthy, Director (PSG CARE) presenting a memento to Dr. Claire Komives, San Jose University on 18-09-2019 at PSG iTech during IUCEE Certification Programme**



## **ACCE (I) Student Chapter -Engineer's Day 2019**

The ACCE(I) – PSG iTech Student Chapter celebrated the “Engineer’s Day 2019” function on 16<sup>th</sup> September 2019. Mr.G.Srinivasan, Managing Director, Srinivasan Associates was the chief guest of the function. The function started with the welcome address by Mr.S.Sitharth Subramani, Chairman of the Student Chapter. Dr.M.I.Abdul Aleem, HoD, Civil Engineering and Treasurer of the student chapter delivered the presidential address. Mr.G.Srinivasan, Managing Director, Srinivasan Associates delivered the chief guest address and he talked to the students briefly about the life and achievements of Sir M Visvesvaraya and Mr.E.Sreedharan, the “Metro Man of India”. He also talked about the recent advancements that have taken place in the civil engineering field and also about the expectation of the industries from the budding civil engineers. He also shared some useful point to become a successful person in life. The function ended with the vote of thanks by Ms.D.Varshini, Managing Committee Member, ACCE(I) – PSG iTech Student Chapter.



**Mr.G.Srinivasan, Managing Director, Srinivasan Associates, Coimbatore addressed the gathering on 16.09.19 in the Civil Engineering Dept, PSG iTech**

## **Higher Studies in Universities Aboard**

An interactive session on higher studies abroad was organised on 16<sup>th</sup> September 2019. Ms Claire F. Komives from San José State University addressed students of various departments who would like to take up higher studies in United States. Dr. Claire has explained in detail about the admission procedure in San Jose University. Nearly 30 students have got benefited from the session.



**Dr Claire interacted with students on 16<sup>th</sup> September 2019 on career opportunities abroad**



### **Visit of guest from Binghamton University, New York :**

Dr. Mohammed Khasawneh, Professor and Chairman - Systems Science and Industrial Engineering and Thomas J. Watson School of Engineering and Applied Science, Binghamton University, New York visited PSG iTech on 18<sup>th</sup> September 2019. Dr. Mohammed gave a brief presentation about the university and interacted with the head of the departments and senior faculty members. He briefed about how he and his team of faculty is using latest concepts of machine learning and data sciences along with the industrial engineering knowledge for providing solutions in the area of health care. For the benefit of the students, he mentioned that doing masters in data sciences course gives a three year stay back in US. Also in his university, for students scoring CGPA of more than 8 in their UG program, GRE score is not necessary for the admissions. Also there were discussions on faculty exchange and students internship possibility between PSG Institutions and Binghamton University.



**Dr. Mohammed Khasawneh, Professor and Chairman - Systems Science and Industrial Engineering and Thomas J. Watson School of Engineering and Applied Science, Binghamton University, New York visited PSG iTech on 18<sup>th</sup> September 2019**

### **National Cadet Corps Women Wing**

The National Cadet Corps is Youth Wing of Armed Forces with its Headquarters at New Delhi, Delhi, India. It is open to school and college students on voluntary basis. National Cadet Corps is a Tri-Services Organization, comprising the Army, Navy and Air Wing engaged in grooming the youth of the country into disciplined and patriotic citizens.



The National Cadet Corps Women Wing has been sanctioned to PSG iTech on 18<sup>th</sup> September 2019. NCC team started with 17 girl students and one caretaker. The Cadets are given basic military training in small arms and parades. The officers and cadets have no liability for active military service once they complete their course. Ms.V.Vilasini, Assistant Professor (Senior Grade), Dept of CSE has been appointed as a caretaker for the NCC Women Wing of PSG iTech.

**Mr Gajendran, AP(Sr.Gr)/Maths and Ms Vilasini , AP(Sr.Gr)/CSE along with Mr Mahendra Singh, NCC Officer on 18<sup>th</sup> September 2019 during the sanction of National Cadet Corps Women Wing**

The Cadet names are mentioned below:

