# PSG Institute of Technology and Applied Research Quarterly Report April - June 2021

#### **Events Organized:**

# **Second National Conference on Communication and System Design 2021**

The Department of ECE, in association with IETE, IE(I) and ISTE, organized the Second National Conference on Communication and System Design 2021(NC<sup>2</sup>SD 2021) on 3<sup>rd</sup> April 2021. Dr P Vetrivelan, Associate Professor and Head, Department of ECE, welcomed the gathering. Dr G Santhanamari, Associate Professor of ECE and the Organizing Secretary briefed about the conference. It was reported that 95 papers from various institutions were received for review and 45 select papers were presented in the conference. Dr. G Chandramohan, Principal, PSG iTech, delivered the inaugural address and encouraged the faculty members to organize International Conferences during the next academic year to establish intellectual networks and collaborations with researchers across the world. Dr P V Mohanram, Secretary, PSG iTech, delivered the presidential address and appreciated the efforts taken by the faculty members in organizing the conference. Dr. P. Subbaraj, Dean (Research-Electrical Sciences), highlighted the recent advancements in technologies like energy efficient communication, wireless power transfer, and wearable to implantable sensors for biomedical applications. Ms N Susithra, Organizing Secretary, proposed the vote of thanks.

Dr. S. Manikandan, (Scientist E), LRDE, DRDO, Bengaluru, delivered a lecture on "Autonomous Driver Assistance System". He deliberated on the sensor fusion for autonomous driver assistance system in detail. Also, he elucidated on the ultrasonic sensors, RADAR, LIDAR, vision systems and their applications as range-sensors in different environments. Dr.R.Ramanathan, Assistant Professor, Amrita Vishwa Vidyapeetham, delivered a speech on "Cognitive Networks for 5G Communication". Six technical sessions were arranged and these sessions were moderated by industry expert from NI - Drive - Japan (Industry), and Professors from Anna University (Regional Centre -Coimbatore), Velammal College of Engineering and Technology (Madurai) and PSG iTech.



Dr. P V Mohanram, Secretary and Dr. G Chandramohan, Principal, PSG iTech along with Dr. P Vetrivelan, HoD in-charge, Department of ECE and Dr. P Subbaraj, Dean - Electrical Sciences releasing the Conference Proceedings



Dr. P V Mohanram, Secretary and Dr. G Chandramohan, Principal, PSG iTech along with Dr. P Vetrivelan, HoD incharge, Department of ECE, Dr. P Subbaraj, Dean (Electrical Sciences) and organizing team of the Second National Conference on Communication and System Design (NC<sup>2</sup>SD 2021)

#### National-level Technical Symposium Yukta: 2021

Students' Union of the college and various clubs, conducted Yukta: 2021, a national-level Technical Symposium for 3 days from 9<sup>th</sup> to 11<sup>th</sup> April 2021. The technical symposium aimed to make students think, compete, and grow. Several events and activities like paper presentations, coding contests, treasure hunts, and pictionary were organized during the symposium. Around 500 students from various colleges across the country actively participated in a wide-range of academic events like workshops, paper presentations, technical and non-technical events organized by various departments.

During the inaugural function, Dr K B R Varma, Director (Research), PSG Institutions, released the Yukta: 2021 Souvenir. Dr B Ramamoorthi, Advisor (Academic), PSG Institution received the first copy and offered his felicitations. Dr B Ramamoorthi expressed his happiness and congratulated the Students' Union members. Ms Sangavi Sri, Chairperson - Students' Union proposed the vote of thanks. PSG College of Technology, Coimbatore bagged the overall Championship Trophy and SRM Easwari Engineering College, Chennai secured the Runner-up place.



From the Left: Dr S Jayakumar, HoD –Phy, Dr.P.V.Mohanram, Secretary, Dr B Ramamoorthi, Advisor (Academic), Dr K B R Varma, Director (Research), PSG Institutions, Dr.G.Chandramohan, Principal, Dr P Subbaraj, Dean (Research), Dr P Vetrivelan, HoD, Dept. of ECE and Students' Union Faculty advisor with other faculty members and Students' Union members



Dr G Chandramohan, Principal, interacting with the coordinators of QGIS workshop during Yukta: 2021

#### Webinar on "Implementation of National Education Policy-2020"

The Depts. of Civil and Mechanical Engineering, in association with the Indian Society for Technical Education (ISTE) and All India Council for Technical Education (AICTE), organized a one-day webinar on "Implementation of National Education Policy (NEP) 2020" on 16<sup>th</sup> April 2021. Dr G Chandramohan, Principal, delivered the welcome address and appreciated the efforts taken by Dr K Kasthurirangan and his committee in drafting the NEP 2019. Several key aspects of NEP like flexibility, blended - learning, gross enrolment ratio (GER), higher-order thinking were discussed in brief. Dr P V Mohanram, Secretary, delivered the presidential address and spoke about the importance of nurturing students with academic, social, and emotional competence coupled with communication and professional skills. Further, the student-centric approach to education practiced across the PSG Institutions was highlighted.

Dr Pratapsinh Kakaso Desai, President, ISTE, New Delhi, delivered the inaugural address. In his address, he elaborated on the objective of education in Indian context and stressed about the importance of knowledge creation in indigenous context. The ideation behind the introduction of NEP like offering collaborative educational courses with foreign universities for the larger benefit of Indian students was discussed. The importance of ancient education and rich cultural background were also highlighted with examples from the history. Later, salient features of the NEP like various flexibilities in pursuing higher education were discussed in detail.



PSG Institute of Technology and Applied Research
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Technology and Tech

DrPratapsinhKakaso Desai, President, ISTE delivering the inaugural address

Release of a proceedings of webinar on National Education Policy - 2020

#### **Session 1: National Education Policy-2020 Challenges**

In the first session, Dr.P.Subbaraj, Dean (Research - Electrical Sciences), PSG iTech, delivered a lecture on "National Education Policy-2020 Challenges". He discussed some of the significant points about the NEP-2020 and challenges involved in implementing it in higher education context. Some of the main tenets of the educational policy were also discussed with the participants.

#### Session 2: Skill Education: Insights from NEP 2020

During the second session, Prof. Sathans Suhag, Professor, National Institute of Technology, Kurushetra, delivered a lecture on "Skill Education: Insights from NEP 2020". In his address, he stated that the NEP is a product of an extensive exercise that strives to achieve 50 per cent Gross Enrolment Ratio (GER) by 2030.

#### **Session 3: Salient features of NEP**

In the third session, Dr.G.Karuppusami, Dean - Research and Innovations, Sri Eshwar College of Engineering, Coimbatore, delivered a lecture on "Salient Features of NEP". In his address, vision and mission of NEP-2020, its salient features, fundamental principles, importance of National Repository of Educational Data, and timeline for NEP 2020 were deliberated during his insightful talk.

# Valedictory Address

Col.B.Venkat, Director, AICTE, in his valedictory address, discussed the various aspects of the National Education Policy 2020. Dr.M.I.Abdul Aleem, Professor and Head, Dept. of Civil Engineering, proposed the vote of thanks. Around 120 participants from various institutions actively participated in the event and benefitted. Ms. D. Pricilla, Ms.V.Selvapriya, Asst. Professors, Dept. of Civil Engineering and Dr. G Rajeshkumar, Associate Professor, Dept. of Mechanical Engineering coordinated the webinar.

# <u>Valedictory Function of AICTE - ISTE sponsored Refresher/Induction Programme on "Integration of Pedagogical Strategies with ICT for Transformation of Engineering Education-Phase III"</u>

The Dept. of Electronics and Communication Engineering (ECE) of PSG iTech organized an AICTE–ISTE-sponsored One-week Online Refresher / Induction Programme (Phase III) on "Integration of Pedagogical Strategies with ICT for Transformation of Engineering Education" during  $22^{nd} - 28^{th}$  April 2021. Dr. P. Vetrivelan, Coordinator of the Programme, Associate Professor and Head (in-charge), Dept. of ECE, delivered the welcome address.

In his address, he expressed his deep gratitude to the All India Council for Technical Education (AICTE) and the Indian Society for Technical Education (ISTE) for sponsoring such need-based impactful programmes for the faculty members. Around nineteen resource persons from top-notch institutions like IIT-M, NIT-Trichy, NITTTR, and ISTE facilitated eighteen sessions on various topics like ICT tools, digital learning, pedagogical strategies, and mental wellbeing etc. Participants found the sessions interesting and informative.

Dr G Chandramohan, Principal, PSG iTech, presided over the valedictory function and spoke about importance of creativity in teaching. Further, he elaborated on different thinking skills like convergent and divergent thinking in enhancing teaching skills. Also, all the participants were appreciated for their active participation in all the sessions. Chief Guest of the event, Dr.N.Tamarai Selvan, Associate Professor, Dept. of Management Studies, NIT-Trichy, overwhelmed by the feedback given by the participants.

Dr. P V Mohanram, Secretary, PSG iTech, recalled the significant points shared during the sessions facilitated by the internal faculty members, and encouraged all the other faculty members to organize such productive sessions on various other useful topics for the students and the society. Finally, Ms. A.K. Kowsalya Devi, Asst. Professor, Dept. of ECE, proposed the vote of thanks.



From the left: Dr. P. Subbaraj, Dean (Research), Dr. G.Chandramohan, Principal, Dr. P.V. Mohanram, Secretary, Dr. P. Vetrivelan, Coordinator, Associate Professor and Head i/c, Dept. of ECE along with the organizers of the event and co-coordinators of the AICTE-ISTE-sponsored One-week Online Refresher / Induction Programme (Phase III) on "Integration of Pedagogical Strategies with ICT for Transformation of Engineering Education" during 22<sup>nd</sup>-28<sup>th</sup>April 2021

# <u>Third International Conference on "Digital Technologies for Design, Construction, and Management in Civil Engineering"</u>

The Dept. of Civil Engineering, in association with Deakin University, Australia, the Indian Society for Technical Education (ISTE), and the American Concrete Institute, organized the Third International Conference on Digital Technologies for Design, Construction, and Management in Civil Engineering (DigiTeC 2021) during  $23^{rd} - 24^{th}$  April 2021. Dr Krishna Kanth Pulicherla, Scientist, TDT Division, Dept. of Science and Technology, Ministry of Science and Technology, Govt. of India, was the chief guest and delivered the inaugural address.

Dr G Chandramohan, Principal, welcomed the gathering and presented a memento to the chief guest virtually. In his welcome address, members of faculty were appreciated for organizing a useful conference on a need-based topic in a professional manner. Dr P V Mohanram, Secretary, spoke about the significant role played by digital technologies in the design and construction management field. In his address, the role of Additive Manufacturing (AM) and Conceiving, Designing, Implementing, Operating (CDIO) approaches, Lean Construction (LC), and Design Thinking, and, several other latest initiatives in the engineering field were highlighted.

Ms K Govarthanambikai, Asst. Professor, Dept. of Civil Engineering, elaborated the conference theme and shared the unique features about the conference. It was stated that the two-day international conference would feature six keynote speakers from different parts of the world and eight technical sessions on various interesting topics. Around fifty-four research papers were presented after a careful scrutiny of 104 papers received from various Colleges and Universities across the world.

Dr Krishna Kanth Pulicherla, in his address, emphasized on the importance of strengthening the infrastructure of the country for boosting the economy and the necessity of building bridges, roads, power plants, industrial units to enhance the societal living conditions. It was stated that the biggest focus area for the Govt. of India is infrastructure development and various initiatives taken by the Govt. like the ATAL Mission for Rejuvenation and Urban Transformation (AMRUT), Smart City, metro rail policies, housing were highlighted.

At the same time, it was mentioned that the advancements in the Digital Technology like Big Data and Artificial Intelligence are creating waves of innovation in Construction Management. The importance and reliance of Drone Technology in construction site was discussed to enlighten the participants on the use of advanced technologies. The crucial roles played by Augmented Reality, Virtual Reality, and pre-fabrication were also highlighted.

Importantly, the speaker appealed to the participants to focus on developing indigenous technologies, which are efficient and customizable to suit the needs of the country. Various programmes and projects introduced by the Dept. of Science and Technology to develop indigenous technologies were discussed succinctly during the talk. The need to automate the construction industry was also emphasized. Further, it was stated that technology-driven systems and highly-skilled capable human resources are the key pillars for infrastructure development.

Finally, he urged the members of faculty to give industry-driven problems statements at the under graduate, post graduate and for PhD level project works. Dr M.I.Abdul Aleem, Professor and Head, Dept. of Civil Engineering, proposed the vote of thanks. The conference proceedings were released at the end of the inaugural function. Dr.M.Devasena, Associate Professor, Mr P Balakumar, Ms K Govarthanambikai, Asst. Professors, Dept. of Civil Engineering, were the organizing secretaries of the conference. Members of Faculty in the Dept. of Civil Engineering successfully coordinated the event.



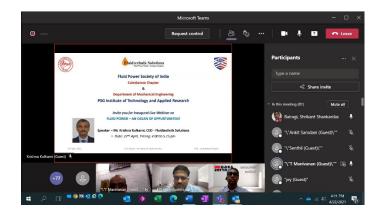
From the Left: Dr. M. Arun, Associate Professor, Dept. of Civil, Dr. G Chandramohan, Principal, Dr PV Mohanram, Secretary, Dr M.I. Abdul Aleem, Professor and Head, Dept. of Civil Engineering, Dr. P. Perumal, Professor of Civil Engineering during the Third International Conference on Digital Technologies for Design, Construction, and Management in Civil Engineering (DigiTeC 2021)



Dr Krishna KanthPulicherla, Scientist, TDT Division, Dept. of Science and Technology, Ministry of Science and Technology, Govt. of India delivering the inaugural address during the Third International Conference on Digital Technologies for Design, Construction, and Management in Civil Engineering (DigiTeC 2021)

#### Webinar on "Fluid Power - An Ocean of Opportunities - Approach"

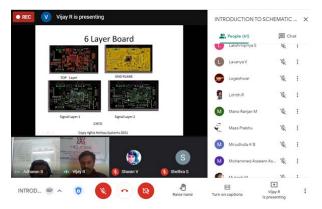
A webinar on 'Fluid Power – An Ocean of Opportunities - Approach' was organized jointly by FPSI Coimbatore Chapter and Department of Mechanical Engineering as a part of FPSI Students' chapter – PSG iTech on 22<sup>nd</sup> April 2021. Around 100 participants (fluid power professionals, students and faculty) from various colleges participated in the live webinar. The workshop provided an overview of utilization of fluid power in various industries and the opportunities available for young engineers.



Webinar on 'Fluid Power – An Ocean of Opportunities - Approach' was held on 22<sup>nd</sup> April 2021

# Guest Lecture on "Introduction to Schematic Diagram, Simulation, and PCB Layout of Electrical and Electronic Circuits"

The Department of EEE, in association with the ISTE Students' Chapter (PSGiTech), jointly organized a guest lecture on "Introduction to Schematic Diagram, Simulation and PCB Layout of Electrical and Electronic Circuits" on 23<sup>rd</sup> April 2021 for the first year EEE students. Mr.R.Vijayanarayana, Joint Director, Helioss Systems, Coimbatore served as the resource person and explained the requirements of PCB, types of PCB, design steps involved and basic guidelines for PCB designing. Also, he explained about the KiCad, an open-source software that can be downloaded freely and used for PCB designing. He also explained the schematic diagram, simulation using PSPICE tool box of KiCad software for an RC network and developed the PCB layout of the same. The multi-layer PCB design and differences in PCB design for leaded components and SMD components were explicated by the resource person. Sixty one participants got benefited by attending the guest lecture.



Mr. R. Vijayanarayana, Joint Director, Helioss Systems, Coimbatore, delivering the guest lecture on "Introduction to Schematic Diagram, Simulation and PCB Layout of Electrical and Electronic Circuits"

# One-week Virtual Training Programme on "MATLAb & SIMULINK for Engineers: An Interdisciplinary Approach"

A one-week virtual training programme on "MATLAB & SIMULINK for Engineers: An Interdisciplinary Approach" was jointly organized by the Departments of Mechanical and EEE from 26<sup>th</sup> April to 1<sup>st</sup> May 2021. Mr.M.Senthilvel, Asst. Professor of Mech and Mr S Ravikrishna, Asst. Professor of EEE organized the event. Around thirty eight students from various colleges including IIT Madras and faculty members participated in the online workshop. This workshop offered insights on using MATLAB & SIMULINK platform for electro-mechanical engineering applications. Participants were exposed to several interesting real-time projects throughout the course.

Virtual training programme on "MATLAB & SIMULINK for Engineers: An Interdisciplinary Approach"

# Talk on "Cracking GATE Exam - Data Structures"

The Department of Computer Science and Engineering, in association with the Institution of Engineers (India) PSGI Students' Chapter, organized a talk on "Cracking GATE Exam - Data Structures" on 6<sup>th</sup> May 2021. The Speaker, Dr R Manimegalai, Professor and Head, Department of CSE, PSG iTech, addressed the participants by highlighting the best tips for GATE preparation (CS), dealt with the approaches to solve GATE Questions, recollected some specific fundamental concepts in Data Structures, and discussed the previous year GATE questions. About 127 external and internal students as well as faculty members have participated in the session. The event was conducted using Zoom online and the registration and feedback was collected through Google Form. The takeaways from the talk are as follows:

- Best Tips for GATE
- CS Paper Analysis (2013-2020)
- Data structures (2013-2020)
- Recommended Text Books
- Recommended Websites
- How to solve GATE Questions?
- List
- Queue
- Stack
- Tree
- Graph



A talk on "Cracking GATE Exam - Data Structures" held on 6th May 2021

# **Lecture on "Cracking GATE Exam Design and Analysis of Algorithms"**

A lecture on "Cracking GATE Exam Design and Analysis of Algorithms" was organized on 13<sup>th</sup> May 2021, in association with the Institution of Engineers (India) PSGI Students' Chapter. The resource person was Mr.C.P.Shabariram, Assistant Professor, Department of CSE, PSG iTech, Coimbatore who has scored 92.8, 87.5, 86.8 percentile in consecutive GATE Exams. During the talk, he addressed the participants by highlighting the best tips for GATE preparation (CS), approaches to solve GATE questions, recollected some specific fundamentals in Design and analysis of algorithms, and discussed the previous year GATE questions. About 101 external and internal students as well as other members participated and raised many doubts and got clarified by the speaker.