S. No.	Cdt. No.	Name of the Student	Father/ Guardian Name	DoB
1	TN19SWA839245	Shreenidhaa KK	Kandasamy N	14-09-2000
2	TN19SWA839246	Naveena C	Chinnusamy R	14-12-2000
3	TN19SWA839247	Kanishkha S	Sivasankar S	01-12-2000
4	TN19SWA839248	Kavya S	Shanmugasundaram A	21-06-2001
5	TN19SWA839249	Swedha R	Rajarajan V	04-04-2001
6	TN19SWA839250	Aswathi R	Sailarajan KK	06-12-2001
7	TN19SWA839251	Kareshmmaa AS	Shiva Subramanian K A	12-06-2001
8	TN19SWA839252	Prema R	Rahuraman G	05-11-2001
9	TN19SWA839253	Gayathri V	Velmani G	11-03-2002
10	TN19SWA839254	Kotamreddy Aishika	Kottamreddy Srikanth	06-06-2002
11	TN19SWA839255	Thaarikaa N	Nagaraj K	18-01-2002
12	TN19SWA839256	Manjuvidya S	Sampath V	13-07-2002
13	TN19SWA839257	Poorani SK	Satheeskumar A	12-08-2002
14	TN19SWA839258	Prabhasree k	Kandasamy M	18-06-2002
15	TN19SWA839259	Suchitra R	Rajasekaran K	27-03-2001
16	TN19SWA839260	Kousik Srinithi	Palanisamy M	11-10-2001
17	TN19SWA839261	Sneha S V	Seenivasan P	17-06-2001

### **Hindi Gyan Kshethr Club Inauguration**

Hindi Gyan Kshethr club was inaugurated on 18<sup>th</sup> September 2019. The faculty co-ordinator is Mr R Rajkumar, AP (Sr.Gr)/Civil Engg and the Student Representative is Mr Dhruv Aggarwal (II-CSE). The club tries to familiarize the usage of Hindi as a language amongst students. The classes will be conducted every Wednesday evening for an hour. The club intends to provide the students adequate exposure to the language by inculcating fun activities and make the learning process more



innovative. The club has created a blog that contains all, that has been taught from the first class onwards. This is to ensure that no student misses any of the topics taught and also has the provision to go through the topics after class. It has a feedback system to clarify doubts from the students and a well equipped team to address all the issues. 25 students got benefitted.

**Hindi Gyan Kshethr Club Inauguration held on 18<sup>th</sup> September 2019**

## **Guest Lecture on “Design and Debugging of Embedded Systems”**

ECE Association organized a guest lecture on “Design and Debugging of Embedded Systems”. The guest lecture was conducted on 23<sup>rd</sup> September 2019. The guest lecture was presented by Mr.J.Hareesh, Houston, Texas, USA. He stated interesting facts on design of embedded systems and gave few real time examples of debugging hardware and software design. Nearly, 120 students of ECE department attended the guest lecture. The main aim of the lecture was to provide insight into Launch-pad, hardware components, software design, interfacing issues and performance enhancing measures.



**Guest lecture on the topic “Design and Debugging of Embedded Systems” for ECE Students was held on 23<sup>rd</sup> September 2019**

## **Mock Test on GATE**

A Mock Test on GATE Exam was conducted by Higher Education Forum in association with TIME Institute. It was held on 25<sup>th</sup> September 2019. About 48 students turned up writing the exam. Mr. Saleem, Exam Admin in TIME Institute along with his coordinator, Mr. Subash helped in carrying out the exam. Besides coordinating, they also explained about preparing for the exam and encouraged the interested students by providing plenty of information about the exam. They also discussed about the books and materials for preparation. A positive feedback was obtained from the students who wrote the exam.



**Final Year and Pre Final Year students of all departments in PSG iTech take up GATE mock test**



## **NSS Day**

As a part of NSS activity, National Service Scheme (NSS) organized a NSS day program in association with Drawing and Painting Club on 25<sup>th</sup> September 2019. Dr. P V Mohanram, Principal, PSG Institute of Technology and Applied Research, Coimbatore inaugurated the NSS Day Function. Dr. P. Senthil kumar, NSS Programme Officer, PSG College of Technology delivered a motivation speech about the importance of NSS. Dr. G. Chandramohan, Vice Principal, Dr. P. Chinnaraj, Assistant Professor (Sl. Gr.)-Mathematics, NSS Programme Officer, Dr. M. Devasena, Associate Professor, Civil, Ms.M.Deepa, Assistant Professor (Sr.Gr) ECE, Ms.N.Susithra Assistant Professor ECE has coordinated the programme. 103 volunteers participated the Programme.