### Virtual Workshop on "Exploring the Inner Potential to Realize Your Dreams"

The Department of Computer Science and Engineering organized a virtual workshop on "Exploring the Inner Potential to Realize Your Dreams" on 18<sup>th</sup> May 2021, in association with the Institution of Engineers (India) PSGI Students' Chapter. Dr Roopa Rani, Visiting Professor, PSG College of Technology, Coimbatore addressed the participants by highlighting the inner potential to realize your dream, set a goal or a vision and work towards the goal, and know the essentials to achieve a goal. About 59 first year students participated. The workshop has received very good response and feedback from the participants. The takeaways from the workshop are as follows:

- Identify your strength
- Identify your weakness and overcome it
- Have a goal or vision
- Split into small goals
- Proper planning and preparation
- Making a schedule and staying motivated
- Self discipline not to get distracted
- Practice is essential
- Don't give up
- Set up a deadline
- Work towards goal
- Ways to measure progress
- Have a mentor who motivates you



A virtual workshop on "Exploring the Inner Potential to realize your Dreams" held on 18th May 2021

#### Five-day Virtual Workshop on "Cracking GATE Exam - CSE Courses"

The Department of Computer Science and Engineering organized a five-day virtual workshop on "Cracking GATE Exam - CSE Courses" held during 20<sup>th</sup> - 26<sup>th</sup> May 2021, in association with the Institution of Engineers (India) PSGI Students' Chapter. The following speakers addressed the participants: 1.Dr R Manimegalai, Professor and Head, Department of CSE, PSG iTech on Data Structures (20<sup>th</sup> May 2021); 2.Dr I Kala, Associate Professor of CSE on Computer Networks (21<sup>st</sup> May 2021); 3. Dr S Bhuvana, Associate Professor of CSE on Database Management System (24<sup>th</sup> May 2021); 4. Mrs. G.Niranjani, Assistant Professor of CSE on Theory of Computation (25<sup>th</sup> May 2021) and 5. Dr A C Sumathi, Assistant Professor of CSE on Computer Architecture (26<sup>th</sup> May 2021). Best tips on GATE preparation (CS), approaches to solve GATE Questions, fundamental concepts in CSE courses, previous year GATE questions were discussed with the participants. About 297 external and internal students as well as faculty members participated and clarified their doubts.



Invitation on "Cracking GATE Exam - CSE Courses" held during 20th - 6th May 2021

#### Webinar on "Distributed Computing in the world of Big Data"

The Department of Computer Science and Engineering, PSG iTech, conducted a webinar on "Distributed Computing in the world of Big Data", in association with Computer Society of India (CSI) on 21<sup>st</sup> May 2021. Totally 50 students from III Year CSE participated in the webinar. The session was facilitated by Mr.Vinothkumar Rajadurai, Manager, Software Engineering, Gartner Inc, Bangalore. He briefed about the various applications such as NETFLIX, Google etc in the field of Distributed Systems. He offered insights on how distributed computation simplifies the complexity in processing of Big Data. He has demonstrated the application of distributed computation with Gartner Skill Extraction process using SPARK tool. Students interacted with the resource person in connection with the Distributed Computation tools and got clarified.



Mr.Vinothkumar Rajadurai, Manager, Software Engineering, Gartner Inc, Bangalore explored the distributed system concepts in real world scenarios during the webinar

#### **Study Opportunities and Scholarships in France**

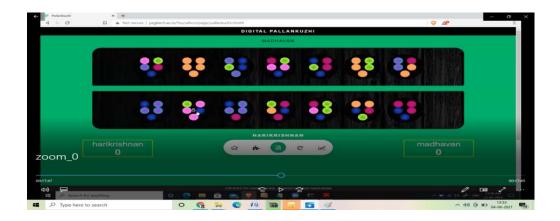
PSG Institute of Technology and Applied Research, in collaboration with Campus France, Chennai and Alliance France, Coimbatore organized a session on "Study and Scholarship Opportunities in France" for the students on 20<sup>th</sup> May 2021. Ms. Rhea Cheryll Shivan, Manager, Campus France, Chennai and Ms. Joshita, Alliance France, Coimbatore addressed the students on various opportunities in higher education, scholarships available for the course, and job opportunities in France. During the talk, Ms. Rhea explained the historical and cultural background of France and the bilateral relationship between India and France. Later, Ms. Joshita elaborated on the various courses available at Alliance France, Coimbatore and briefed about the scopes of learning French. Mr.Pranav Kiran, Student of First Year B.E. CSE, proposed the vote of thanks. Mr N Sethunarayanan, Assistant Professor (Sr. Gr), Department of English coordinated the session.



Ms. Rhea Cheryll Shivan, Manager, Campus France, Chennai addressing the participants on "Study Opportunities in France" on 20<sup>th</sup> May 2021

#### Webinar on "Digital Pallanguzhi using Circular Linked List"

A webinar on "Digital Pallanguzhi using Circular Linked List" was organized on 22<sup>nd</sup> May 2021 as a part of Coder Series for the benefit of students. Mr. M Harikrishna and Mr. B Madhavan (III B.E. CSE Students), PSG iTech, elaborated on the idea of Pallankuzhi, which was aimed to promote local traditional games that are underrated. The transformation of the project using C++, to a website was explained. They did a code walkthrough C++ code on how the pointers were used to implement the game. Also, ways and means of submission of project in national level Hackathon named Toycathon was briefed. Totally, 59 students have attended the webinar.



Webinar on "Digital Pallanguzhi using Circular Linked List" held on 22nd May 2021

#### Webinar on "Building Micro Services on Azure Services Fabric"

The Department of Computer Science and Engineering conducted a webinar on "Building Micro-Services on Azure Services Fabric" on 22<sup>nd</sup> May 2021. A total of 35 participants including students and faculty members participated in the webinar. Ms. Sritharini Radhakrishnan, Backend Developer, Integration Wizards, Bangalore, was the resource person for the session. Mr.S.Thivaharan, Assistant Professor (Sl. Gr), Dept. of CSE, PSGiTech, coordinated the webinar. Ms. Sritharini, Alumna of PSGiTech, made a demonstration on Azure platform. Later, some reference materials and web links were shared with the participants.



Screenshot of the webinar on "Building Micro-Services on Azure Services Fabric" held on 22<sup>nd</sup> May 2021

#### Online Special Lecture on "5G Open Source is the Future"

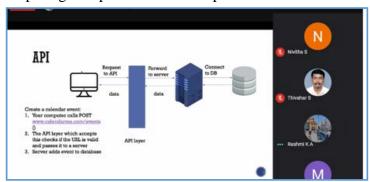
The Department of Electronics and Communication Engineering, in association with ISTE Students' Chapter, organized an online guest lecture on "5G Open Source is the Future" on 22<sup>nd</sup> May 2021. Dr.P.Vetrivelan, Associate Professor and Head, Dept. of ECE, welcomed the gathering. Mr. Ramkumar, Technical Specialist, Mobile Network Division, Nokia Networks, Bangalore, shared his insights on the topic. Around 50 students of III B.E ECE and 7 Faculty members attended the session. The speaker spoke about the need for 5G communication systems. Further, he elaborated on different 5G /new radio use cases, the 5G spectrum and the 5G architectures. He also highlighted the speciality of 5G in implementation aspects (i.e., the open source software), when compared to the previous standards. The speaker ended the session by sharing his experience on acquiring a career in networking domain. Overall, the session was very informative and the students were offered a bird's eye view of different aspects of 5G and the open source components available for developing 5G systems. The session was coordinated by Dr. P. Reba, Associate Professor and Ms. N. Susithra, Assistant Professor, Department of ECE.



Mr. Ramkumar, Nokia Systems explaining the need and scope of 5G during the lecture held on 22<sup>nd</sup> May 2021

# Webinar on "Server-Less Computing: A New Way of Cloud Computing"

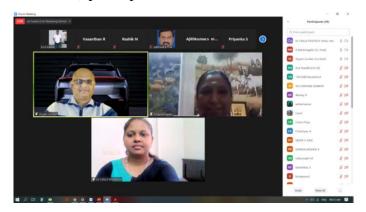
The Department of Computer Science and Engineering conducted a webinar on "Server-less computing: A New Way of Cloud Computing" on 29<sup>th</sup> May 2021. Twenty eight participants, including students from various disciplines and faculty members, attended the session. Ms. K A Rashmi, Software Developer, Intuit Inc, Bangalore, served as the resource person for the event. Mr.S.Thivaharan, Assistant Professor (Sl. Gr), Dept. of CSE, coordinated the session. The session focused on discussing the fundamentals of the server less kubernetes and imparting the germination of cloud computing as a platform free setup.



Webinar on "Server-less computing: A new way of cloud computing" held on 29th May 2021

#### International Webinar on "Autonomous Vehicles: Past and Present"

An international-level webinar on "Autonomous Vehicles: Past and Present" was organized on 5<sup>th</sup> June 2021, in association with the Institution of Engineers (India) PSGI Students' Chapter. The Speaker, Mr Shyam Sundar, Head – Product Management, Faraday Future, San Diego, USA offered a detailed introduction to autonomous vehicle for the participants. Around 580 students and faculty (300 in zoom + 280 in YouTube) participated in the session.



Mr Shyam Sundar, Head – Product Management, Faraday Future, San Diego, USA addressing the participants on 5<sup>th</sup> June 2021 during the webinar

### Webinar on "Physical Design and its role in Semiconductor Industry"

The Department of Electronics and Communication Engineering, in association with IETE Students' Chapter, organized a webinar on "Physical Design and its role in Semiconductor Industry" on 10<sup>th</sup> June 2021. Dr.P.Vetrivelan, Associate Professor and Head, Department of ECE, welcomed the gathering. Dr.M.Jayasanthi, Associate Professor of ECE, introduced the resource person Mr. Samuel Jigme Harrison, Senior Digital IC design Engineer, ST Micro-electronics Asia Pacific Pvt. Ltd., Singapore. Around 50 participants comprising students of II and III Year B.E. ECE and members of faculty attended the session.

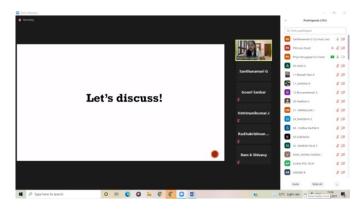
The speaker explained the importance of physical design in VLSI systems and provided an extensive description of the steps involved in physical design process like placement, routing etc. Various online courses, certificate courses available to learn IC design, and implementation were highlighted to the participants. In addition, the speaker discussed the different roles of engineers in VLSI industry and opportunities and internships that are currently available for them. It was an enlightening session and students were motivated by the resource person. Ms. A.K Kowsalyadevi, Assistant Professor, Department of ECE, proposed the vote of thanks.

#### Webinar on "Power - Aware IC Design"

The Department of Electronics and Communication Engineering, in association with ISTE Students' Chapter, PSG iTech, organized a webinar on the topic "Power – Aware IC Design" on 12<sup>th</sup> June 2021. The resource person was Dr Priya Venugopal, Principal Engineer, Design Enablement Advance Circuit Design (ACD) – BLR Global Foundries, Bengaluru. More than 100 participants including faculty members and students from different institutions attended and benefitted from the webinar. The webinar was coordinated by Dr G Santhanamari, Associate Professor and Ms. M Deepa, Assistant Professor (Sl.Gr.), Department of ECE.

Dr. Priya discussed the integrated circuits (IC) in brief and elaborated on the need for integrated circuits. Then, she explained the basic terminologies related to IC design namely technology node, technology scaling, and difference between analog and digital ICs and the process of IC fabrication. Further, she explained in detail about the need for reducing the channel length of a transistor in order to accommodate more transistors in an IC. She stated that the ICs are applied in other fields like computers, automobiles, defense, medical equipments, wearable devices, air coolers, washing machines, smart watches and so on. She explained in detail about Power – Aware IC design, which includes operating an IC on a low power budget, with a goal to operate on the minimum possible power profile.

She also elaborated on the need for power – aware IC design as it provides prolonged battery life, reduced charging cycles, cost efficiency, lesser heat dissipation among many other reasons. Then, she explained one such application using a case study on the design of a Wearable Cardiac Activity Monitor IC. The modules inside the Cardiac Activity Monitor were sensors, signal acquisition circuits, signal conditioners, memory, controller and transceiver module. The system could be designed to operate in sleep mode, active mode and transmission mode for power awareness. Finally, she ended the session by giving some insights on career in IC Designing and spoke in brief about the research happening worldwide in the area of semiconductor devices, circuit design and design verification.



Webinar on "Power - Aware IC Design" held on 12th June 2021

#### Three-day webinar on "Career Guidance and Counseling"

#### Day 1: Set Your Goals Early to Achieve Your Dreams

The three-day webinar on Career Guidance and Counselling was held during  $09^{th} - 11^{th}$  June 2021. The first day session started on the topic "Set Your Goals to Achieve Your Dreams" by Dr M Roopa Rani, Visiting Professor, PSG College of Technology, Coimbatore. The resource person enlightened about the personal and professional goals and the ways to convert goals into SMART goals. She quoted from the real life examples of Dr.A.P.J. Abdul Kalam, Mr.Arnold and her own experiences to have the perseverance to achieve their goals. She also emphasized the "Breath Watch" and Visualization technique with a live demo. Around 157 participants attended the session.



Day 1 Session on Set Your Goals to Achieve Your Dreams by Dr M Roopa Rani, Visiting Professor, PSG College of Technology, Coimbatore

#### Day 2: Entrepreneurial Motivation, Skills and Behavioral Training

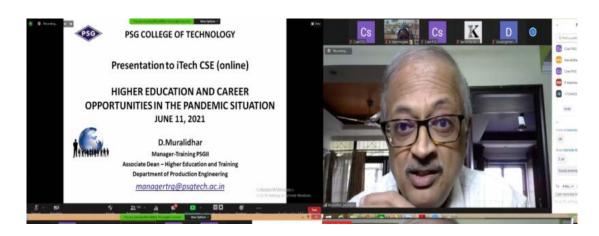
In the second-day session on "Entrepreneurial Motivation, Skills and Behavioral Training", Prof Dr. R Ganesan, Founder & Chairman, National Federation for Entrepreneurship Development, outlined the necessity of self-motivation and skill sets required to become an entrepreneur. He shared the sources for entrepreneurial motivation and the ways of achieving it. The resource person also briefed about the self-management through the dimensions such as physical, emotional, psychological and spiritual factors. He enlisted the core entrepreneurial skills such as Internal Locus of Control, Attentiveness, Reinforcement, Information Congregation, Super Competence and Ethicality. Around 122 participants have attended the session.



KVJ Prof Dr R Ganesan, Founder & Chairman, National Federation for Entrepreneurship Development, Coimbatore delivered a talk on "Entrepreneurial Motivation, Skills and Behavioral Training"

### Day 3 – Higher Education Opportunities during Pandemic Situation

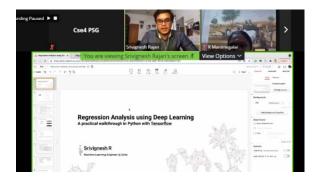
In the third-day session on "Higher Education Opportunities during Pandemic Situation", Prof D Muralidhar, Manager – Training, PSG College of Technology discussed the various higher education opportunities across the globe. The resource person listed the available benefits for the students to have overseas education at PSG College of Technology. Also, he explained how globalization has offered various opportunities for professional development. Later, he encouraged the students to convert their knowledge into research papers and publish in the reputed journals. Around 127 participants attended the session.



Prof D Muralidhar, Manager – Training, PSG College of Technology, Coimbatore delivered a talk on "Higher Education Opportunities during Pandemic Situation"

# Webinar on "Regression Analysis using Deep Learning –A Practical Walkthrough in Python using Tensorflow"

The Department of Computer Science and Engineering, PSG iTech, in association with the Computer Society of India (CSI), conducted a webinar on "Regression Analysis using Deep Learning - A Practical Walk through in Python using Tensor Flow" on 12<sup>th</sup> June 2021. The session was facilitated by Mr. Srivignesh Rajan, Machine Learning Engineer, Zoho Corporation, Chennai. He briefed about the basic concepts in Machine learning and explained the essential steps to be followed in Machine Learning. Also, he explored various concepts with real-time examples. He demonstrated the house-rate prediction using California Dataset using Google Colab with Scikit and TensorFlow. Around 263 Participants have actively participated in the webinar and got benefitted.



Resource Person Mr.Srivignesh , Machine Learning Engineer, Zoho briefed about the basic concepts in Machine Learning

#### Workshop on "PLC Programming"

The Department of Electrical and Electronics Engineering organized a two-day online workshop on "PLC Programming" for students, faculty members and industry personnel. The training program was conducted from 12<sup>th</sup> June 2021 to 13<sup>th</sup> June 2021. The training on simulation was conducted using Zelio software from Schneider Electric. The participants were taught the basics of electrical control circuit using contactors and push buttons, and programming PLC using ladder logic diagram and functional block diagram, in addition to the fundamentals of automation, and development of control logic for different industrial scenarios using PLC.

# **Arcesium Interview - The In and Out**

The Department of Computer Science and Engineering, in collaboration with Computer Society of India (CSI), organized a session on 'Arcesium Interview – The In and Out' on 17th June 2021 for the students of III Year B.E. CSE, ECE and EEE. Totally, fifty six students preparing for placements participated in the event. The session was conducted by Mr. Amal Matty Antony (Senior Software Engineer, Arcesium), Mr.K.R.Vinuramanan (Software Engineer, Arcesium) Mr.D. Balasiddharth, Final Year Student who got placed in Arcesium. Mr. Amal Matty Antony and Mr. K.R. Vinuramanan are (2015 - 2019 Batch) alumni of PSG iTech. During the session, Mr.Amal shared some productive tips. Mr.K.R.Vinuramanan and Mr. D. Balasiddharth shared some interesting and informative points, which greatly inspired the pre-final year students. Also, they shared their interview experiences, placement preparation tips and the layout of the Arcesium placement process starting from preliminary round to final HR rounds. Doubts raised by the participants were clarified at the end of the session. Finally, Mr.Shabariram C.P, Assistant Professor (Sr. Gr.), Dept. of CSE, proposed the vote of thanks.

# Annual Day - Daksha: -2021

PSG Institute of Technology and Applied Research (PSG iTech) celebrated its 7<sup>th</sup> Annual Day virtually on 16<sup>th</sup> June 2021 (Wednesday). Shri. Raman Venkat, Chief Executive Officer and Chief Financial Officer, LeFiell Manufacturing Company, U.S.A delivered the Chief Guest Address. Dr.M.I.Abdul Aleem, Professor and Head, Dept. of Civil Engineering welcomed the gathering. Dr.G.Chandramohan, Principal, presented the Annual Report (2020-2021).

During his presentation, various achievements made by the students and faculty members in academics, research, and sports were highlighted and appreciated. In his presidential address, Shri.L.Gopalakrishnan, Managing Trustee, PSG & Sons' Charities, congratulated the students and faculty for the significant achievements made during the previous academic year. During the felicitation speech, Dr PV Mohanram, Secretary, congratulated the Principal for his colourful presentation of Annual Report 2020-2021 and appreciated all the award winners, who invested their relentless efforts and their parents for their unstinted support.

Shri. Raman Venkat, Chief Financial Officer, LeFiell Manufacturing Company, U.S.A delivered the Chief Guest address. The fascinating story behind the formation of PSG & Sons' Charities was reminisced along with its noble vision for society. Various competencies and characteristics, which are important for one to become a successful professional in life, were shared with the participants as outlined below:

#### **People Skills:**

Participants were requested to feel happy and at ease, and establish some personal touch with every individuals, which will be useful during the interactions. It was pointed out that students need to be compassionate with their team members. They were told to understand the science behind the body language and response of people from different cultures for effective interaction with them. Also, they should welcome different approaches of people from different cultural background, which plays a pivotal element to success.

#### **Communication Skills:**

While explaining the role of communication skills, participants were urged to slow down, listen to the other person, and formulate their ideas to speak. The speaker emphasized that one to one setting during dialogues will be effective in reaching out to the customer. Students can be given practice on effective presentation skills and public speaking skills, which will help them to learn to express themselves clearly without an element of fear. Also, they were advised to welcome diversity of thoughts from their team members.

#### **Risk Management:**

Students were advised to be prepared for real-life situations, where uncertainty is the order. They have to train themselves in understanding their grey areas in business life in order to flourish. Further, they must make appropriate assumptions and provide their customers, feasible solutions rather than asking several questions. Such an approach will enable the customer to be at ease and maximise the customer management.

#### **Networking Skills:**

The speaker quoted that networking is about planting and nourishing relationships. Students were advised to develop interest in typical areas like sports, nature, and music etc. outside their technical domain, which will help them to bring fresh perspectives and facilitate smooth interactions during meetings. He urged the students to listen to the interviews of experts in their desired field. It will benefit immensely to understand their visions and experiences. In addition, he stressed that attending internships in industries, will get a practical feel of industries.

#### **Lifelong Learning:**

Participants were appealed to learn and build new knowledge's in multi-disciplinary fields like management, finance, language, sports and literature. Lastly, he thanked the management, faculty, and students and wished success in all the endeavours. PSG Venkataswamy Naidu Memorial Awards for the Best Outgoing Student were given to Mr S Palani Karthick (B.E. Mechanical Engineering) and Ms. S Roshini Naveen (B.E. ECE). Also, department-wise Best Outgoing Student awards were presented.

Finally, Dr P.Vetrivelan, Dean (Students' Union) recapitulated some of the significant points shared during the session and proposed the vote of thanks. The iTech Music Club, Dance Club, Tamil Mandram, Drawing and Painting Club collaboratively organised the cultural events.



On behalf of the management, a memento was presented to Shri. Raman Venkat, CEO and CFO, Lefiell Manufacturing Company, U.S.A. Dr.G.Chandramohan, Principal receiving the memento in his absentia from Dr P.V.Mohanram, Secretary.



Shri. Raman Venkat, Chief Executive Officer and Chief Financial Officer, LeFiell Manufacturing Company, U.S.A is addressing the participants during the 7<sup>th</sup> Annual Day Celebrations on 16<sup>th</sup> June 2021

#### Personal Development and Secrets to Self-Motivation

A webinar on "Personal Development and Secrets to Self-Motivation" was organized jointly by the Department of ECE in association with ISTE & Wellness Centre of PSG iTech. The webinar was conducted on 17<sup>th</sup> June 2021. Around 50 participants including the first year ECE students have participated along with 4 faculty members and benefited through the webinar. Ms. Usha Nandhini Mahalingam, Application Development Senior Analyst, Accenture Solutions Pvt. Ltd., Bangalore, served as the resource person and delivered the keynote address.

The key points discussed:

- Techniques for self-development
- Tips to manage time
- Ways to motivate oneself
- Categories of motivation
- Activities to develop the personality

Mr.D. Venkatesh, Assistant Professor [Sr.Gr] and Ms.M. Sowmiya, Assistant Professor, Dept. of ECE coordinated the session.

#### Online Six-day FDTP on Fluid Mechanics

The Department of Civil Engineering(PSG iTech) in association with the Centre for Faculty Development, Anna University, Chennai, organized an online six-day Faculty Development Training Programme (FDTP) on "CE8302-Fluid Mechanics" from 21<sup>st</sup> June 2021 to 26<sup>th</sup> June 2021. Dr. G. Chandramohan, Principal, delivered the welcome address. Several key aspects of fluid Mechanics were highlighted in his talk. Dr P V Mohanram, Secretary, delivered the presidential address and spoke about the importance of hands-on training in the laboratory.



Dignitaries on the dias during inauguration (from the left to right) Ms. K.Govathanambikai, Dept. of Civil Engineering, Dr. PV Mohanram, Secretary, PSG iTech, Dr. G.Chandramohan, Principal, PSG iTech and Dr. M.I. Abdul Aleem, Prof. and Head, Dept. of Civil Engineering



Dr. B.V.Mudgal, Professor & Director, Centre for Water Resources, College of Engineering, Guindy delivering the inaugural address

Dr.B.V.Mudgal, Professor and Director, Centre for Water Resources, College of Engineering, Guindy delivered his inaugural address on "Introduction to Fluid Properties". In his address, he elaborated on the importance of Fluid Mechanics for Civil and Mechanical Engineers. The basic terms and fundamental concepts were discussed during his speech. He also explained in detail about the fluid properties. Participants actively interacted with the resource person and clarified their doubts at the end of the session. In the second session, Dr.G.L.Sathyamoorthy, Professor of Civil Engineering, Kumaraguru College of Technology, delivered a lecture on "Pressure Measurement" and highlighted the importance of pressure measurement in field application. In the third session, Dr.M.Kaarthik, Assistant Professor, Department of Civil Engineering, Coimbatore Institute of Technology, delivered a talk on "Buoyancy and Floatation".

On the second day, Dr. N.Ramsundram, Associate Professor, Department of Civil Engineering, Kumaraguru College of Technology, delivered a talk on "Hydrostatic Forces on Surfaces". In the second session, Dr. Subashisa Dutta, Professor, Department of Civil Engineering, IIT Guwahati delivered a lecture on "Types of Flow & Continuity Equation".

In the third session, Dr. Subashisa Dutta, Professor, Department of Civil Engineering, IIT Guwahati delivered a lecture on "Kinematics of Flow - Velocity Field and Acceleration, Velocity Potential Function & Stream Function".

On the third day, Dr.E.Arun Babu, Assistant Professor (Sl. Gr), Centre for Water Resources, College of Engineering, Guindy, delivered a lecture on "Dynamics of flow - Equation of motion & Bernoulli's Equation". In the second session, Dr.E.Arun Babu, delivered a lecture on "Application of Bernoulli's Equation". Also, he explained about the experimental setup to verify the Bernoulli's Theorem. In the next session, Ms.K.Govarthanambikai, Assistant Professor, Department of Civil Engineering, PSG iTech delivered a lecture on "Linear Momentum Equation and its Application". She highlighted the practical applications of linear momentum equations. In another session, Dr. R. Deepa, Chief Co-ordinator, PSG CARE delivered a lecture on "Emotional Intelligence". She explained about the process of emotion generation. In her address, she highlighted the importance of emotional intelligence for the day to day well-being of humans.

On the fourth day, Dr.N.Ramsundram, Associate Professor, Department of Civil Engineering, Kumaraguru College of Technology, delivered a lecture on "Reynold's experiment - Laminar Flow Through Circular Pipe". He explained the concepts with real-time examples and case studies. Ms.V.Vanathi, Assistant Professor, Department of Civil Engineering, PSG College of Technology, delivered a lecture on "Flow through pipes - Major and Minor Losses of Flow in Pipes". She explained various problems on the major and minor losses in detail. Dr.G.L.Sathyamoorthy, Professor, Department of Civil Engineering, Kumaraguru College of Technology, delivered a lecture on "Pipes in Series and in Parallel". He also highlighted the problems in the modern drainage system. In the next session, Dr.S.Senthilnathan, Professor, Department of Educational Technology, Bharathidasan University delivered a lecture on "Pedagogical Strategies for Engineering Education". In his address, he highlighted digital learning techno pedagogical and OER perspectives.

On the fifth day, Mr.A.Rajkumar, Assistant Professor, Department of Civil Engineering, PSG College of Technology, delivered a lecture on "Dimensional Analysis". In another session, he spoke about the model analysis. In his address he discussed the various real time problems and solutions.

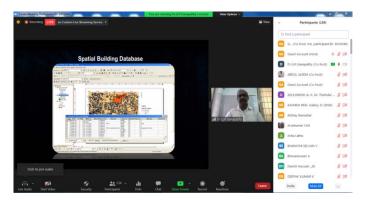
In the third session, Dr.R.Manjula, Assistant Professor, Department of Civil Engineering, NIT Trichy delivered a lecture on "Introduction to Boundary Layer & its Thickness". Ms.K.Govarthanambikai Assistant Professor, Department of Civil Engineering, PSG iTech delivered a lecture on "Momentum Integral Equation & Boundary Layer Separation and Control". In her address, she highlighted the real time application of Momentum Integral Equation & Boundary Layer Separation and Control with examples.

On the sixth day, Ms.V.Selvapriya, Assistant Professor, Department of Civil Engineering, PSG iTech, conducted a session on Online Tutorial & Online Polls. Participants' reflections on the questions were discussed. In the next session, online quiz was conducted.

Finally, Ms. K. Govarthanambikai, Asst. Professor, Dept. of Civil Engineering, proposed the vote of thanks. Total of fifty participants from various engineering colleges affiliated to Anna University have actively participated in the FDTP and benefited. Ms.K.Govarthanambikai and Ms. V. Selvapriya, Asst. Professors, Dept. of Civil Engineering coordinated the FDTP.

#### Webinar Series on "Recent trends in the Concepts of Civil Engineering Projects"

The Dept. of Civil Engineering (PSG iTech) conducted a six-day webinar series on "Recent Trends in the Concepts of Civil Engineering Projects" from 7<sup>th</sup> to 12<sup>th</sup> June 2021. A total of 150 participants from various countries such as Oman, Kuwait, Philippines, and Bangladesh participated in the program. The participants comprise of members of faculty, research scholars, industry professionals, under graduate and post graduate students. The participants were exposed to recent technologies in the field of Geo-technical Engineering, Structural Engineering and Environmental Engineering. The first technical session was delivered by Dr.G.P.Ganapathy, Professor, Centre for Disaster Mitigation and Management, Vellore Institute of Technology (VIT), Vellore, India on "GIS applications in Disaster Management" on 07.06.2021.



Lecture delivered by Dr. G.P. Ganapathy, Professor , Centre for Disaster Mitigation and Management, Vellore Institute of Technology (VIT), Vellore on 07th June 2021

In the second technical session, Dr.S.Ganesh Kumar, Scientist, CSIR - Central Building Research Institute, Roorkee, India, delivered a lecture on "Ground Improvement Techniques for Liquefaction Mitigation" on 08.06.2021.In the third technical session, Er.K.S.Asaithambi, General Manager, Offshore structures, Technip India limited, Chennai delivered a lecture on "Floating LNG Offshore Structures-Design Challenges".

In the fourth technical session, Dr. Jayasree Chakkamalayath, Research Scientist, Energy and Building Research Center, Kuwait Institute for Scientific Research, Kuwait delivered a talk on "Chemical Admixtures for Sustainable Concrete Construction" on 10.06.2021. In the fifth technical session, Er.Burhanuddin Khuzema Zaveri, EIT, Design Engineer, Hayter Engineering, Texas, USA delivered a lecture on "Role of Water and Waste-water Treatment towards Sustainability". In the last technical session, Er.Boopathi.R, Chief Engineering Manager (Civil), Larsen & Toubro Limited, Chennai, explained "How to Conceptualize Effective Water Supply System Design" on 12.06.2021. At the end of every session, feedbacks were collected from all the participants. The program was coordinated by Mr S Elayaraja, Assistant Professor (Sl.Gr), Ms D Pricilla and Mr K Kavikumaran, Assistant Professors, Dept. of Civil Engineering.

#### Lecture on "Additive Manufacturing for Aerospace Applications in an end user Perspective"

The Dept. of Mechanical Engineering (PSG iTech), in collaboration with the Indian Society for Technical Education (ISTE) and Mechanical Dept. Association, conducted a special lecture on 21<sup>st</sup> May 2021. Dr. Alphons A. Antonysamy, who is a Principal Materials Scientist, GKN Aerospace Bristol, UK, delivered an insightful talk on "Additive Manufacturing for Aerospace Applications in an end user Perspective".

Dr. Alphons explained in detail about the Additive Manufacturing Technology (AMT) and its wide uses in Aerospace Applications. Students from all 4 years of Mechanical Engineering attended the session, along with members of faculty in the Dept. of Mechanical Engineering. Dr. Alphons spoke about the job opportunities in the field and explained more about the 3D printing machine and various processes involved in it.

#### **International Day of Yoga Celebrations**

The Department of Physical Education (PSG iTech) and PSG College of Technology jointly celebrated the International Day of Yoga 2021 on 21<sup>st</sup> June 2021. Dr. S. Somasundaramooorthy, Director of Physical Education, PSG College of Technology, and Dr. P. V. Mohanram, Secretary, PSG iTech addressed the participants on the importance of Yoga and its life-long benefits. Dr. G. Chandramohan, Principal, PSG iTech spoke about the importance of celebrating the International Day of Yoga and Dr. K. Prakasan, Principal-in-charge, PSG College of Technology, administered the Yoga Day Pledge.

Around 100 participants consisting of both students and faculty members benefitted through the session. During the session, Mr. M. Senthilkumar, Yoga Master, demonstrated various yoga asanas and pranayama (breathing exercises). At the end of the session, Pranayamas (breathing exercises) like Bhramari Pranayama, Sitali Pranayama, Kapalbhati Pranayama, NadiShodhan Pranayama, and Dhyana were also explained and demonstrated.

Some of the other asanas practised during the session include:

# **Standing Asanas**

- Tadasana
- Vrksasana
- PadaHastasana
- AardhaChakrasana
- Trikonasana

#### **Sitting Asanas**

- Bhadrasana
- Vajrasana
- Ardha Ustrasana
- Ustrasana
- Sasankasana
- UttanaMandukasana
- Vakrasana

#### **Prone Posture Asanas**

- Makarasana
- Bhujangasana
- Salabhasana

#### **Supine Posture Asanas**

- SetuBandhasana
- Uttanpadasana
- ArdhaHalasana
- Pavanamuktasana
- Savasana



Mr. M.Senthilkumar, Yoga Master, demonstrating the Salabasanas to our college staff and students during the International Day of Yoga Programme-2021



Mr. J. Harsh (IV B.E. CIVIL) performing Padma Mayurasana during International Day of Yoga (IDY) 2021

# **Guest Lectures delivered by faculty members:**

S.No.	Name of the faculty	Venue	Topic	Date
1.	Dr. K. Balaji	Chettinad College of Engineering and Technology	Creative Thinking Vs Critical Thinking'	05.06.2021
2.	Dr P. Prabunathan	SRM University, Ramapuram	Materials	19.06.2021
3.	Dr. M. Manoj	campus,	Perspective 365	19.00.2021
4	Dr .K. Pramila	Christ the King Engineering College, Cbe	Career Planning and Implementation	08.05.2021
5	Dr.P.Chinnaraj	NGP Arts and Science college, Cbe	Human Nature and Psychology	28.05.2021

# **PSG CARE Programmes- Online sessions attended by faculty members:**

The following faculty members have attended various programmes being organized by PSG CARE during this quarter period:

S. No.	Name of the faculty	<b>Event Title</b>	Organised by	Date
1	Dr S Maruthamuthu	Induction Programme for		
	Asso. Prof/Physics	Faculty - 2021		30 <sup>th</sup> January to
2	Mr N Sethu Narayanan			24 <sup>th</sup> April 2021
	Asst. Prof(Sr.Gr)/English			
3	Dr S Bhuvana			
	ASP/ Computer Science			
	Engineering			
4	Ms V Vilasini			May 2021
	AP(Sr.Gr)/ Computer Science	One-year executive program		_
	Engineering	on "Data Analytics"		May 2022
5	Mr M Sathiya Nathan			
	AP(Sr.Gr)/ Electrical and			
	Electronics Engineering			
6	Dr. P.Manoj Kumar			
	ASP/ Mechanical	Webinar on "Introduction to		3 <sup>rd</sup> May 2021
	Engineering	OpenFOAM and CFD"		
7	Mr. R Avinash Kumar			
	AP/ Mechanical Engineering			
8	Mr C Gopalakrishnan	Session on "Systems	DCC CADE	4 <sup>th</sup> May to
	AP/ Mechanical Engineering	Approach Design &	PSG CARE	22 <sup>nd</sup> May 2021
		Manufacture"		
9	Dr. G. Latha			
	HoD i/c & ASP / Chemistry			
10	Dr. K. Balaji			
	AP/ (Sl.G) / Chemistry			
11	Dr. A. Kumaravel			
	AP (Sl.G) / Chemistry	Interdisciplinary Research		24 <sup>th</sup> April 2021
12	Dr. M. Manoj	among PSG Institutions		
	AP(Sr.G) / Chemistry			
13	Dr. P. Prabunathan			
	AP/ Chemistry			
14	Dr. D. Thangaraju			
	AP / Physics			
15	Ms G Niranjani			
	AP (Sr.Gr)/CSE			
16	Mr G R Hemanth	Internet of Things for		25 <sup>th</sup> April 2021
	AP/EEE	Beginners using PTC		to
17	Dr G Santhanamari	ThingWorx – Batch 2		05 <sup>th</sup> May 2021
	Asso. Prof/ECE			
18	Ms M Sowmiya			
	AP/ECE			

# Workshops/FDPs/Webinars/ Seminars attended by faculty members:

S.No.	Name of the faculty	Event Title	Organized by/Venue	Date
1	Mr. G. R. Hemanth	Doranatives of Taschina		17.05.2021
2	Dr. M. Mohamed Iqbal	Perspectives of Teaching Power Systems	NIT-Trichy	to 21.05.2021
3	Dr. M. Mohamed Iqbal	Nanomaterials for energy and environmental sustainability	Nehru Institute of Engineering and Technology, Cbe	12.06.2021
4	Mr. K. Anandhakumar	FDP on Recent Trends and Research Perspective on Energy and Power System	PSN College of Engineering and Technology	31.5.2021 to 04.06.2021
5	Dr M.Jayasanthi	Deep Learning on Computer Vision	Karpagam College of Engineering	29.6.2021 & 30.6.2021
6	Mr Venkatesh D	Next Generation Wireless Communication: 5G & Beyond	K.S. Institute of Technology , Bengaluru	03.05.2021 to 08.05.2021
7	Mr Jothibasu M	Image Processing Using MATLAB	PANTECH Solutions	12.04.2021 to 16.04.2021
8	Mr A.Anand	Recent Advancement in Electronics and Communication Engineering	Dr. N. G. P. Institute of Technology, Cbe.	08.06.2021 to 12.06.2021
9	Mr A.Anand	Advancements in Optical Communication Research	A.C.Government college of Engineering & Technology Karaikudi	21.06.2021 to 25.06.2021
10	Ms A K Kowsalyadevi	Cyber Security	AICTE	09.06.2021
11	Mr Aravindhraj N	Data Visualization using Python	Pantech in association with NITK	26.06.21 to 27.06.21
12	Ms K Lakshmi Kalpana Roy	AICTE ATAL FDP on Data Science	Punjab Engineering College	07.06.2021 to 11.06.2021
13	Ms K Lakshmi Kalpana Roy	Inculcating Human Values in Technical Education	Online	28.06.2021 to
14	Ms V Vilasini			2.07.2021
15	Dr I Kala	Six days FDTP on Cryptography and Network Security	Anna University, Chennai	14.06.2021 to 19.06.2021
16	Ms.S.Hemkiran	Recent Advances in Computer Science	Saveetha Engineering College, Chennai	18.06.2021

S.No.	Name of the faculty	<b>Event Title</b>	Organized by/Venue	Date
17		Online FDP: CSIR-NET Preparative Program in Mathematics	PSG College of Technology	26.04.2021 to 29.04.2021
18	Mr.P.Gajendran	Online workshop on Recent Trends in Domination and Graph Labelling	Ramanujan College, University of Delhi	27.05.2021 to 31.05.2021
19	Dr. G. Latha	Essential Chemistry for Engineers	National Institute of Technical Teachers Training and Research (NITTTR), Chandigarh	03.05.2021 to 07.05.2021
		Recent Developments in Materials Science 21	Sree Saraswathi Thiyagaraja College, Pollachi	16.06.2021 to 22.06.2021
20	Dr. K. Balaji	International Webinar III, 2021 on "PEM fuel cells for Electric vehicles" and "Heterogeneous catalyst design for desulfurization targeting clean environment"	The American College, Madurai	28.06.2021

# PSG Institute of Technology and Applied Research Quarterly Report (July to September 2021)

#### **Guest Lecture on "Machine Learning and Algorithms"**

The Department of Electronics and Communication Engineering, in association with the Institute of Electronics and Telecommunication Engineers (IETE) Students' Chapter, organized an online guest lecture titled "Machine Learning and Algorithms" on 7<sup>th</sup> July 2021. Dr. G. Chandramohan, Principal, delivered the welcome address and briefed about the importance of machine learning (ML) in the day-to-day affairs and the way ML has impacted and transformed the modern lifestyle. Dr. P. Subbaraj Dean (Electrical Sciences) presided over the session.