**Dr. P V Mohanram, Principal and Dr. G. Chandramohan, Vice Principal presented the memento to the chief guest Dr. P. Senthil kumar, NSS Programme Officer, PSG College of Technology on 25<sup>th</sup> Sep 2019 at PSG iTech**

## **The Institution of Engineers (India) PSGI - Students' Chapter**

The Institution of Engineers (India) PSGI- Students' Chapter 2019-20 was inaugurated for the academic year 2019-20 on 25<sup>th</sup> September 2019. Dr. P R Natarajan, Chairman of IEI, Coimbatore Local Centre was the guest of honour. Dr. T. Hamsapriya, HoD, ECE Dept. welcomed the gathering and the function was presided over by Dr. S. Jayakumar, HoD, Physics. Mr. Jothibas M, Assistant Professor (Sr.Gr), ECE Dept. introduced the Office Bearers for the academic year 2019-20. Dr. I. Kala, Associate Professor, CSE introduced the chief guest to the gathering. Dr. P R Natarajan stressed the importance of mother tongue in increasing one's creativity.

He described about some of the new inventions which includes a room that can collect over a million bio-medical data of a person within 20 minutes and even predict the deficiency that the person can experience in future. He added a quote by Sir Mokshagundam Visvesvaraya, "Anything happens against humanity must be removed by Engineers". He also described about the future of electric cars that can even fly. He concluded his speech with a statement that "Engineers can transform even Hell into Heaven". The session ended with the vote of thanks by Dr. M. Mohamed Iqbal, Associate Professor, Department of EEE.





**Dr. P R Natarajan, Chairman of IEI, Coimbatore Local Centre, addressing the gathering on 25<sup>th</sup> September 2019**

### **Let's Talk**

Let's Talk programme was held on 25<sup>th</sup> September 2019. There were two speakers: Arul Mozhi Selvan (IV Mech) and Kiritin Srinivas. R (II ECE). Mr Arul Mozhi Selvan R (IV Mech) gave an inspiring talk on, "Be Better." He pleaded for making the best use of the time we have on earth, to be kind and compassionate to everyone. He also emphasized the need for expressing our love for others and not to wait till the person passes away. He urged young people to do away with depression, fear & anger and to be successful in personal as well as in professional life.

Mr Kiritin Srinivas (II ECE) attempted an intriguing topic "Mr. Bean-ism." He stressed on the importance of being true to ourselves and not to hide behind masks. He further, encouraged the young audience to love themselves first, only then they can love others. He also stressed that people should express their love for another and be compassionate towards all.

Both the speakers spoke with a lot confidence and they were highly appreciated by the audience. Certificates were given to the speakers by Dr.S.Jayakumar, HoD, Department of Physics and Dr. R. Manimegalai, HoD, Department of CSE.



**Mr Arul Mozhi Selvan R (IV Mech), delivering a talk on, "Be Better" in the Let's Talk programme by ELF held on 25 Sept 2019**



**Mr Kiritin Srinivas R (II ECE) delivering a talk on "Mr. Bean-ism" in the Let's Talk programme by ELF held on 25 Sept 2019**

### **Residential program on Science, Education and Technology for Rural India:**

Dr.M.Devasena, Associate Professor, Department of Civil Engineering, Dr.P.Chinnaraj, Assistant Professor, Department of Mathematics and Dr.R.Ravikumar, Assistant Professor, Department of Humanities attended a one week residential program on Science, Education and Technology for Rural India during 29<sup>th</sup> June to 6<sup>th</sup> July 2019. The programme was organized by M S Ramaiah Institute of Technology Bengaluru and was held at at Kaiwara mutt near Bangalore. The program was an initiative towards making rural India sustainable. Technologies applications to villages for self sustaining through water management, entrepreneurship, sustainable agriculture practicing, Govt Schemes, model villages, establishment of herbal gardens were the focus of the programme. Zero percent natural farming, creation of replica forest, Rainwater harvesting structures, establishment of embankments by Mr. Ayyapa Masakki, water Gandhi of India was an eye opener in water conservation and farming methods. Health tips and yoga asanas by Tammiah Guruji in the divine locality has boosted our energy and spirits. Tiny technologies by Mr. V.K.Desai have showed a pathway to venture in decentralized technologies including tiny oil mills, tiny sugarcane plants. Interaction with successful farmers, interaction with Ayurvedic and homeopathic doctors showed a path towards alternative medicines. IOT based tools and innovation amongst students was highlighted by the resource persons.

#### **Outcomes:**

1. To organize a similar programme for the student community and disseminate the importance of technology development in rural areas. (Tentative Date and Place)
2. To adopt few villages and convert them as model villages (Tentative villages)
3. To empower womenfolk with the resources available in villages (Creating Road maps)
4. To revive the traditional knowledge and practices and contribute towards reinventing village Swaraj (Creating Road maps)

### **Visit to DRDL, Hyderabad**

DRDL, Hyderabad had sent a set of projects for which they are expecting faculty from PSG iTech to initiate, discuss and submit proposals. On 21<sup>st</sup> August 2019, a team of faculty consisting of following members, visited DRDL.

1. Dr.N.Saravanakumar, HoD/Mechanical Engineering
2. Dr.R.Ramesh,Professor/Mechanical Engineering
3. Mr.K.Anantharaman, Visiting Prof/ Mechanical Engineering

#### **Scientists met during visits:**

The following senior scientists had detailed discussion with the above team, regarding projects:  
Dr.Dasharathram Yadav, Director/DRDL Labs, Dr.Arjun Vedadri, Director/Engineering, Dr.John, Dr.Indumathi , Dr.Suresh, Dr.Abhishek and Mr.Ashok Ponram

## **Outcome of the visit:**

1. Project proposals submitted by Dr G Chandramohan, Vice Principal is told almost approved and DRDL scientists had confirmed to sanction soon.
2. Project proposals submitted to Dr.Indumathi were discussed in details by HoD, Mechanical. Revised proposals to be submitted on return.
3. Discussed with Dr.John and technical clarifications were obtained on other projects also.
4. Dr.Suresh was unavailable to discuss on proposed training programme to DRDL scientist by PSGiTech. Sri.Ashok Ponram assured to organize one more meeting either at PSG iTech or at DRDL, Hyderabad, on this.
5. Mr.Ashok Ponram is coordinating on behalf of DRDL and helped them in getting permission, providing accommodation and vehicles also.

## **Lab Visit to IIT Madras**

The following faculty members visited the i) Indigenous 5G Test bed project lab, ii) RISE Lab and iii) Structural Health monitoring lab at IIT Madras on 20.09.19 and had fruitful discussions with the Principal Investigators and Professors in-charge.

1. Dr R Manimegalai, Professor and Head, Dept. of CSE
2. Dr A C Sumathi, Asst Prof, Dept. of CSE
3. Dr P Reba, Asso Prof, Dept. of ECE

### **I. Indigenous 5G Test bed project lab, PI : Dr Radhakrishna Ganti**

The 'Indigenous 5G Testbed' project is funded in large scale by Department of Telecommunication (DoT) to encourage Indian startups and the industry to take an early lead in 5G. The project involves in designing and fabricating multiple high-end components such as baseband processing units, remote radio heads, RF modules, core network, network interconnects and baseband algorithms and software. The software is developed using C, C++ and Python programming languages. Other software tools such as vivado and verilog are used for hardware designing. Internship opportunities are available in the areas such as MIMO testing, Hardware Security and RFC standards.



**Dr R.Manimegalai, Dr Sumathi and Dr Reba at 5G Project lab, IIT Madras, Chennai on 20<sup>th</sup> Sep 2019**

## **II. RISE LAB, Profs. In-charge : Dr Neel Gala & Dr Chester Rebeiro**

SHAKTI is an open-source initiative by the RISE group at IIT-Madras, building open source, production grade processors, and its associated components like interconnect fabrics, verification tools, storage controllers, peripheral IPs and SOC tools. RISE team is also working on the front-end design of SHAKTI processor using Bluespec System Verilog and Vivado. Verification is done using Python programming. Internship opportunities are available in the areas such as Verification, Memory subsystems and Security systems.

## **III. Structural Health Monitoring using IoT, Prof. in-charge: Dr U Saravanan**

Development of Structural Health Monitoring schemes for Indian Civil Engineering Infrastructure using Smart Sensing Technologies, funded by Government of India. Internship opportunities are available in developing software for monitoring the health of bridges constructed across the state using Python and Java programming languages.

## **IV. Hardware Security , Prof in-charge: Dr V Kamakoti**

Internship opportunities are available to work in the areas such as Hardware security, Applied cryptography, Side channel analysis and operating system security.