Ms. Madhuri Gopal, an expert mentor in the field of Machine learning, Data Science and Natural language Processing (NLP) participated as the chief guest and shared her rich decade-long work experience after serving in various top-notch R&D companies. Her session commenced with a detailed introduction to machine learning and explicated the three types of learning methods. She clearly elaborated on the different algorithms used in realizing the learning methods. In addition, python snippets for some of the algorithms were also discussed. The session was loaded with information that motivated and driven students to explore and develop deep insights. Lastly, students expressed their inclination towards the topic and shared how the session benefitted them. Around 80 students and 20 faculty members across the circuit branches participated in the online lecture.

Finally, Dr.P.Vetrivelan, Professor and Head, Department of ECE, proposed the vote of thanks and recapitulated the significant points shared during the session with the participants. The session was coordinated by Dr.P.Reba, Associate Professor, Ms.M.Deepa and Ms.N.Susithra, Assistant Professors, Department of ECE.



Dr. G. Chandramohan, Principal, Dr. P. Subbaraj Dean (Electrical Sciences), Dr. P. Vetrivelan, Associate Professor and Head, Department of ECE, and Dr. R. Manimegalai, Professor and Head, Dept. of CSE along with faculty members are seen in the photo during the guest lecture "Machine Learning and Algorithms" held on 7<sup>th</sup> July 2021

#### **Project Contest on "Arduino Platform and Programming"**

The Department of Electronics and Communication Engineering (PSG iTech), in association with the Indian Society for Technical Education (ISTE) Students' Chapter, organized an online Arduino based project contest on 12<sup>th</sup> July 2021. The contest was planned as a part of the value-added course (VAC) titled "Arduino Platform and Programming" offered to the students of I Year ECE (2<sup>nd</sup> Semester). Ms. Mirnalani, I year ECE student, began the session with a prayer song. Dr. P. Vetrivelan, HoD – Department of ECE, delivered the welcome address. Dr.P.Subbaraj. Dean (Electrical Sciences) presided over the session. Dr P V Mohanram, Secretary, motivated the students on how to present their work in a forum.

The Class tutor, Ms.M.Deepa, introduced the judging panel members, Mr. K Yazhisaikumar (2014 batch Alumnus), Validation Engineer, Renault Nissan Technology and Business Centre India Pvt. Ltd, and Ms. Samyuktha Saravanan (2015 batch alumnus), Software Engineer, CISCO Systems Pvt Ltd. Totally 13 batches, with maximum 4 members per batch (50 students) took part in the contest. They demonstrated their work through live video, slide presentation, animation, recorded video demo and screen recordings. The Class tutor Dr. P. Reba lauded the efforts of all the students and thanked the Alumni for joining the event. At the end of all the presentations, Professor Dr. P Subbaraj announced the prize winner. Dr. P. Vetrivelan, thanked all the co-ordinators. Ms. M. Sowmiya and Ms. N. Susithra, Class tutors and all the students were appreciated for their tremendous efforts in doing hardware-based project work as a team amidst the pandemic situation. The first prize was given for the project "Home Automation System", done by Mr Viswa Kumar N, Mr Sriniketh J, Mr Ganeshraam K and Mr Asswanth S D.

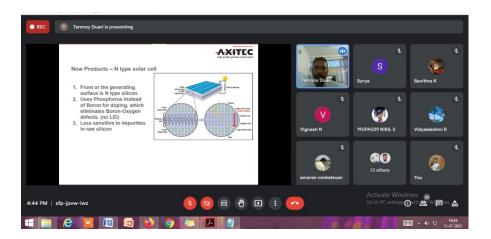


Arduino based Project Contest held on 12th July 2021

#### Three-Day workshop on "Advanced Solar Technology"

The Department of Electrical and Electronics Engineering, in association with Institute of Electrical and Electronics Engineers (IEEE) PSGI Student Branch and Cares Renewable Private Limited, Coimbatore, organized a three-day workshop on "Advanced Solar Technology" during 14<sup>th</sup> - 16<sup>th</sup> July 2021. Totally 30 participants including the faculty members, students and the practicing engineers from industries benefited through the workshop.

The workshop was inaugurated by Mr. Subrahmanyam Pulipaka, Chief Executive Officer of National Solar Energy Federation of India, New Delhi on 14.07.2021. Experts from solar photovoltaic manufacturing and related service industries delivered the lecture on advancement in inverter technologies, storage system, power optimization in solar system and hybrid and micro inverter options. Design presentation and various case studies by the experts enlightened the participants on solar domain. Finally, the session was concluded with the Virtual Tour to Renewable Energy Systems Laboratory facility at PSG Institute of Technology and Applied Research, Coimbatore.



Mr.TanmoyDuari, CEO, Axitec Energy India Pvt. Ltd delivering a talk on "Mono PERC Half Cut Technology" on 15<sup>th</sup> July 2021

#### **NCC Inaugural Ceremony**

The new rising of 6 (TN) Medical Company National Cadet Corps (NCC) was inaugurated on 20<sup>th</sup> July 2021 in the college premises with great enthusiasm. The Chief Guest of the function was Major Dhinesh Davis, Commanding Officer, 6 (TN) Medical Company NCC, Coimbatore. The Chief Guest unfurled the NCC flag. After flag hoisting, Major Dhinesh Davis opened the NCC room at E4 Block. Principal Dr.G.Chandramohan welcomed the gathering. In his welcome address, he emphasized the need for joining in NCC through which students can render their service as responsible citizen. The chief guest encouraged the students with his invigorating speech. In his speech, he said that NCC aims to develop qualities of character, courage, comradeship, discipline, leadership, and secular outlook, the spirit of adventure and sportsmanship and ideals of selfless service among the youth to make them useful citizens. The keynote address was given by Dr.P.V.Mohanram, Secretary. In his address, he said, that "even though the NCC was initially created as a second line of defense for the nation, the NCC experience is much more than that. It is a platform to build character, team work, leadership qualities, and a secular outlook in life. Finally, the vote of thanks was proposed by Mr.P.Gajendran, NCC Caretaker unit.



Dr. G. Chandramohan, Principal, Dr. P.V. Mohanram, Secretary, with the Chief Guest Major Dhinesh Davis, Commanding Officer, 6 (TN) Medical Company NCC, Coimbatore, New rising inauguration event held on 20<sup>th</sup> July 2021

# **Faculty Awards Function**

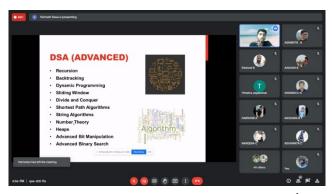
Faculty Awards Function was held on August 02, 2021 to recognize research contributions and achievements made by faculty from 1<sup>st</sup> January 2021 to 30<sup>th</sup> June 2021. As per the norms established in approval with management for each category of awards, the management was gracious enough to release Rs.1,41,410/- (One Lakh Forty One Thousand Four Hundred and Ten Rupees). The function was presided over by Dr K B R Varma, Director – Research, PSG Institutions. Around 42 faculty members were honored for their achievements.



Dr K B R Varma, Chief Guest awarding to Ms. K. Govarthanambikai, Assistant Professor/Department of Civil Engineering

#### Interactive Session on "Strategies to get Placed in Core/ Software Company"

On the 3<sup>rd</sup> of August 2021, the Dept. of ECE organized an interactive session for the students of 3<sup>rd</sup> year. The session started with a welcome address by Dr.P.Vetrivelan, HoD / ECE. The session was organized by placement faculty coordinator and student placement coordinators with two students of the final year Akash B and Shrinath D, who are successfully placed in Texas instruments and PayPal respectively. Especially at this point of the year, it is significant for the students to be aware of placement details and the types of companies recruiting. The interaction helped the third-year students to gain clarity regarding the placement procedure and preparation strategies. A live interaction session with the placed seniors opened doors for the juniors to gain more insights and understand the opportunities on the table from a better perspective. They explained the concepts, topics, and resources which are required for placement preparation in a nutshell. They also patiently cleared the doubts that students had. The session ended with the vote of thanks by Mr.K.Paldurai.



Screen shot taken during the interactive session held on 3<sup>rd</sup> August 2021

#### Webinar on "Transformative Reforms under National Education Policy (NEP) 2020"

PSG iTech in association with the Depts. of Civil and Mechanical Engineering, the Indian Society for Technical Education (ISTE) and All India Council for Technical Education (AICTE), organized a webinar on "Transformative Reforms under National Education Policy (NEP) 2020" (Theme: Research, Innovation and Ranking) on 12<sup>th</sup> August 2021. Dr P.Vetrivelan, HoD, Electronics and Communication Engineering, delivered the welcome address. Dr. Gaurav Kumar Dhuria, Associate Professor & Head, DAV Institute of Engineering and Technology, Jalandhar, Punjabfacilitated the session on "Research innovation and Ranking".

The importance of ancient education and rich cultural background were highlighted with examples from the history. The relevance and importance of research was discussed during his speech. He also discussed the current state of affairs in the country on research and 360 degrees holistic progress cards. During his lecture, salient features of NEP 2020 were explained. He discussed the goals, significant activities, and different types of research proposals at national research foundation. Around 50 participants from various institutions participated in the webinar. Ms.V.Selvapriya, Asst. Professor, Dept. of Civil Engineering coordinated the webinar. Dr. M.I. Abdul Aleem, Professor and Head, Dept. of Civil Engineering proposed the vote of thanks.



Dr. Gaurav Kumar Dhuria, Associate Professor & Head, DAV Institute of Engineering and Technology, Jalandhar, Punjab delivering the session on "Research innovation and Ranking" on 12<sup>th</sup> August 2021

#### Alumni Talk on "Interested-Committed"

The Department of Electronics and Communication organized an "Alumni Talk" for the Students of 3<sup>rd</sup> and 4<sup>th</sup> year, which served as a motivational session for the students for having a fruitful academic year. Ms. Harini, who is working as Software Engineer at AppViewX and Ms. Pavithra, working for Temenos as Software Developer, were the resource persons. The session was held on 11<sup>th</sup> August 2021.

The session focused on the ways and means of reaching great heights in life and how doing routine work with interest and commitment can bring paradigm shift in the way of life. They spoke about the importance of fitness, money making, evolving mindset, knowledge, and creativity, which are essential for every individual for a successful living. They explained these five essential things with interesting examples from histories and living legends like Mary Kom, Serena Williams and other achievers. Later they motivated the students who are going to attend placement interviews with examples from Olympics. The session was not only interactive and interesting but filled with fun. Finally, the session ended with Q & A and feedback.



Alumni Talk on "Interested-Committed" held on 11th August 2021

#### Webinar on "Opportunities after Engineering through GATE & ESE"

The Webinar on "Opportunities after Engineering through GATE & ESE" was held on 12<sup>th</sup> August 2021 in association with The Institution of Engineers (India) PSGI Students' Chapter and ACE Engineering Academy. The Speaker Mr.Anand Kumar, a motivational speaker and senior faculty, ACE addressed the participants by highlighting various strategies for competitive exams. Around 75 students have participated and their doubts were clarified.



Mr.Anand Kumar, Senior Faculty, ACE addressing the students on the topic "Opportunities after Engineering through GATE & ESE" held on 12<sup>th</sup> August 2021

#### Webinar on "Importance of Mathematics in Intelligent Techniques"

The Department of Mathematics has conducted a Webinar on "Importance of Mathematics in Intelligent Techniques" on 13<sup>th</sup> August 2021. The aim of the webinar is to create awareness in the field of Artificial Intelligence for the faculty members, researchers, and students to know the importance of Mathematics in the era of modern technologies. Dr. Mehar Chand, Professor, Department of Mathematics, Baba Farid College, Punjab, explained the importance of Mathematical techniques in the light of modern technologies. Around 110 participants from various parts of the country participated in this webinar and got benefitted. Dr.V.Jailaxmi, Professor and Head, Department of Mathematics, welcomed the chief guest and participants joined in online and offline. Dr P.V. Mohanram, Secretary gave the presidential address. He pointed out the role of Mathematics in the light of modern technologies like Data Science and Artificial Intelligence. Dr.R.S.Sankarasubramanian, Professor introduced the chief guest. Dr P. Chinnaraj, Assistant Professor (Selection Grade) proposed the vote of thanks. Dr.S.Aramuthakannan, Associate Professor hosted the Question Answer Session, Dr. V. Chitra anchored the session and Ms.Amrita sung the prayer song.



Webinar on Importance of Mathematics in Intelligent Techniques on 13th August 2021

#### **Guest Lecture on "What is Learning?"**

The Department of Electronics and Communication Engineering, in association with ISTE students' chapter conducted an online guest lecture on "What is Learning?" on 13<sup>th</sup> August, 2021 to the second and third year students of ECE. Prof Muruganantham exclaimed that the "Capacity to learn is a gift" which is inherited from our forefathers. He quoted several examples from Tamil literature to add value to his speech. He also quoted that the "Ability to learn is a skill", which is acquired from the surroundings and society we grow up in. But "Willingness to learn is a choice" made by the individual. Around 63 students took part in the guest lecture and got benefited.

He stated that willingness plays a crucial role in learning more than the ability and capacity. He spoke about the innovations made by Archimedes in the mechanical and civil engineering domains like pulleys and levers to explain how it helped during the times of war by easing the muscle load in lifting the warships. Similarly, he wondered if there could be a lever that could lower the cognitive load (brain load) while we study. He elaborated the concepts of strong encoding and long term memory and how we can effectively train our brain to remember and retrieve new concepts learnt.

He also presented the models of brain and how the neurons made strong emotional associations when we learn the concepts with utmost concentration and acceptance. He also threw light on the concept of chunking in order to shrink the content and store it in the limited available memory. He also illustrated examples in favor of the concept of transfer, how the principles in physics were transferred to a new domain of veterinary gynecology. He concluded the talk highlighting the terms in Bloom's taxonomy and move higher in the Bloom's level in order to excel in the curriculum as well come out with flying colors.



Prof C Muruganantham, Former professor, TCE, Madurai, presenting his talk on "What is Learning?" on 13th August 2021

#### **Independence Day Celebrations**

PSG Institute of Technology and Applied Research celebrated the 75<sup>th</sup> Independence Day (I-Day) in the presence of the Chief Guest Col B Satish, Commanding Officer 5 (TN) Girls Battalion NCC, Coimbatore on 15<sup>th</sup> August 2021. Unfurling the national flag, Col B Satish accepted the students' march-past parade and delivered the I-Day speech. In his special address, several sacrifices made by the forefathers and martyrs for the freedom struggle were recalled and an appeal was made to the spectators to reminisce about the glorious past and historic moments. Students were urged to understand their moral responsibility to the nation and the society. Col B Satish shared that with freedom comes maturity, sense of gratitude, resilience, inclusivity, equality, respect for everyone, and sense of ownership. He requested everyone to remind themselves about Nation First and work for the nation to reach great heights in all aspects.

Earlier, Dr.G.Chandramohan, Principal, welcomed the gathering and lauded the achievements made by the students and members of faculty of PSG iTech. He shared that students of iTech are continuously motivated not only to excel in academics but in extra-curricular activities through various clubs functioning in the college like NCC, music club, eco-club and so on to become holistic citizens and serve the nation. With great sense of pride, he shared that PSG iTech has NCC Wings for both boys and girls. Also, he thanked faculty members and students involved in organizing the event successfully.

In his felicitation address, Dr P.V Mohanram, Secretary, extended a warm welcome to everyone and reflected upon the glorious sacrifices made by the ancestors to overcome the freedom struggle. Several important values to be inculcated by every human being like mutual respect, love, inclusive growth, sense of responsibility and ownership were recalled in the speech. Also, young students were urged to pursue the Defence Services as one of the options for their career and add value not only to the individual self but to the nation.

Further, he shared an interesting anecdote from the life of Major Dhyan Chand to explain how one should be truly patriotic to the nation and render selfless service to the country which he or she belongs to, at any point of time. Finally, participants were requested to practice watching their breath pattern to know their emotional state for a harmonious living.

At the end, a special tree-plantation drive was organized to commemorate the 75<sup>th</sup> Independence Day celebrations by the eco-club. Finally, Dr.P.Vetrivelan, Associate Professor and Head, Dept. of ECE, proposed the vote of thanks. Lt. V.Vilashini, Asst. Prof, Dept. of CSE, Mr. Gajendran, Asst. Prof, Dept. of Mathematics along with Mr A Robinson, PED, Dept. of Physical Education coordinated the event.