## **International Conference CTSE-2019 attended by faculty**

SSN College of Engineering conducted an International Conference on the title “Recent Trends in Clean Technologies for Sustainable Environment (CTSE-2019) on 26<sup>th</sup>-27<sup>th</sup> September 2019. Participants from all over India participated in the event. Mr J Nagarjun, AP (Sr.Gr)/Mech presented two papers in the title ‘Influence of Infill density on Mechanical Traits in 3D printed Nylon 6’ and another paper titled ‘A survey on start/stop response of two wheel riders in Indian Road signals to reduce Co<sub>2</sub> emissions. The papers are expected to get published in the Journals Material Science-Poland and Environmental Science and Technology respectively. Of the two papers, one paper won the ‘Best Presentation Award’.



**Mr Nagarjun J, AP (Sr.Gr)/Mech receiving ‘Best Presentation award’ from Dr. Dai Viet, University Malaysia Pahang on 27<sup>th</sup> Sep 2019**



**Guest Lecture Delivered by faculty members:**

The faculty members those who delivered lectures in other colleges during the quarter period are as follows:

S. No.	Name of the Faculty	Topic	Venue	Date
1	Dr Mohanram P V	Teaching and Learning Style - Outcome Based Learning	PSGIM PSG CARE programme	04.07.2019
		Engineering Education	PSG IAS I year Orientation	16.07.2019
		I year Orientation Programme Preparedness to face challenges	Anna University, Coimbatore	05.08.2019
		Three Week Induction Programme for First Year Students-Mechanical	PSG Tech Mechanical Dept	08.08.2019
		How to use Kahoot?	PSG Public School	21.08.2019
		Importance of commitment in Professional Life	Login 2019 PSG Tech	29.09.2019
2	Dr G Chandramohan	Use of Clickers	PSG IM PSG CARE programme	28.09.2019
3	Dr. M. Devasena	Environmental Research	BIT, Sathy	15.07.2019
		Sustainable Water Management Systems		23.07.2019
		River Basin and Flood Risk Management	Dr. NGP Institute of Technology, Coimbatore	06.09.2019
4	Dr M Arun	Basics in Design of RC Elements	Sri Ranganathar Institute of Engineering and Technology, Coimbatore	16.08.2019
5	Dr.D.Sivaganesan	One Day Workshop on NAAC Accreditation process and procedure	RVS College of Engineering and Technology, Coimbatore.	08.09.2019

**General Workshops/Meetings attended by faculty members:**

The faculty members those who attended general workshops/meetings in other colleges during the quarter period are as follows:

S. No.	Name of the Faculty	Event Title	Venue	Date
1	Dr P V Mohanram Dr G Chandramohan	IUCEE ABET workshop and Leadership Summit	Goa	11 <sup>th</sup> – 13 <sup>th</sup> July 2019
2	Dr P V Mohanram Dr N Saravanakumar Dr R Ramesh	Improving the I year students intake and placement	DOTe Office, Chennai	27 <sup>th</sup> August 2019
3	Dr P V Mohanram Dr G Chandramohan Dr R Ramesh Dr D Elangovan Dr D Sivaganesan Dr P Reba	Meeting with Mentee Institutions under UGC's Paramarsh Scheme,	PSGCAS	28 <sup>th</sup> August 2019

**Workshops/FDPs Attended:**

The faculty members those who attended workshops/FDPs in other colleges during the quarter period are as follows:

<b>Department of Civil Engineering</b>				
S. No.	Name of the Faculty	Event Title	Venue	Date
1	Mr Rajkumar R	Application of Remote Sensing and GIS for Hydrology and Water Management	IIT Bombay	15.07.2019 to 19.07.2019
2	Dr Devasena M	Science and Technology for Rural India	Kaiwara, Bangalore	06.07.2019
3	Dr Arun M	Analysis and design of RC buildings in seismically sensitive zones - Present & Future	Dr. B. R. Ambedkar Institute of Technology, Port Blair, Andaman	08.07.2019 to 12.07.2019
4	Dr Devasena M	One Day Thematic Workshop on "Clean Technologies"	PSG STEP	17.08.2019
		Meeting with Siruthuli, NGO	Siruthuli, Coimbatore	19.08.2019
		e-Learning and MOOCs in Higher education	Anna University, Chennai	14.09.2019

<b>Department of Computer Science and Engineering</b>				
<b>S. No.</b>	<b>Name of the Faculty</b>	<b>Event Title</b>	<b>Venue</b>	<b>Date</b>
1	Dr Bhuvana S Mr Shabariram C P Ms Radhika P R	Oracle Data Base Foundation	PSG iTech	19.08.2019 to 23.08.2019
2	Dr. A. C. Sumathi, Ms. K. Lakshmi Kalpana Roy, Mr.B.Ajith Jerom	NMEICT Workshop on Linux conducted by IIT Bombay	KPR Institute of Technology, Coimbatore	23.8.2019
3	Ms Lakshmi Kalpana Roy K Dr Sumathi A C	FDP on Linux	IIT Bombay	23.08.2019
4	Dr.S.Bhuvana	Kaizen IOT Workshop	Government college of Technology, CBE	1.9.2019

<b>Department of Electrical and Electronics Engineering</b>				
<b>S. No.</b>	<b>Name of the Faculty</b>	<b>Event Title</b>	<b>Venue</b>	<b>Date</b>
1	Mr M Sathiyathan	QIP short term course on “Solar Energy Systems”	Indian Institute of Science, Bengaluru	01.07.2019 to 05.07.2019
2	Dr Bharathisankar S	Mini bike design and fabrication techniques	Karpagam College of Engineering	09.08.2019
3	Mr Ravikrishna S	Lithium battery: Technology, Safety and BMS	Autobot India, Bangalore	09.08.2019 & 10.08.2019

<b>Department of Mechanical Engineering</b>				
<b>S. No.</b>	<b>Name of the Faculty</b>	<b>Event Title</b>	<b>Venue</b>	<b>Date</b>
1	Mr J Nagarjun	International Conference on Recent Trends in Clean Technologies for Sustainable Environment	SSN College of Engineering, Chennai	26.09.2019 & 27.09.2019
2	Dr K Sivananda Devi	FDP on Product Development	Tractors and Farmers Equipment Ltd, Chennai	23.09.2019 to 25.09.2019

<b>Department of Science and Humanities</b>				
<b>S. No.</b>	<b>Name of the Faculty</b>	<b>Event Title</b>	<b>Venue</b>	<b>Date</b>
1	Dr K Pramila	Attended FDP organized by DOTE for English Teachers	PSG College of Technology	17.09.2019 to 21.09.2019
2	Dr.P.Chinnaraj	One week FDP – SEAT for Rural India.	Ramaiah Institute of Technology, Bangalore.	29.06.2019 to 06.07.2019

**Paper Presentation in Conference / Workshop attended by non-teaching staff:**

The staff members those who attended Conference/workshops in other colleges during the quarter period are as follows:

<b>S. No.</b>	<b>Name of the Staff</b>	<b>Event Title</b>	<b>Venue</b>	<b>Date</b>
1	Ms N.Vasanthi Asst.Librarian	Paper presented on the topic in “Reshaping Modern Libraries to Collaborative Libraries in ”International Conference on “Reshaping Librarianship: Innovations and Transformations”	Bharathiar University, Coimbatore	16.08.2019 & 17.08.2019
2	Ms V.Sumathi Junior Assistant	Two day National Workshop on “Academic Identity, Enhancing Research Visibility and Improving Citations”.	PSG College of Arts & Science, Coimbatore	26.09.2019 & 27.09.2019

**PSG CARE Programmes attended by faculty members:**

The faculty members those who attended PSG CARE programme during the quarter period are as follows:

<b>S. No.</b>	<b>Name of the Faculty</b>	<b>Event Title</b>	<b>Venue</b>	<b>Date</b>
1	Ms D Saranyadevi Dr A Bharathi Sankar Ms Mishmala Sushith Ms G Vidya Mr N Aravindhraj Dr Y Akila	Orientation Programme for new faculty	PSGIM PSG CARE	05.07.2019
2	Ms G Vidya Mr N Aravindhraj Dr Y Akila	Faculty Induction Module 1 & Module 2	PSGIM PSG CARE	12.07.2019
3	Dr M Arun Dr S Bhuvana Dr M Mohamed Iqbal Dr P Reba Dr V Rajkumar	Funding Opportunities for R & D Projects	PSG Tech PSG CARE	06.08.2019
4	Dr R S Sankarasubramanian	Statistical Tools for Research	PSGIM PSG CARE	31.08.2019



## Sports Achievements

<b>I. Anna University Zone IX - Tournament CHESS (Women)</b>					
S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	Meha Ravi	IV CSE	CHESS	Second place	29 <sup>th</sup> Aug 2019
2	Bala Keerthana. K. B	II CSE			
3	Khamali Shree A. S.	II EEE			
4	Pradeepa. T	I CSE			
5	Subhiksha. R	I EEE			