Principal Dr G Chandramohan, Secretary Dr PV Mohanram and other dignitaries presenting a memento to the Chief Guest Col. B Satish during the 75<sup>th</sup> Independence Day celebrations held in the Central Courtyard at PSG iTech on 15<sup>th</sup> August 2021

# Short-term Training Programme on "Application of Geospatial Technologies in Building Sustainable Smart Cities"

The ISTE approved Short-term Training Programme on "Application of Geospatial Technologies in Building Sustainable Smart Cities" was conducted by the Department of Civil Engineering, PSG iTech during 23<sup>rd</sup>to 27<sup>th</sup> August 2021. The inaugural function started with the invocation, followed by welcome address by Dr.M.I.Abdul Aleem, Professor and HoD of Civil Engineering at PSG iTech. He thanked the ISTE for approving the STTP programme. The presidential address was delivered by Dr.P.V.Mohanram, Secretary, PSG iTech. In his address, he stressed upon the need to implement the Intelligent Traffic Management System for finding alternative routes, IoT and cloud based automation, application of drones for surveillance, as a part of the Smart City development. He also highlighted the use of geospatial technologies for the monitoring of common amenities in smart cities such as 24x7 water supply, effective garbage disposal systems, underground drainage systems, digital documentation of land and public records. Mr.V.Navin Ganesh, Assistant Professor (Sr. Gr.), Department of Civil Engineering, PSG iTech, briefed about the objectives of the STTP. The chief guest of the function, Dr.K.Elangovan, Professor in the Department of Civil Engineering at PSG College of Technology, Coimbatore, delivered the inaugural address.

He explained the salient features of the smart cities mission launched by the Government of India and the objectives of the mission, which include applying smart solutions to infrastructure and services in area-based development in order to make the cities a better place for living. Mr.R.Rajkumar, Assistant Professor (Sr. Gr.), Department of Civil Engineering, PSG iTech, proposed the vote of thanks. The first session of the STTP was facilitated by Dr.K.Elangovan, Professor, Department of Civil Engineering, PSG College of Technology, Coimbatore.

He elaborated on the concept of smart city and the various geospatial techniques available. Renowned speakers from various institutions including IIT, NIT, NITTTR, and other institutions delivered talks on various topics. Every day, 2 sessions were held. One session on Hands-on training in QGIS was conducted for the benefit of the participants. A test was conducted for the participants on the last day of the STTP.



Dr P Perumal, Prof (Civil Engg) and Dr P V Mohanram, Secretary presenting a memento to the chief guest Dr.K.Elangovan, Professor in the Department of Civil Engineering at PSG College of Technology, Coimbatore on 23<sup>rd</sup> August 2021.

## **Teachers' Day Celebrations**

The Staff Club of PSG Institute of Technology and Applied Research organized a guest lecture on "Seriousness is Sickness" on 3<sup>rd</sup> Sep 2021. Dr K Rathnasabapathi, Director, Anglophonix Institute of English, Coimbatore participated as the resource person and addressed the gathering. Dr.G.Chandramohan, Principal welcomed the gathering and spoke about the legacy of Dr. G.R.Damodaran, especially his unfailingly courteous, helpful and kind gesture with everyone around him. Also, the impactful life led by Dr G.R.Damodaran and his tremendous contributions for the development of education and society was highlighted in the address.

Further, he appealed to the members of Staff Club to organize and celebrate the birth anniversary of Dr G.R.D as Staff Day of PSG iTech in the upcoming years. Also, he requested the Staff Club to take initiatives for celebrating Teachers' Day every year and organize more events for the members of faculty and their family members, which will help to establish strong bonding in the work environment. Later, Mr. M Jothibasu, Asst. Prof, Dept. of ECE, introduced the chief guest to the audience.

Speaking on the special occasion, Dr. Rathnasabapathy recalled his remarkable experiences at PSG College of Arts and Science as a Professor of English and encouraged the faculty members to feel proud and responsible about their opportunity to address young minds every day, which is a rare opportunity in any profession.

At the same time, he urged the policy makers, educationists, and teachers to read *Bertrand Russell's The Functions of a Teacher* for understanding the roles and responsibilities of educational institutions and teachers in shaping the young minds. Through stories and personal experiences, various significant qualities required for effective teaching were highlighted.

Importantly, he urged the members of faculty to capture the attention of students in the first five minutes of every class and find ways to stay away from tension, which will reduce the performance and increase forgetfulness. Also, teachers were appealed to enter the classrooms with excitement and use PPTs sparingly as it may not interest the students all the time.

Dr. P.V. Mohanram, Secretary, offered his felicitations and requested the faculty members to relish teaching, be joyous and serve the student community with high spirits and shape them as responsible citizens. Later, gifts were distributed to all the faculty and staff of the institution during the special occasion.

Finally, Dr.S.Aramuthakannan, Associate Professor of Mathematics, proposed the vote of thanks. The event was coordinated by Staff Club coordinators Dr.P.Chinnaraj, Mr.M.Jothibasu, Dr.R.Ravikumar, Ms.K.Govarthanambikai, Asst. Professors and Ms.N.Vasanthi, Asst. Librarian.



Dr K Rathnasabapathi, Director, Anglophonix Institute of English, Coimbatore distributing the gifts to Ms K Bavithra, AP (EEE) during the Staff Day celebrations on 03.09.21. Dr.G. Chandramohan, Principal and Dr. PV. Mohanram, Secretary were seen in the picture

## One week online Faculty Development Programme on Computer Architecture

The Department of Computer Science and Engineering has organized a one-week online Faculty Development Program on "Computer Architecture" from 06<sup>th</sup> September 2021 to 10<sup>th</sup> September 2021, in association with "PSG Center for Research and Academic Excellence". There were 46 participants from various colleges which included 8 participants from PSGiTech. The programme began with the welcome speech by the Director Dr. R. Rudramoorthy, PSG CARE followed by Introduction to Chief Guest by Dr. R. Manimegalai, HoD, Dept. of CSE. Principal Dr. G. Chandramohan offered his felicitations. The session was started by Dr. John Jose, Assistant Professor, Department of Computer Science & Engineering, Indian Institute of Technology Guwahati.



Principal Dr. G. Chandramohan, Dr. R. Manimegalai (HoD/CSE) along with the Event Coordinators and Faculty members during the inaugural function of the FDP on "Computer Architecture"

Each session was concluded by Dr. R. Manimegalai, HoD, Department of CSE and immediate feedback was received from the participants. The programme ended with a vote of thanks by Dr. R. Manimegalai, HoD, Department of CSE.

#### **Association Inauguration - CSE**

The CSE Association for the academic year 2021-2022 was inaugurated on 14<sup>th</sup> Sep 2021 at PSG Institute of Technology and Applied Research, Neelambur, Coimbatore. Mr Manoharan Duraisamy, Chief Executive Officer and Mr M Khaja Mohideen, Chief Administrator Officer from Jana Analysis Pvt. Ltd. were the Chief Guests. Mr Manoharan shed light upon "Digital Transformation and its Challenges" and Mr Khaja elucidated on "The Entrepreneurial Journey of a PSGian". Dr.R.Manimegalai, Head of the CSE Department welcomed the gathering and inaugurated the association. Dr. I Kala, Faculty In charge, CSE Association introduced the Office bearers of the association. Mr Abhisek, Class of 2019 who got placed at Infibeam Avenues-Bangalore and is currently a Research Scholar at IIT Bombay, accepted our invitation to interact with our students. He delivered a talk on "Homo Sapiens 2.0- Technology and Beyond".



CSE Association Office Bearers during the Inaugural Function held on 14th Sep 2021

#### **Engineer's Day Celebration**

The Department of Civil Engineering, PSG iTech in association with "The Institution of Engineers (India) PSGI CV Student Chapter" organized "Engineer's day celebration" on 15<sup>th</sup> Sep 2021. Er.A.Sudhahar, Managing Director, Dimensions structural designs was the chief guest of the program. The function was started with invocation followed by welcome address by Preethi VM, convener, IEI, final year student. Akash R, secretary, IEI, final year student briefed about the chief guest. The chief guest insisted about importance of engineers in innovating new technologies for solving problems in simple manner. Also, he added the importance of entrepreneurship in the field of civil engineering. He stressed upon various start up idea in the civil engineering field and explained the importance of ethical behavior of engineers in the society. Ms Sreemathi Gayathri S, Joint secretary, IEI, third year student, proposed the vote of thanks. The coordinator of the event was Mr.R.Rajkumar, Assistant Professor, Department of Civil Engineering.



Dr P Perumal, Professor, Civil Engg. department presenting a memento to the chief guest Er.A.Sudhahar, Managing Director, Dimensions structural Designs

#### **Covid-19 Vaccination Drive at PSG iTech**

The Youth Red Cross (YRC) Society has organized Covid-19 Vaccination Drive in the college premises on 14<sup>th</sup>September 2021. Around 121 vaccines have been granted by Deputy Director of Health Services, Coimbatore district. Dr. S. Gangadaran, Doctor, PSG iTech Medical Centre, and medical team from PSG IMSR have vaccinated the students, faculty and their family members. Dr. G. Chandramohan, Principal, and Dr. P. V. Mohanram, Secretary appreciated the efforts taken YRC volunteers and Mr.M.Sathiyanathan, YRC Programme officer and Mr. Udayakumar, General maintenance for coordinating this event. They also thanked Dr. S. Gangadaran, Doctor, PSG iTech Medical Centre and medical team of PSG IMSR for their support.



Covid-19 Vaccination Drive at PSG iTech on 14th September 2021

#### **Soft Launch of PSGIAP**

Soft launch of the PSG Institute of Architecture and Planning was held on 18<sup>th</sup>September, 2021. Architecture block was inaugurated by the honorable Chairman PSG Institutions, Shri G R Karthikeyan and Shri L Gopalakrishnan, Managing Trustee, PSG & Sons' Charities. Heads of the various PSG institutions and faculty members were present on the occasion. The inauguration was followed by the soft launch program. Dr.P.V.Mohanram, Secretary, PSG Institute of Technology and Applied Research welcomed the august gathering. Shri G R Karthikeyan gave an interesting insight into the journey of the PSG Institutions and Charities from the inception to where it stands today and the path ahead while also wishing success to the new institution. Shri L Gopalakrishnan, in his address, conveyed his best wishes for the new institution. Ar.K.Venkatesh Kumar, Principal, PSG Institute of Architecture and Planning presented his vision for the architecture college and introduced his team. Dr. G Chandramohan, Principal, PSG Institute of Technology and Applied Research delivered the vote of thanks. The event was followed by a press briefing.



Inauguration of the architecture block by Shri G R Karthikeyan, the honorable Chairman PSG Institutions and Shri L Gopalakrishnan, Managing Trustee, PSG & Sons' Charities on 18th September 2021

#### **NSS Day Celebrations**

The National Service Scheme (NSS) Unit of PSG Institute of Technology and Applied Research has organised a special event to celebrate the NSS Day and to install the new office bearers for its Unit on 24<sup>th</sup> September 2021. Dr. P. Chinnaraj, Assistant Professor (Senior Grade), Dept. of Mathematics and NSS Coordinator welcomed the gathering. Principal Dr G Chandramohan delivered the presidential address and motivated the students to render selfless service for the society and fellow human beings.

Dr. M. Devasena, Associate Professor, Dept. of Civil, PSG iTech, participated as the chief guest and addressed the gathering. In her special address, students were urged to be socially responsible through their day to day activities and encouraged them to prepare compost from hostel food waste. Also, they were introduced to mobile libraries, a great way to inculcate a book reading habit. The college NSS Unit was recognized for its commendable and outstanding works and received the "Best NSS Unit" award for the year (2019-2020) by Anna University. Also, students Mr. B Aakash, Final Year B.E. ECE and Ms. S Vaishali, Final Year B.E. CSE received the 'Best NSS Volunteer' awards from Anna University. Mr B Aakash, Senior NSS Volunteer, office bearers and they were congratulated. presented the new Finally, Ms K Bhuvaneshwari, Final Year B.E. EEE student, proposed the vote of thanks.



Members of NSS Unit seen along with Dr M Devasena, Dr G.Chandramohan, Dr P Chinnaraj (From the left) during the induction of new office bearers for the college NSS Unit

#### **Student Achievements**

#### e-Yantra Innovation Challenge (eYIC 2020-21)

The final year Electrical and Electronics Engineering Students of PSG iTech, Mr. Gopi Ananth, Mr.Kavikumaran R, Mr. Kolappan C and Mr. Lingesh L developed a hardware prototype "Disinfecting Rover" addressing the Disaster Management concept. This team was mentored by Mr. M. Sathiyanathan, Assistant Professor (Senior Grade), Department of EEE. There were 300 plus teams from various parts of the country participated in this competition held on 31<sup>st</sup> July 2021. This team was placed in the top 10 teams selected for final round of eYIC- 2020-21. The Professors from IIT-Bombay and experts from industries have reviewed the proof of concept and awarded a Bronze certificate to the team. Principal Dr. G. Chandramohan and Dr.C.L.Vasu, Professor and HoD, Department of EEE congratulated the student team and mentor for achieving this award.

#### Mega Fluid Power Championship Quiz 2021

The 'Mega Fluid Power Championship Quiz 2021' was conducted by Fluid Power Society of India (Coimbatore Chapter) on 4<sup>th</sup> September 2021. A team from the Department of Mechanical Engineering M Aniruth, Final year A K Aseel Ahamed mentored by Mr T Prem Kumar (Assistant Professor, Mechanical) and Mr M Senthilvel (Assistant Professor, Mechanical) participated in the above event and emerged as the 'Winners' for the year 2021. The team is awarded with a two month Industrial internship at Argo Hytos Pvt Ltd, Pollachi with a stipend of Rs 10,000/month and faculty mentor is awarded with Rs 10,000 as Research Grant.



The teams from various colleges along with the quiz moderators in the online Microsoft Teams Platform

## **International Rover Design Challenge (IRDC) 2021**

'Team Aurora' from PSG iTech participated in the International Rover Design Challenge competition held during September 2021 and finished with 7<sup>th</sup> Position. The IRDC is an annual event conducted by International Mars South Asia. The event was organized via online due to pandemic. Around 60 teams participated in the competition from all around the world. The competition demanded students to design and simulate the Rover. During the event, students justified their design based on the calculations, analysis, results and simulation results. The jury team consisted of prominent scientists from all over the world including NASA.



PSG iTech team Aurora presenting their Design report to the Jury that includes Scientists from NASA

## PSG Institute of Technology and Applied Research Quarterly Report (Oct – Dec 2021)

## **Events Organized:**

## **Students Union Inauguration:**

PSG Institute of Technology and Applied Research (PSG iTech) inducted the new office bearers for its Students' Union for the academic year 2021-2022 on 11.10.21 (Monday). Dr G Chandramohan, Principal, welcomed the gathering and spoke about the various activities organized by Students' Union in the past. At the same time, he requested the clubs to organize more events for students to enhance their skills for stamping success in their desired career. Shri L Gopalakrishnan, Managing Trustee, PSG Institutions, delivered the presidential address and offered his felicitations. He requested the members to conduct more activities and help every student to enjoy their stay in the campus and take part in sports activities, which will help to stay physically fit. Dr P Vetrivelan, Dean, Students' Union, introduced the new office for the academic year 2021.

Chief Guest of the event Mr Raja Gopal Sunkara IAS, Coimbatore City Municipal Commissioner congratulated all the newly selected office bearers of the Students' Union and requested the members to be ready to address the difficulties faced by students at any point of time. During the talk, he recalled some of his college day memories and shared some tips to excel in life. Also, he urged the members to have plans from day one and execute them before the completion of their tenure. Further, he appealed to them to utilize the time effectively and focus on both academic activities and extracurricular activities. Interestingly, he compared the City Corporation with the Students' Union in identifying, understanding and solving the problems faced by the people and students and shared the challenges involved in solving the problems. Then, he urged the members of the Students' Union to stay in touch with all the students and help them develop their unique skills required for their life. Finally, Mr B Aakash, Final Year B.E. ECE, Secretary, Students' Union, proposed the vote of thanks. The event came to an end with a group photo with all the members.



Principal Dr G Chandramohan, Managing Trustee Shri L Gopalakrishnan, Coimbatore City Municipal Commissioner Mr Raja Gopal Sunkara IAS, Secretary Dr P.V. Mohanram, Dean Students' Union Dr P Vetrivelan along with newly-selected office bearers of the Students' Union are in the photo during the Inauguration of Students' Union 2021

#### Navratri Golu Celebrations 2021

As part of the Navratri celebrations, *Golu Alankaram*, a display of figurines, was jointly organized by the Drawing and Painting Club (Tulika), Cooking Club (Pushti:) and Music Club for the third year in a row. The *Golu Alankaram* was decorated and displayed in the Office of the Controller of Examinations from 11<sup>th</sup> to 13<sup>th</sup> October, 2021. Dolls and idols contributed by members of faculty and students adorned the *Golu* arrangements.

Approximately, 100 clay dolls were arranged in 9 tiers with idols ranging from Nava Shakthi, Ashta Lakshmi, Dasavatharam, Arupadai Veedu, Lord Vishnu, Lord Brahma, and Lord Nataraja etc. Especially, Goddess Varalakshmi idol, an epitome of health, wealth, and prosperity, was beautifully decorated with jewels and kept it in a pot.



Glimpse of Golu Alankaram at Exam Cell on 11th October 2021

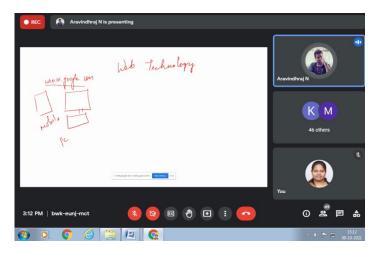
PSG iTech Band members along with Ms.Shanmuga Bhagyasree, an alumna, rendered soulful Bhajans during the first day of the Golu display. Principal Dr. G. Chandramohan, Secretary Dr. P.V Mohanram and Dr R Manimegalai, Professor and Head, Dept. of Computer Science and Engineering presided over the Navratri celebrations.

Apart from Navratri and Saraswati Pooja celebrations, Navratri Art and Cooking feast were organized by respective club members. During the event, students distributed the divine Prasadham. Also, *Mulaipari*, specially prepared by the students, waskept in display in front of the Goluarrangements to add beauty to the festival. Some alluring art works of students were displayed in the hall.

The event was organized successfully by Dr.G.Santhanamari,Ms.M.Deepa,Ms. N. Susithra, Dept. of ECE, Ms.K.Lakshmi Kalpana Roy, Dept. of CSE, and Mr.C.Gopalakrishnan, Dept. of Mech.

#### Workshop on "Web Technology: HTML, CSS, JavaScript, and PHP with SQL"

The Department of Computer Science and Engineering in association with Computer Science and Engineering Association, the Institution of Engineers (India) PSGI Students' Chapter organized a workshop on "Web Technology: HTML, CSS, JavaScript and PHP with SQL" on 09<sup>th</sup> Oct 2021. Mr. N. Aravindhraj, Assistant Professor, Dept. of CSE, PSG iTech, served as the resource person and provided hands on training on HTML for the beginners. Approximately, 50 students participated in the workshop and benefitted.