<b>II. Anna University Zonal - Tournament CHESS (Men)</b>					
S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	Palani Karthick. S	III MECH	CHESS	Second place	29 <sup>th</sup> Aug 2019
2	Dhayahar. G. D	III MECH			
3	Muthu Rakesh. B	I CSE			
4	Kishore Lakman. K	I CSE			
5	Ajayswar. S	I CSE			
6	Hrithik. S	I CSE			

<b>III. Anna University Zonal - Tournament Basketball (Women)</b>					
S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	Akshatha Jacob	I – EEE	Basketball	Third Place	11 <sup>th</sup> Sep 2019
2	Rama lakshmi. S	I – ECE			
3	Gowsika.D	I – ECE			
4	Naveena .C	I – ECE			
5	Subiksha.M	I – CIVIL			
6	Shakthi. K	I – ECE			
7	Kousik Srinithi.	I – CIVIL			
8	Umayal.V.R	I - CSE			

**IV. Anna University Zonal - Tournament Badminton (Women)**

S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	Suchithra. R	II – CIVIL	Badminton	Third Place	15 <sup>th</sup> Sep 2019
2	Kavya . S	II - ECE			
3	Subiksha.M	I – CIVIL			
4	Kousik Srinithi.	I – CIVIL			
5	Kowsika. R	I - EEE			

**V. Anna University Zonal - Athletic (Men)**

S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	Dharun .P	III - EEE	Discuss throw	First place (New Meet Record)	22 <sup>nd</sup> Sep 2019
2	Dharun .P	III - EEE	Shot put	First place (New Meet Record)	
3	Jowin Mario Germanus	II - ECE	100 Meter	Fourth place	
4	Senthamizh chelvam	I - EEE	Javelin throw	Fourth place	

**VI. Anna University Zonal - Athletic (Women)**

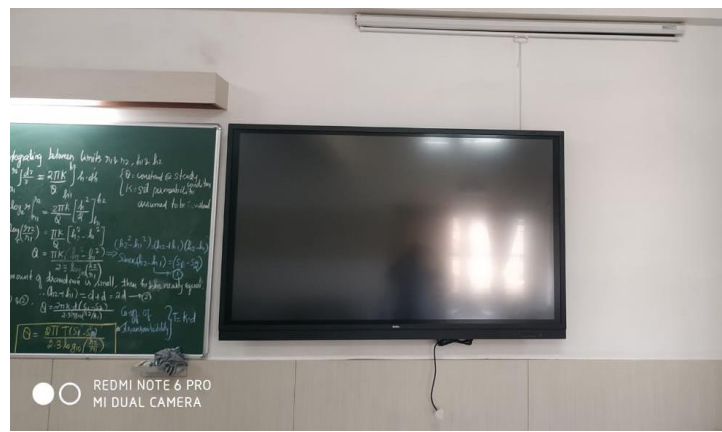
S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	Pritha.S	IV – CSE	4X100 m Relay	Third Place	22 <sup>nd</sup> Sep 2019
2	Poorani.S.K	I EEE			
3	Prabha Sree. K	I EEE			
4	Kowsika. R	I - EEE			
5	Kousik Srinithi.	I – CIVIL	Shot put	Fourth Place	

6	Kowsika. R	I - EEE	Tripple Jump	Fourth Place	
7	Prabha Sree. K	I EEE	400 m	Fourth Place	
8	Poorani.S.K	I EEE	100 m	Fourth Place	

VII. 14 <sup>th</sup> Thiruvallur District Roller Skating Championship (Men)					
S. No.	Name of the Students	Branch / Year	Participation	Position/ Awards	Date
1	S. Kishore Venkatesh	I CSE	Roller Skating	Gold in 10,000 Mts.	29 <sup>th</sup> July 2019
				Gold in 15,000 Mts.	
				Silver in 15,000 Mts.	
				Silver in 20,000 Mts	

**Interactive Display Panel:**

Two numbers of 75 inches Interactive Display panels are installed in Civil and ECE Tutorial Halls at PSG iTech on 04<sup>th</sup> July 2019, to enhance the usage of ICT in Teaching - Learning process.



**75 inches Interactive Display TV panel installed in ECE Tutorial Hall on 04<sup>th</sup> July 2019**