Workshop on "Web Technology: HTML, CSS, JavaScript, and PHP with SQL on 09th October 2021

## **Content Writing Workshop**

Tarangini Club and the Department of English in association with Indian Society for Technical Education (ISTE) Students' Chapter of PSG iTech organized a workshop on Content Writing on 12<sup>th</sup> October 21. Mr D Muralidhar, Manager Training, PSG II, Associate Dean – Higher Education and Training, Dept. of Production Engineering, PSG College of Technology served as the resource person and addressed the participants on various aspects of content writing. Ms.N.Susithra, Assistant Professor, Dept. of ECE, welcomed the gathering and introduced the resource person to the audience.

During the workshop, Mr.D Muralidhar shed light on different types of contents, art of writing contents for various mediums, and tips and tricks for producing effective contents for various purposes. Apart from these, he spoke about the efficacious use of technical tools for writing, proofreading and editing like MS Word and Grammarly.com. The speaker demonstrated the impact of technological tools on writing and underscored the demerits of using such technologies with some examples from various texts.

Other significant components of writing like readability, consistency, spellcheck, syntax and various other metrics associated with writing were also discussed in brief to make participants understand the essentials of writing skills. Approximately, 20 students from various departments and members of faculty participated and benefitted through the workshop.

Dr.P.V.Mohanram appreciated the efforts taken by Tarangini and Dept. of English in organizing such need-based workshops for the students and discussed the demand for good content writers and the job prospects. The session ended with feedback and group photo.

Finally, Ms. N Susithra, Assistant Professor, coordinator of the workshop, proposed the vote of thanks. Dr. K Pramila, Professor and Head, Dept. of English, Ms. N Susithra and Mr K Sakthi Prasanth, Assistant Professors and coordinators of Tarangini Club, coordinated the workshop.



Mr. D. Muralidhar, Manager Training, PSGII, presenting Certificate of Participation to a participant after the Workshop on Content Writing held on 12<sup>th</sup> October 21

## One-day ISEA workshop on "IoT-Edge Ecosystem: A Security Perspective"

The Department of Computer Science and Engineering in association with IIT (Guwahati) organized a one - day ISEA workshop on "IoT-Edge Ecosystem: A Security Perspective" on 18.10.2021. Dr R Manimegalai, Professor and Head, Dept. of CSE, welcomed the gathering.

Dr G Chandramohan, Principal, delivered the presidential address and appreciated the Dept. of CSE for organizing such need-based workshops for the student and faculty members. Speaking on the occasion, he highlighted the importance of imparting knowledge on cyber security and appealed to the students to go beyond the classroom learning and explore the latest trends and knowledge available in this trending field. He stated that cyber security is one of the critical fields in the IT sector. Next, he appreciated the efforts taken by the department in collaborating with IIT (Guwahati) in hosting such workshops for the larger benefit of the students from several colleges of the city.

Dr P V Mohanram, Secretary, offered his felicitations and informed that self-reliance through knowledge, training, and awareness is the need of the hour. In addition, he appreciated the resource persons for educating the members of faculty about the latest methodologies of teaching computer science and requested them to set-up a lab with a vision to provide students an opportunity to develop new applications for addressing the problems faced in the industries and societies. During the workshop, Prof Sukumar Nandi, Senior Professor, IIT Guwahati, thanked the college for taking steps to host such productive programmes for the student's community.

He spoke about the need for developing new insights and spreading awareness about information security. Also, he shed light upon the projects and PhD dissertations that focussed on the information security and need for future generations in spreading knowledge and awareness about the data security among the members of society including kids and old age people. Later Dr John Jose, Assistant Professor, IIT Guwahati lauded the efforts taken by scientists and health care professionals in vaccinating such a great population and helping people to overcome Covid19. While briefing about the workshop, he highlighted the opportunities waiting for the students and institutions in the field of information security and challenges in protecting confidential data.

Shri Sanjay Kumar Vyas, Scientist 'F', Director, HRD, MeitY, Govt. of India, delivered the inaugural address and emphasised on creating awareness about cyber security among the people of India. In addition, he called for a collaborative learning approach for sorting out the challenges faced by the country and ways to address them via proper training, education and awareness. Further, he stated that the Govt. is keen in organizing boot camps, hackathons, and various competitions for students in developing fresh insights on cyber security. Finally, Dr I Kala, Associate Professor, Dept. of CSE, proposed the vote of thanks.

Dr. S V Srikanth, Joint Director, C-DAC, Hyderabad shed light on various key requirements of an IoT application and shared the reasons for security vulnerabilities that are happening around the world with felicitous examples of such liabilities in IoT applications. He highlightedseveral applications of IoT such as mimo, google nest etc.

In another session, Dr.Ruchika Gupta, Post-Doctoral Fellow, IIT Guwahati shared some glimpses on paradigm from unicore to multicore. Then, she enunciated the routing algorithm, a procedure to lay down routes to transfer data packets from source to destination. Finally, a live interactive session with student was conducted by Dr. Sukumar Nandi and Dr. John Jose. More than 200 Students and Faculty members from various colleges of Tamil Nadu benefitted.



Group photo of the participants along with the chief guest during the workshop on "IoT-Edge Ecosystem: A Security Perspective" held on 18<sup>th</sup> Oct 2021

#### **Student Induction Programme -2021**

PSG Institute of Technology and Applied Research (PSG iTech) inaugurated the First Year Induction Program on 20.10.21 (Wednesday). Shri. K Pandiarajan, Chairman, Ma Foi & CIEL Groups, Chennai participated as the Chief Guest and enlightened the students with his insightful thoughts on various aspects of academic and professional life. Dr. G. Chandramohan, Principal, welcomed the gathering and spoke about the various achievements made by the students and faculty in the previous years. It was stated that the college has been ranked 131<sup>st</sup> in the NIRF-2021 and consistently secured top ranks in the academic performance released by Anna University, Chennai. Also, it was mentioned that PSG iTech is considered as one of the most-sought engineering colleges in Tamilnadu by the students with high-cut offs and almost all the seats are filled in the first two rounds of the Anna University Engineering Admissions (TNEA). During the event, the chief guest Shri. K Pandiarajan honoured the best outgoing students and the over-all best outgoing student of the college.

In his presidential address, Shri L Gopalakrishnan, Managing Trustee, spoke about the establishment of PSG Saravajana School exactly before 100 years and the significant vision set by the four brothers "education for all". He added that PSG Institutions has a diverse student population in the campus and explained about the various state-of-the-art infrastructural facilities available for students. He requested the students to utilize all the facilities in the campus and become a successful person.

Shri K Pandiarajan, Chief Guest, reminisced his collegiate days at PSG College of Technology and spoke about the way the latest technologies and ideas shaped the entrepreneurship model in India and in various other countries. He explained how some of the significant revolutions like Agricultural Revolution, Industrial Revolution, and IT revolution shaped the world and deliberated about the next revolution as G-Governance, I-Innovation, V- Value, and E-Entrepreneurship (GIVE) along with various examples and stories from real life incidents.

Further, he differentiated science, engineering, and technology with examples to make students to understand the interconnections between them. He emphasized that questioning spirit is important for every student and students must be inquisitive. He encouraged the students to develop self-respect and be self-motivated in their lives. Also, he asked the students to set a goal in life and work towards achieving their dreams for a happy and harmonious living. At last, he urged the students to develop good rapport with everyone and set the right attitude towards life.

In his felicitation address, Dr P.V. Mohanram, Secretary, recapitulated the significant points shared by the chief guest and encouraged students to do more projects during the course of study. Importantly, he appealed the students to ask more questions in the classrooms to gain fresh perspectives. Finally, Dr P Vetrivelan, HoD, Dept. of ECE proposed the vote of thanks.



Ms.S.Roshninaveena, (B.E. ECE 2017-2021), receiving the Best Outgoing Student award from the Chief Guest Shri. K Pandiarajan, Chairman, Ma Foi & CIEL Groups, Chennai during the Inauguration of First Year Students Orientation Programme on 20.10.21

## Informal and Interactive Session on "Lifelong Learning"

The Department of Computer Science and Engineering in association with Computer Science and Engineering Association organized an interactive session on "Life Long Learning" for the II B.E. CSE students on 25<sup>th</sup> October 2021. Mr. S. Ramachanchran, Principal Consultant, Engineering Infosys, Knowledge Institute, addressed the students about the importance of networking to achieve their goals. Besides sharing some tidbits from his personal experiences, he explained the way networking helped him to obtain admission to PhD program in Nanyang University, Singapore. The session was interactive and interesting. All the students participated enthusiastically and clarified their doubts.



Interactive session on "Life Long Learning" held on 25th October 2021

#### **Quiz Contest**

The Quiz Club of PSG I Tech in collaboration with Students' Union conducted a Quiz Competition on 28<sup>th</sup> October 2021 to commemorate the 75 years of India's Freedom. Students from various departments enthusiastically participated in the Quiz Contest. The event was aimed tosensitize students about the freedom fighters and various struggles encountered by them for Indian Independence. Members of the club explained the rules for the Quiz Competition, which consisted of two rounds, the preliminary, and the finals. Among the 20 participants, who participated in the preliminary round, six teams were shortlisted for the finals. Students found the event fruitful and they had an enthralling experience. At the end of the event, the winners were awarded with certificates. Finally, the event coordinator proposed the vote of thanks.



Students participating in the Quiz Contest organized by the Quiz Club of PSG iTech to commemorate the 75<sup>th</sup> Anniversary of Indian Freedom on 28.10.2021

#### Hands on Training on Reverse Engineering by 3D Printing

A hands-on training programme on "Reverse Engineering by 3D Printing" was conducted between 28<sup>th</sup> and 30<sup>th</sup> October, 2021. Participants were given training on several areas such as scanning, modeling, building, slicing, and optimization. They were given ample opportunity to work in differentsoftware such as Sense 3D, Solidworks, Simplify 3D, Inspire.During the programme,lattice optimization, topology optimization, and stiffness optimization were demonstrated using case studies such as humanoid arm, prosthetics, and military barrels respectively.

Totally, forty participants attended the programme and some of the notable participants include a dentist from Rainbow Hospitals, Bengaluru, industry personals from PLM Siemens, Pune, LMW, Coimbatore, and members of faculty from academia from Kumaraguru College of Technology, Coimbatore and Builders Engineering College, Tirupur. Finally, Dr P V Mohanram, Secretary, PSG iTech, Dr N Saravanakumar, Professor and Head, Department of Mechanical Engineering, PSG iTech felicitated the participants with Certificate of Appreciation.



Dr N Saravanakumar, HoD (Mech), Mr. J Nagarjun, the faculty trainer, along with the participants at the end of the training programme on 30<sup>th</sup> October 2021

#### **Tree Plantation:**

As part of "International Climate ActionDay" celebration, the Eco Club of PSG iTech organized a TreePlantation Programme in the college premises on 29<sup>th</sup> October 2021. Dr. G. Chandramohan, Principal, inaugurated the event. After planting saplings, Principal briefed the students about the importance of planting trees, and vision and mission of the College. About 40 students eagerly participated and planted saplings. Dr. A. Kumaravel, Faculty in-Charge of Eco club, coordinated

the event.



Principal Dr. G. Chandramohan planting a sapling during the event held on 29.10.2021

#### **Coding Contest on "Clash of Codes"**

Clash of Codes, a coding contest, was organized for II and III B.E CSE studentsinassociation with The Institution of Engineers (India) PSGI Students' Chapter and Computer Science and Engineering Association on 01<sup>st</sup> November 2021. The contest was conducted with the help of HackerRank, an online coding platform. Two separate problem sets were framed from wide range of concepts from logorithms, mathematics, data structures, and bit manipulations. The questions made the contestants to think out-of-box and helped them to increase their coding, logical thinking and reasoning skills. The contest served as a motivation factor for many students to enter into the world of Competitive Programming. Totally, ninety nine students participated and enhanced their coding skills.



Coding Contest was held on 01st November 2021 at PSG iTech

#### **NBA Expert Team Visit**

A team of experts from the National Bureau of Accreditation (NBA) under the chairmanship of Professor Dr Avinash Gajanan Keskar visited PSGiTech from 12<sup>th</sup> to 14<sup>th</sup> Nov 2021 to evaluate the quality of programmes offered by the college and for the grant of NBA Accreditation for all the programmes.

S.No.	Name of the Members	
1.	Prof.AvinashGajananKeskar-Chairperson	
2.	Prof. Farhan Kidwai-Programme Expert Team-Member-CIVIL	
3.	Dr.Sarbjeet Singh-Programme Expert Team-Member-CSE	
4.	Dr.Manoj Kumar Panda-Programme Expert Team-Member-EEE	
5.	Dr.SanjivTokekar-Programme Expert Team-Member-ECE	
6.	Dr.PiyushGohil-Programme Expert Team-Member-MECH	



Dr.G.Chandramohan, Principal, making a presentation before the NBA Expert Committee during their visit.



Dr.R.Manimegalai, Professor and Head, Dept. of CSE, making the presentation before the expert



Members of NBA Expert Committee visiting the central facilities and infrastructure of the college

#### Five day Faculty Development Programme on Mathematical Foundations of Data Science

The Department of CSE, PSG iTech in association with PSG College of Technology and PSG CARE conducted a 5-day Faculty Development Programme on "Mathematical Foundations of Data Science"during Saturdays from 9.10.2021 to 21.11.2021. Dr. R. Manimegalai, Professor and Head, Dept. of CSE, PSG iTech, delivered thewelcome address. Dr.G.Chandramohan, Principal, PSG iTech, Dr.P.V.Mohanram, Secretary, PSG iTech, Dr. R. Rudramoorthy, Director, PSG CARE, and Dr. R. Nadarajan, Head, Department of AMCS, PSG College of Technology, offered their felicitations. Around thirty two faculty members from PSG Institutions and other engineering colleges in and around the city participated.



Inauguration of the FDP on Mathematical Foundations of Data Science held on 09th Oct 21

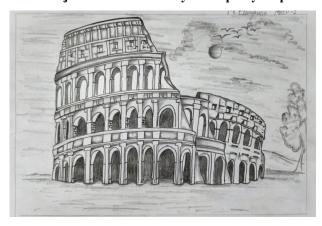
The 5-day FDP ended with hands-on session on exploratory data analysis using Python by Lt. V. Vilasini, Asst. Professor, Dept. of CSE, PSG iTech and demonstration of Edraw and Origin Pro to generate visuals by Ms. K. Lakshmi Kalpana Roy, Asst. Professor, Department of CSE, PSG iTech, who were also the organizers of the FDP.

#### SankataharaChathurthi celebration

SankataharaChathurthiwascelebratedatVidhyaGanapathitempleon23<sup>rd</sup>November,2021intheaugust presence of the Managing Trustee Shri L Gopalakrishnan along with Dr P V Mohanram,Secretary,DrGChandramohan,Principal,PSGiTech,ArVenkateshKumar,Principal,PSGIAP , Dr Nadarajan, Placement Officer, PSG Tech, faculty, and staffmembers ofPSGiTech.An outdoor sketching activity based on the theme "Trip to a Monument" was conducted by the Drawing and Painting Club as a part of Sankatahara Chathurthi celebrations.



AglimpseofthePoojacelebration atVidhyaGanapathytemple



A drawing competition was organized onthetheme"Trip toa Monument" by Drawing and Painting Club

#### Project Expo 2021-22

The Department of Electronics and Communication Engineering, in association with ECE Association (ECA) and IETE Students' Forum (ISF), organized a Project Expo-2021 on 16<sup>th</sup> and 17<sup>th</sup> Dec 2021 at National Instruments Graphical System Design Centre (NIGSDC) Laboratory. Dr G Chandramohan, Principal, inaugurated the event. Dr P Vetrivelan, Head, Dept. of ECE, faculty members from the Dept. of ECE and other departments evaluated the projects.

Students from all the departments visited the projects. Initially, all the sixty fiveregistered students were split into 22 teams.Later, the students displayed and demonstrated their innovative projects to the evaluators and the visitors. Many interesting projects from different domains like IoT, Electrical, Machine learning, Web and App development were exhibited. Totally, there were around sixteen hardware and six software projects were kept for the demonstration.



Student participants explaining their projects to the Principal and faculty members on 17th Dec 2021

Convener Dr. P Vetrivelan announced the results and appreciated all the winners and participants. The event was coordinated by Dr. M Jayasanthi Associate Professor, Ms. A. K. Kowsalyadevi, Ms. D. Archana Asst. Professors, Dept. of ECE.

S.No	Project Title	Batch members	Prize
1.	Electricity theft detection system	Gowsika D	I
		Naveena C	
		Rama Lakshmi S	
2.	A-EYE (See the Deaf, Hear the Blind)	Athul Krishna R	II
		Colin Rolance D	
		ShyamVikram S	
3.	LIFI & ultrasonic communication	Devanand R P	III
		Karthikeyan A	
		Mahesh Krishna	
4.	Smart street lights	Lavanya R	III
		Anuvratha Vijay	

#### <u>Inauguration of ECE Association(ECA) and IETE Student Forum(ISF)</u>

The Department of Electronics and Communication Engineering of PSG iTech inaugurated the ECE Association (ECA) and IETE Students' Forum (ISF) on 08.10.2021. Mr. Prakasham Ponnusamy, Software Development Specialist, Bosch Engineering and Business Solutions, Coimbatore, served as thechief guest.Dr P Vetrivelan, Head, Dept. of ECE,introduced the newly selected office bearers for the academic year 2021-2022. He encouraged the association conduct more co-curricular, technical, and non-technical activities for the larger benefit of students. Further, he highlighted the importance of understanding and practicing all the twelve Program Objectives, Program Educational Objectives, and Program Specific Objectives.

Mr.M M Sanjit, Secretary (ECA) and Mr. B Ram Narayan, President (ISF) discussed themonthly activities plan, project worksconsolidation, and conduct of career guidance. Further, the implementation of technical potpourri, arrangement of technical talk, and workshop episodes were discussed in the meeting along with the commencementofelectronics & coding club and management & analyst club. Importantly, students were encouraged to write technical papers and publish them in journals.

While delivering his addresses on "Semiconductor Revolution across the Industries", the chief guest Mr. Prakasham Ponnusamyspoke about the industrial revolution versions from 1.0 to 4.0, artificial intelligence (AI), IoT, and blockchain. The significance of semiconductors in the automotive, infotainment, telecommunication, and shipping industries was highlighted. He mentioned about the transformation of mechanical systems to electronics via sensors along with the electronic control unit (ECU), control area network (CAN), and graphical processing unit (GPU). Moreover, he explained the smartness of various equipment and its connection with the internet, application, and merits of LED with energy-saving at an affordable cost. Around eighty students participated in this event. Finally, Ms. C Aishvarya, Joint Secretary (ISF), proposed the vote of thanks. The event was coordinated by Dr. M Jayasanthi and Dr. G Santhanamari, Associate Professors, Dept. of ECE.



Dr. P Vetrivelan, HoD-ECE, Chief guest, Mr.Prakasham Ponnusamy, Dr. M Jayasanthi, Associate Professor along with the office bearers of ECE Association (ECA)

#### **NCC Annual Training Camp**

The annual 9-day NCC training camp was held at Avinashilingam Institute for Home Science and Higher Education for Women from 22<sup>nd</sup> to 30<sup>th</sup> November 2021. NCC officers, Girl Cadet Instructors (GCIs), Permanent Instructor(PI) Staff, and 260 cadets from various colleges in and around the city of Coimbatore participated in the training. Fifteen senior cadets attended the camp for C certificate, eight junior cadets attended for B certificatefrom PSG iTech. Every day, the cadets were trained physically and participated in various competitions. The first day events started with the welcome speech by Maj. Sripriya, Administrative Officer of 5 (TN) Girls Battalion NCC, Coimbatore.



Cadets with Camp Commandant Maj. Sripriya, SM Sarabjit Singh, ANOs Maj. KavithaSri, Capt Dr.R. Shanthi, Capt. Rachel Priskilla, Lt. V. MalarVizhi, GCIs and PI staff

The cadets were divided into four companies- Alpha, Bravo, Charlie and Delta and our college was a part of the Bravo Company headed by Havildar Jebaraj. Parade training was given to participants. Later, college teams were divided for the drill competition and each college practised individually after the company drill. Then, the theory classes were conducted on various subjects like Field Craft and Battle Craft, Health and Hygiene, Weapons, Map Reading, First Aid, and Fire Fighting etc. Practical demo of map reading, kholna - jhodna of weapons was demonstrated and the students had the chance to do the same practically.

The PI and GCI staff preparedthe students for both physical and written examination. Besides training sessions, extra-curricular activities and competitions like debate, extempore, quiz, drill test, written exam were conducted every day. The drill competition was held on 29<sup>th</sup> Nov for all 12 teams and prizes were distributed on the last day (30th Nov2021). In the competitions held, PSGiTech cadets bagged meritorious positions.

Ms.S.Kavya of IV Year B.E. ECE won the gold medal in debate competition, Ms.S.Kanishka of IV Year B.E. ECE won the gold medal in Kholna - jhodna, Ms.S.Manjuvidya of III B.E. EEE won the silver medal in quiz, and our contingent won the third place in the drill test headed by contingent commander K K Shreenidhaa of IV Year B.E. ECE.



Sgt. Kavya S receiving the gold medal for Debate Competition

The camp provided the cadets a chance to witness life beyond the campus and imparted several soft skills like time management, teamwork, and endurance along the process. The 9-day camp ended with the closing ceremony at the auditorium.

## NSS Special Camp 2021

Under the motto of "Not Me But You", the NSS volunteers of PSG I Tech conducted a 7-day special camp at Vellanaipatti village, North Coimbatore served the people of Vellanaipatti and Serayampalayam village from 15<sup>th</sup> to 21<sup>st</sup> Dec 2021 under the guidance of NSS Programme Officers Dr.P.Chinnaraj, Asst. Prof (Sl.Gr) and Dr. R. Ravikumar, Asst. Prof (Sl.Gr).Sixty fiveenthusiastic volunteers participated in this camp with enthusiasm and worked diligently. The volunteers stayed in the Periyanayagi Amman temple and carried out their services on all seven days. "Youth for Clean India" was the theme for the camp.





Inauguration of NSS Camp by Dr G Chandramohan, Principal on 15<sup>th</sup> Dec 2021

Volunteersgoingonarallyonthetheme"Avoid TobaccoandPlastics"

#### OrphanageVisittoSri SankaraSevalayam

The National Service Scheme (NSS) Club of PSG iTech organized a one-day visit to Tiruppurbased orphanage named Sri Sankara Sevalayamon 20.11.2021. Dr.P.Chinnaraj, Assistant Professor (Senior Grade) and NSS Program Officer along with NSSstudent members raised funds of Rs.10,000/- and collected contributions in the form of toys, dresses, and stationary items, and donated them to students of the orphanage. The inmates oftheorphanagewereengagedhappilyandproductivelyinseveralactivitieslikepassingtheball,musical chair, dancing and singing. They were encouraged to display their unique talents likesinging and enjoyed a delicious lunch together with a dancing. Later, all the students gratefulprayer. The NSS volunteers served food for the students to make their day memorable. Finally, chi ldren and the caretakers expressed their thoughts about their enriching experience. Dr.D.Thangaraj, Asst. Professor, Dept. of Physics, accompanied the volunteers and guided thestudents about the joy of sharing.



Dr P Chinnaraj, Asst. Prof (Sl.Gr.) of Mathematics &NSS Program Officer, Dr.D.Thangaraju,Asst.Professor,Dept.ofPhysics,alongwithNSSvolunteersareinthegroup photo taken during the orphanage visit to Sri Sankara Sevalayam on 20.11.2021

#### **Inauguration of Association of Consulting Civil Engineers (I) - Student Chapter 2021-2022**"

The Department of Civil Engineering in association with the Association of Consulting Civil Engineers (India) organized the "Inauguration of Association of Consulting Civil Engineers (I) - Student Chapter 2021-2022" on 3<sup>rd</sup> Dec 2021 (Friday). Dr. M I Abdul Aleem, Professor and Head, Dept. of Civil Engineering, welcomed the gathering and deliveredthe presidential address. He explained about the strong tiesbetween ACCE (I) and PSG iTech student chapter. Followed by, Mr. K Sakthiprasanth, Assistant Professor, Dept. of Civil Engineering, briefed about the ACCE (I) and introduced the office bearers for the academic year 2021-22.Er. J Prem Kumar, Chairman, ACCE (I), Coimbatore, addressed the students on "Chance or Choice of Civil Engineering".He appreciated the interest of students for opting Civil Engineering program and requested them to make fullest use of this opportunity and strengthen their knowledge.

Also, he elaborated the recent trends in Civil Engineering like building information modelling (BIM), drone surveying, 3D printing, and artificial intelligence. In addition, he gave some tips to students on how to improve their communication and professional skills. Finally, Mr. K S Risvan, President, ACCE (I), Student chapter, PSG iTech, proposed the vote of thanks.



Er. J Prem Kumar, Chairman, ACCE(I), Coimbatore Chapter and all dignitaries along with Student Office Bearers of ACCE (I) - Student chapter 2021-22, PSG iTech

## National Conference on Recent Advances in Computing and Information Technology

The Department of Computer Science and Engineering of PSG iTech organized a 2-day national-level conference on "Recent Advances in Computing and Information Technology"during the 3<sup>rd</sup>-4<sup>th</sup> December, 2021 with the theme of Artificial Intelligence and Computer Vision. The conference was well-received by the faculty members, students, delegates from various colleges in Tamil Nadu and southern parts of India.



Dr G Chandramohan, Prinicpal, PSGiTech presenting Memento to the Chief Guest Mr Ganesh Kumar Sundaram, Vice President – Strategic Initiatives, Payoda Technologies along with Dr P V Mohanram, Secretary, PSGiTech, Dr R Manimegalai, Head of CSE, PSGiTech and Organizing Secretaries Dr V C Mahavishnu and Mr N Aravindhraj

Intelligence and Computer Vision. The inaugural function started with an invocation. Dr R Manimegalai, Professor and Head, Dept. of Computer Science and Engineering, delivered the welcome address. She welcomed the gathering and emphasized on the need forconducting such conferences. Dr V C Mahavishnu, one of the organizing secretaries, presented the conference report. Out of eighty three papers received, forty one papers were accepted for presentationafter double-blind review.

Principal Dr G Chandramohan, shared his views on computer vision, artificial intelligence and compared it to the human brain and its functionalities. He also briefed about the importance of Cyber security and its uses in various fields.

Dr P V Mohanram, Secretary at PSG iTech, highlighted the importance of presenting papers at international conferences. He asked the students to participate and publish papers in Scopus-indexed journals. He underlined the use of artificial intelligence in railways, market trends, healthcare and self-driving cars, etc. He also quoted an example from Mahabharata, where Sanchaya was informing the scenario of war field to Dhritarashtra which is similar to computer vision technology.

The chief guest of the conference Mr Ganesh Kumar Sundaram, the Vice President - Strategic Initiatives at Payoda Technologies, Coimbatore enlightened the audience by illustrating the future of artificial intelligence. He elaborately discussed the research issues, challenges, and industry trends in the field of artificial intelligence and computer vision. He underscoredthe different use cases of artificial intelligence such as security, finance, medical, autonomous vehicles, etc. He stressed the importance of upskilling the students in the following domains: machine learning, deep learning, robotics, computer vision, and convolutional neural networks. Also, he encouraged the students to contribute in open-source community projects. The session ended with question-answer, where several students had the opportunity to interact with the chief guest.

Finally, Mr N Aravindhraj, one of the organizing secretaries of the conference, proposed the vote of thanks.

Eminent speakers from industry and academia were invited to give the keynote speeches as part of the national conference on "Recent Advances in Computing and Information Technology". The keynote speeches include 1) AI and Data Science Trends for the Decade by Dr Ebin Deni Raj, IIIT – Kottayam 2) Building a Career in Cyber SecurityTata Consultancy Services – Hyderabadby Mr Vishak Raman, Director - Security Business, Cisco - India & SAARC 3) Trustworthy AI: Industry Perspective by Dr Sitarama Brahmam Gunturi, Head, Software Product Development, TCS – Hyderabad and 4) Artificial Intelligence in Social Network Analysis by Dr M Venkatesan,NITK – Surathkal.

## **Combined Annual Training Camp - 2021**

A 7-dayNCC Annual training camp for 6 (TN) Medical Company was held at RVS Technical Institute, Sulur from 6<sup>th</sup> to 12<sup>th</sup> of December, 2021. Two hundred cadets from in and around Coimbatore attended this camp to qualify them for appearing in the B certificate examination. 16 senior cadets from attended this camp. The camp began with the opening speech delivered by Major Dinesh Davis.

The camp was administered by 7 Permanent Instructor Staff and 2 Associate NCC Officer. The cadets were divided into three companies Alpha, Bravo and Charlie and our college was a part of Charlie company. Rigorous physical and drill training was given to cadets along with weapon training, war field training and basic wartime medicine.

Every day, the cadets were trained physically and students taken part in competitions. In the weapon training session, we had a hands-on session on kholna-jhodna and rifle shooting. During war field training, they were trained to pitch a tent, along with Field Craft and Battle Craft and Reading maps. In

basic medical course, the students learnt how to administer first aid and how to maintain personal health & hygiene. Rifle shooting and kholna-jhodna competition were held on 11<sup>th</sup> of November 2021 in which cadet Mr.K M.Sriram of 2<sup>nd</sup>-year, B.E. Mechanical secured the second place in rifle shooting and cadet Mr.S Atharsh of 3rd - year, B.E. EEE secured the first place in kholna-jhodna. The camp culminated with cultural events and a closing address by Maj. Dinesh Davis. This camp helped students to understand the hardships in life and inculcated disciple and punctuality.



## AIMTDR Conference 2021:

#### **Combined Annual Training Camp 2021**

TheDept.ofMechanicalEngineeringofPSGCollegeofTechnology and PSG iTech jointly organized the8thInternationaland29<sup>th</sup>NationalConferenceon"TransformationalChangesinManufacturing"during 9<sup>th</sup>-11<sup>th</sup>December2021.

The conference served as a platformforintensivenetworking and fruitful interaction, where technocrats, academic ians, researchers, practicing engineers, entrepreneurs, corporate executives, industrialists, start upprofessionals, and budding engineers exchanged their ideas and share their experiences.



#### Talk on 'Decision Science and Intelligence in the Context of an AI/ML Driven World'

The Department of Computer Science and Engineering, PSG iTechorganized the eighth Technical Talk under the banner Bits, Bytes & Packets, a series of Online Talks on Computer Science Topics and Alternative Career Options, in association with the Institution of Engineers (India) PSG I Students Chapter held on 10<sup>th</sup> December 2021. Mr. Ismail Syed Mohammed, Managing Director, North America Oracle Utilities Industry Lead, Accenture – USA, delivered the talk. He started with the importance of artificial intelligence (AI) based applications and how AI is changing our daily lives: i) the way we socialize, ii) the way we personalize, iii) the way we automate and industrialize, and, iv) the way we augment human intellect. Also, he explained the impact of gap between decisions taken and AI driven solutions. He described how decision intelligence impacts tech-giants like Uber Eats, Swiggy and BigBasket. He highlighted that decisions are influenced by i) what we want to achieve i.e. outcome, ii) things that we care about i.e. factors and weight, iii) priorities i.e. order of importance, and, iv) the available options. Further, he explained that the decision intelligence framework involves outcomes, decisions, and mechanics. Around 152 students and faculty members from various engineering colleges across Tamil Nadu have attended and benefitted from the talk.



Talk on 'Decision Science and Intelligence in the Context of an AI/ML Driven World' held on 10th December 2021

#### **Entrepreneurship Awareness Camp**

The Entrepreneurship Development Cell (EDC), in association with PSG STEP,organized Entrepreneurship Awareness Camp from 21 to 23 Dec 2021. The event was sponsored by PSG STEP with a sum of Rs.20,000. About 85 students from various departments participated and got trained in entrepreneurial skills. Dr G Chandramohan,Principal,welcomed the gathering. Chief Guest Er. Manikandan, Founder and CEO, GREENERG Mobility Solutions Pvt. Ltd, Coimbatore delivered the inaugural address and motivated the students to become entrepreneurs at the earliest age in life after graduation. Followed by his session, Dr R Ramachandran of PSG CT delivered a lecture on "Entrepreneurial Competencies". In another session, Ms B Kayalvizhi, Assistant Director of MSME, Coimbatore, delivered lecture on "MSME- Policies & Support Schemes", Ms Nivedithaa Ramasamy, Interior Designer, Utpura, shared her entrepreneurial journey. On 23.12.2021, participants visited the Incubation facilities available at PSG College of Technology, Peelamedu.



Principal, Dr G Chandramohan presenting a memento to the chief guest during the Entrepreneurship Awareness Camp held on 21.12.2021

#### **Project Exhibition**

The Electrical and Electronics Engineering Association and ISTE Students chapter jointly organized a project exhibition on 22<sup>nd</sup> December, 2021. Students of all five departments visited the exhibition. Totally thirteen projects were displayed in the expo. Students, who exhibited their project work, gave a detailed explanation to all the visitors. Principal, Dean and HoD appreciated the efforts taken by the students. The event was coordinated by Dr. C. S. Subash Kumar, Associate Prof and Dr. M.Sathiyanathan, Asst. Professor (Sr. Gr.).



Principal Dr. G. Chandramohan interacting with second year EEE students during project exhibition

The projects were evaluated by the faulty members and first three places were chosen for prize. The projects which won prizes are listed below:

Prize		Project Title	Project Team
First		Baby Monitoring System	Sharan.V, Sharan.U
Thst			Varsha.N, Sai Shri Mouriya C.M
Second		Eazykart-Intelligent	Vignesh M, Mohammad
Second		Shopping Trolley	AseemAsfak
		Bluetooth Based	Shahana R, Dharsana A, Preethi K
		Induction Motor	
Third		Monitoring System	
lillra			Rohit.H, Prabakaran T,
		Fire Fighting Robot	Manoranjan.M,
			Sreehareesh VL, SanjayKumar K

#### **National Mathematics Day -2021**

To commemorate the birth anniversary of great mathematician Srinivasan Ramanujan, the Department of Mathematics organized the National Mathematics Day on 22<sup>nd</sup> December 2021. Dr. T Velusamy, Former Principal, Government Arts College, Paramakudi, served the chief guest and delivered a talk on "Positive Thoughts in Younger Minds". He spoke about the Ramanujan's result on infinity. Around 80 students from all branches of engineering departments actively participated in this lecture. Dr. V. Jailaxmi, Professor and Head, Department of Mathematics, welcomed the gathering. She explained that the magical number 1729 is the smallest number which can be expressed as the sum of two cubes in two different ways discovered by Srinivas Ramanujan.Later, Dr. S. Aramuthakannan, Associate Professor, introduced the chief guest. Dr. R.S Sankarasubramanian, Professor, proposed the vote of thanks. As part of the celebration, Maths Quiz: "Cipher 1729" was conducted by the "iTech Intellect Quiz Club. About fifty five students from all the branches of first years participated in this Quiz competition. Prizes were distributed for the first three prize winners.



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National Mathematics Day Celebration on 22<sup>nd</sup> December 2021

#### NCC Orientation Programme (2021 - 2022)

The NCC orientation programme (2021 - 2022) for 6 (TN) Medical Company NCC and 5 (TN) girls Battalion NCC took place on 24<sup>th</sup> December 2021 at PSG iTech.

Mr J Avinash, Asst. Commandant Indian Coast Guard and the event, participated as the chief guest. Dr.G.Chandramohan, Principal and Dr.P.V.Mohanram, Secretary of PSG iTech offered their felicitations. Lt. V Vilasini presented the camp report followed by a ranking ceremony for the seniors. Later, the chief guest Mr J Avanish shared his rich experience of becoming an Assistant Commandant in the Indian Coast Guard. Also, he motivated the young NCC cadets to pursue a career in armed forces. Dr.G.Chandramohan, Principal, highlighted the integral role of NCC in educational institutions. Next, Dr PV Mohanram, Secretary, PSG iTech, shared his memories with the chief guest during his good old college days, hardships which he had gone through. The event was coordinated by faculty Lt. V Vilasini and CTO. P. Gajendran.



Dr. G. Chandramohan, Principal addressing the integral role of NCC to Cadets



Chief Guest Mr Avanish J addressing the gathering during NCC orientation

## Guest Lecture on "Artificial Intelligence: Past, Present, and Future"

The Department of Computer Science and Engineering, PSGiTech organized a Guest Lecture on Artificial Intelligence (AI): Past, Present, and Future on 23<sup>rd</sup>December 2021.Dr.G.Chandramohan, Principal, PSGiTech, delivered the welcome address and Dr. R. Manimegalai, HoD, Dept. of CSE, introduced the Chief Guest Dr.C.Mohan, Distinguished Visiting Professor (Tsinghua University). The resource person addressed the students on "Artificial Intelligence (AI): Past, Present, and Future". He discussed various issues and the need for the AI and emphasized on the fact that "Data is the New Oil". He elaborated the 3 waves of AI and the use of Knowledge Representations. The session was very interactive and was well-received by the participants. At the end of the session, Dr. V.C.Mahavishnu, Assistant Professor (Sr.Gr), Dept. of CSE, proposed the vote of thanks.



GuestLecture on "Artificial Intelligence (AI): Past, Present and Future" held on 23rd Dec 2021

## Three days FDP on "Internet of Things and Wireless Sensor Network"

The Department of Electronics and Communication Engineering conducted a three-day Faculty Development Programme (FDP) on "Internet of Things and Wireless Sensor Network" from 20.12.2021 to 22.12.2021. The training was conducted by the Texas Instruments University Programme through STEPS Knowledge Services Pvt. Ltd, Coimbatore. Mr. V.S. Ramesh, Director, STEPS Knowledge Services Pvt. Ltd, addressed the students and members of faculty. Finally, Dr.G. Chandramohan, Principal, thanked the resource person, participants, coordinators and distributed the certificates.



Mr. V.S. Ramesh, Director, STEPS Knowledge Services Pvt Ltd,addressing theparticipants on "Internet of Things and Wireless Sensor Network" on 20.12,2021

## **PSG Institute of Technology and Applied Research**

#### **Quarterly Report (January – March 2022)**

## **Events Organized:**

## **Inauguration of Science and Humanities Association:**

The Science and Humanities Association (SHA) of PSG iTech was inaugurated in the presence of Dr. Murugavel S C, Professor and Head, Dept. of Applied Science, PSG College of Technology, Coimbatore on 03.01.2022. Around 120 students along with 20 faculty members attended the inaugural function. Ms. Divyasri K S of Student of Civil Engineering Department and Secretary of Science Humanities Association welcomed the gathering. Dr.G.Chandramohan, Principal, delivered the presidential address. Dr.G.Latha, SHA Convener, introduced the office bearers of the association. Mr. Yuvanesh J of II B.E. CSE, Student coordinator, SHA, introduced the chief guest to the audience. Dr. Murugavel S C, in his talk, spoke about the importance of science education, technological advancements, and the role of science. During the talk, the speaker explained the inseparable role of science and humanities. Several interesting instances were shared about the way science and technologies impact various industries like automobiles, combustion, etc. Later, he explained the impactful role of chemistry in our daily life. Finally, Ms. Keerthana Vasan S, II B.E. ECE, Student Coordinator, SHA, proposed the vote of thanks.



Inaugural function of the Science and Humanities Association was held on 03.01.2022

#### Awareness Programme on "Intellectual Property Rights"

As a part of Azadi Ka Amrit Mahotsav, an awareness programme on "Intellectual Property Rights" was conducted by the Department of Civil Engineering, PSG iTech in association with Government of India (Ministry of Commerce & Industry) on 04.01.2022.

The function started with the invocation, followed by welcome address by Dr.M.I.Abdul Aleem, Professor and HoD, Civil Engineering. The presidential address was delivered by Dr G Chandramohan, Principal, PSG iTech. He stressed upon the need for the awareness towards Intellectual Property Rights. The chief guest of the function, Mr.P.Hariprasath, Examiner of Patents & Designs, Patent office, Chennai explained the benefits of Intellectual Property Rights. He briefed the difference between copyrights, patents, design, trademarks and geographical indicators. Mr.R.Rajkumar and Mr.V.Navin Ganesh, Assistant Professor (Sr. Gr.), Department of Civil Engineering, PSG iTech, were the coordinators of the event. Totally 92 participants have attended the session and got benefitted.



Dr G Chandramohan, Principal, PSGiTech presenting a memento to the chief guest

## AICTE – ISTE Sponsored FDP on "Industry 4.0 and Electric Vehicles"

The Department of Electrical and Electronics Engineering organized an AICTE – ISTE sponsored one-week online induction/refresher program on "Industry 4.0 and Electric Vehicles" from 17<sup>th</sup> to 22<sup>nd</sup> Jan 2022 with 285 participants from both engineering and polytechnic colleges across India. Dr. C L Vasu, Professor and Head, Dept. of EEE, welcomed the chief guest and participants during the inaugural ceremony and gave an overview of the program. Dr. G. Chandramohan, Principal, delivered the presidential address and emphasized that faculty members should be trained in the latest technologies. Prof. Vijay D Vaidya, Executive Secretary, ISTE, inaugurated the program. In his talk, he stressed the importance of acquiring knowledge and skills in emerging areas such as industry 4.0 and electric vehicles, and the need for faculty members to pursue research to enhance the rate of innovation in the country.



Prof. Vijay D Vaidya, Executive Secretary, ISTE interacting during the inauguration held on 17th January 2022

The inaugural session was followed by a session on "National Education Policy 2020" by Dr Gaurav Kumar Dhuria, Associate Professor, DAV Institute of Engineering and Technology. He shared his insights on the new education policy, which is holistic, futuristic, and flexible in offering value-based quality education. He described that this policy helps in creating individuals by enabling them develop their character, ethical and constitutional values, intellectual curiosity, scientific temper, creativity, and spirit of service, and becoming good human beings and global citizens.

The next session of the programme was on "Industry 4.0 – Technology and Trends" by Mr.Surendran D, Director- Global Delivery for Industry x.0 solutions, Maxbyte Technologies, Coimbatore. He presented the different layers of integration of Industry 4.0 and the challenges faced by industries in implementing Industry 4.0.In the afternoon session on 17-1-2022 and forenoon session on 18-01-2022, participants were introduced to "Edge Computing" by Dr Ananthanarayanan V, Assistant Professor (Sl. Gr.), Amrita Vishwa Vidyapeetham.

He explained the different microcontrollers and how smart systems and Industrial Internet of Things (IIoT) are driven by a combination of sensors, actuators, connectivity, people, and processes. He gave a detailed presentation on the seven-layer IoT architecture and demonstrated programming and transferring data to Thingspeak cloud using the STM 32 microcontroller board.

The second session on 18-01-2022 was engaged by Mr. Uthayan Elangovan, Founder & CEO, NeelSMARTEC Consulting. He discussed the topic "Industry 4.0 and Technology Development".

He briefed the participants Industrial Internet of Things (IIoT) and its application with respect to saving energy in industry, smart grid systems, telematics, and communication in electric vehicles.

The third session on 18-01-2022 was on the topic "Stress Management", which was handled by Dr. Dinesh Nayak, Director of Neurology, and Advanced Centre for Epilepsy, Gleneagles Global Health City. He indicated the various medical conditions that our body faces when we are in a stressful condition and described the methods of overcoming stress. The participants have taken part in the live session of reducing stress by Jacobson's Relaxation Therapy and felt relaxed at the end of the session.

The first session of day-3 on 19-1-2022 was on the topic "Electric Drives" presented by Mr. Ramesh M, Senior Manager – Industrial Automation, Delta Electronics India Pvt. Ltd. He gave numerous industrial applications, where electrical drives are used extensively, and the technical aspects to be understood for selecting a drive for applications. The participants were briefed about the international standards followed for selecting a drive and the various power quality issues that occur in the drive.

The second session on 19-01-2022 "Machine Learning for Automation" was discussed by Mr.Syedghouse N, Chief Product Officer, Katomaran Technologies. He briefed the participants on the basics of neural networks and explained with examples how computer vision is used for doing predictive maintenance using machine learning algorithms.

The afternoon session on 19-01-2022 was handled by Dr. Sreenath Vijayakumar, Assistant Professor IIT, Palakkad, on the topic "Efficient Interfacing Circuits for Capacitive Sensors". He explained to the participants the various issues faced while interfacing sensors for different applications. The design of interfacing circuits was discussed with the participants.

The first session of day-4 was handled by Mr. Ravikiran Annaswamy, CEO Numocity Technologies on the topic "Electric Vehicle Charging Solutions". He explained to the participants the challenges faced by electric vehicles and their charging infrastructure. He emphasized the issues faced in batteries and their management, optimum use of green electrical power generated, and requested faculty members to work on these emerging research areas. The second session on 20-01-2022 was on the topic "Controllers for Electric Vehicle" by Dr. Moorthi S, Associate Professor NIT Trichy. He briefed the participants on different controllers used for automation applications. He briefed about the various input, and output devices to be controlled by the general-purpose processor.

He explained about FPGA-based design, how size and power rating are being optimized, and also provided an example of computing state of charge (SoC) of battery using Kalman filtering in the battery management system.

The afternoon session on 20-01-2022 was handled by Dr. Sundaram M, Associate Professor, PSG College of Technology. He described the choice of electric motor for electric vehicles. He briefed about the different magnetic circuit parameters and their arrangement of magnets in electric motors to change the speed-torque characteristics to suit various electric vehicle applications.

The forenoon session on day-5 on 21-1-22 started with the topic of "Challenges in Electric Vehicle Testing" by Mr. Prasanth kumar Palani, Chief Technical Consultant, Haritha TechLogix. Coimbatore. The session was very informative, and the participants were introduced to different testing methods along with their standards and practical applications. He explained the challenges that are being faced by the Indian electric vehicles industry.

The second session on 21-1-22 was handled by Mr. Manikandan P, CEO, Greenerg Mobility Solutions Pvt. Ltd., on the topic "Vehicle Control Unit". He explained to the participants about the different control units available in the vehicle, the communication protocol in which the data are transferred from one control unit to another. The function of the vehicle control unit during different modes of operation of the electric vehicle was discussed in detail with the participants.

The afternoon session on 21-1-2022 was handled by Dr. Karthikeyan V, Assistant Professor from NIT Calicut, and discussed the topic "Advancement in Power converters for EV and their Charging Infrastructure". The different converters used along with their algorithms to maximize the efficiency were discussed. The different charging topologies used, and corresponding advantages and disadvantages of the converter techniques were discussed.

The first session on the last day of the program was on the topic "Converters for E-Vehicle" by Dr. Rama Reddy S, Dean, Electrical Sciences, Rajalakshmi College of Engineering. He briefed the participants on the various circuit topologies used for different converter circuits used for the electric vehicle.

He covered design aspects of boost converters for battery charging applications, and isolated converters for wireless charging. He also mentioned that Silicon Carbide has revolutionized the power electronic industry.

The last session of the programme on 22-1-2022 was handled by Dr. Chitti Babu B, Assistant Professor (Sr. Gr.), IIITD & M Kancheepuram, Chennai, on the topic "Peer-reviewed Model and Publication Process in SCI Journals". He made the participants aware of the journal indexing, publishing priorities, the importance of language and grammar. He helped the participants understand the different factors in choosing a journal for publication. He insisted that journal guidelines and author instructions are to be followed.

Based on the knowledge provided in each expert speaker session, an online test was conducted daily to evaluate the learning of the participants. In addition, on the final day, a test comprising of 50 questions was conducted. Certificates were issued to participants who have scored more than 60 % of the marks and with an attendance of 80%. Based on the criteria, 83 participants were eligible for certification in this faculty development programme. The valedictory function of the programme was held on the afternoon session of the last day on 22-1-2022. Dr. Vasu C L, HoD – EEE, proposed the valedictory address and he encouraged participants to keep learning the latest technologies in their areas of specialization. Dr. Subash Kumar C S, Associate professor / EEE, the coordinator of the programme proposed the vote of thanks.

## **Republic Day celebrations - 2022**

PSG Institute of Technology and Applied Research (PSG iTech), celebrated the 73<sup>rd</sup> Republic Day on 26<sup>th</sup> January 2022 in the college premises between 8.00 a.m. and 9.30 a.m. Wing Commander R Selvaraj (Retd.) Chief Flight Test Engineer, Hindustan Aeronautics Limited, was the Chief Guest and unfurled the National Flag in the Central Courtyard. Dr.G.Chandramohan, the Principal, welcomed the gathering and expressed his happiness and appreciation that both Boys and Girls NCC Units, in collaboration with various other clubs, worked collaboratively, and organized the event successfully in spite of the pandemic.

He explained how the chief guest was highly spirited and focused on joining the national service from his school and college days. Also, he appealed to young students that besides academics, they should participate in extra-curricular activities and enhance their unique talents along with life skills and managerial skills.



Wing Commander R Selvaraj unfurling the National Flag during the 73<sup>rd</sup> Republic Day Celebrations at Central Courtyard, PSG iTech. Dr. G. Chandramohan, Principal, Dr. P. V. Mohanram, Secretary, PSG iTech, and Ar. K Venkatesh Kumar, Principal, PSG IAP are in the photo

Wing Commander R Selvaraj, in his speech, thanked the PSG Institutions for rendering noble and selfless service to the nation through various activities. He congratulated the students for their impressive parade. Importantly, the chief guest underscored the success journey of PSG iTech in a short span of time in being recognized as a top-ranked college in NIRF and getting accredited for all the programs by the National Board of Accreditation (NBA). He shared various painful experiences from his personal and professional life to explain the struggles encountered by him to reach his goal of joining the Indian Air Force (IAF) and how it helped him to render yeoman service to the nation. While talking about the unsurmountable sacrifices made by the freedom fighters and forefathers, he highlighted some of the significant sacrifices made by the freedom fighters to set the country free and requested everyone to be forever grateful for all those freedom fighters.



Wing Commander R Selvaraj appreciating the NCC Cadets during the 73<sup>rd</sup> Republic Day Celebrations at Central Courtyard, PSG iTech. Dr. G. Chandramohan, Principal, Dr. P. V. Mohanram, Secretary, PSG iTech, Ar. K Venkatesh Kumar, Principal, PSG IAP and NCC Coordinators are in the photo.

In addition, he explained the need for applying rational thinking in decision-making. Further, he urged all the students to stay positive, confident, and celebrate every moment of their life without losing their self-identity. Finally, the speaker requested the students to do meditation and yoga regularly to develop a sound mind and body for a happy and successful life. Later, Dr. P.V.Mohanram, Secretary, PSG iTech, and Ar. K Venkatesh Kumar, Principal, PSG IAP offered their felicitations. Finally, Dr. P Vetrivelan, Head, Dept. of ECE, proposed the vote of thanks. Students, members of faculty, and staff participated in the event. The celebration included cultural events by students from Music and Dance Clubs, tree plantation by the ECO-Club, and special Patti Mandram by the Tamil Mandram.



Wing Commander R Selvaraj, Dr. G. Chandramohan, Principal, Dr. A. Kumaravel, Eco-Club Coordinator, planting saplings at PSG iTech ground

#### Awareness Programme on "இணைவோம் இதயம் காப்போம்"

The Staff club of PSG iTech organized the Awareness Programme on "இணைவோம் இதயம் காப்போம்" on 27<sup>th</sup> January 2022. Dr. G. Chandramohan, Principal, welcomed the gathering. The chief guest Dr.G.Rajendran, Professor & Head, Department of Cardiology, PSGIMSR delivered the lecture on causes of heart diseases and its symptoms and remedial measures. He explained about the pearl clinic practices in detail and its benefits. The guest of honour was Dr.V.Ramamoorthy, Professor & Head, Dept of Medicine and Rehabilitation, PSG College of Physiotherapy. He shared the importance of physical activities, yoga and exercises and its differences. Mementos were presented to the Chief guest and Guest of Honour. Dr PV Mohanram, Secretary, delivered the felicitation address. Finally Dr.G.Santhanamari, Associate Professor, Dept of Electronics and Communication Engineering proposed the vote of thanks.



Dr M I Abdul Aleem, HoD (Civil) presenting a memento to the Guest of Honour Dr.V.Ramamoorthy, Professor & Head, Dept of Medicine and Rehabilitation, PSG College of Physiotherapy during an awareness programme held on 27th Jan 2022

#### **Third Graduation Day Ceremony**

PSG iTech celebrated the Third Graduation Day Ceremony on 12<sup>th</sup> February 2022 at PSG Convention Center. Shri.L.Gopalakrishnan, Managing Trustee, PSG & Sons' Charities, welcomed the gathering and highlighted the significant achievements made by students and faculty. He stated that PSG iTech serves as an instrument of transformation for the region and nation. While talking about the achievements, he mentioned that students of PSG iTech have been consistently securing top places in the Anna University exams and congratulated all the thirteen university rank holders, best-outgoing students, and all the 262 graduates of the 2016-20 batch.

Further, he mentioned that 95% of the students got placed in reputed companies and they were given good feedback by the employers in the workplace. During his talk, he congratulated all the administrators, faculty, and students for securing 131<sup>st</sup> rank in the NIRF and being accredited by the NBA for all five programs.

Further, various awareness programs and vaccination camps organized during the pandemic period were appreciated. He appealed to all the graduates to recommit to their passion and values. He requested the graduates to work hard and contribute to society. Finally, he administered the graduation day pledge.

Shri Sanjeev Kumar Varshney, Adviser and Head, Department of Science and Technology, Govt. of India, participated as the chief guest and distributed the awards for the best-outgoing students Ms Mega Ravi of Computer science engineering and Mr Uma Sundhar of Mechanical engineering and degrees to the graduands.

In his commencement address, he congratulated all the graduates for their efforts and parents and teachers for rendering their continuous support to the students in all aspects. While talking about the roles and responsibilities of an engineer in these highly challenging times, he underscored the key skills required to be a successful engineer like passion for work, optimism, hope, and a never-give-up attitude. It was stated that India is a land of opportunities, where the role of engineers is crucial for the development of the nation. He appealed to all the graduates to look for opportunities available in every field and contribute their knowledge and skill for making not only the industry but the country proud in the global market.

Further, he urged the young graduates to dream big and have the self-belief to achieve excellence in their desired field. Especially, he requested the graduates not only to be a part of the generation of new knowledge but work for protecting the Intellectual properties. Finally, he advised all the engineers to work till their last breath for the country with high hopes. Later, alumni interaction was organized to create space for interaction between the first-year students and the graduates. As part of the graduation day, alumni meeting was also organized in the evening with musical performance by the music club.



Third Graduation Day ceremony held on 12th Feb 2022

#### **Third Alumni Meet**

The Third Alumni Meet of PSG iTech Alumni Association, Neelambur was held on 12<sup>th</sup> February 2022. Around 230 alumni from 2014-18, 2015-19, 2016-20 and 2017-21 batches and their parents attended this meet. The Chief Guest for the evening was Mr. Krishna Samraj, Managing Director, Magna Electro Casting Limited, Coimbatore Heads of Departments and faculty members were also present on the occasion.



Third Alumni meet held on 12th Feb 2022

Principal Dr. Chandramohan G welcomed the gathering. He mentioned that while first batch of students joined in PSG iTech, the management was keen in providing quality education to the students. The importance was given to academics and the pass percentage of the first batch of students was 98.3%. It was stated PSG iTech encourages students to participate in extra-curricular activities through various clubs and creates a platform for the industry-institute interaction that gives exposure to the student to upgrade their knowledge and skills which will help them excel in their life.

Managing Trustee Shri L Gopala Krishnan delivered the presidential address. He spoke about the services rendered by the PSG and Sons' Charities for the welfare of society. He mentioned that PSG and Sons' Charities Manavar Illam have adopted 180 children, those who have a single parent or no parents, irrespective of caste, creed, religion, etc. and those who hail from economically weaker sections of the society to provide succor. PSG Hospitals inaugurated 'Santham' in October 2021, 40-bedded palliative care and hospice unit. PSG Vishnugranthi, another initiative by the PSG and Sons' Charities, provides education to children with special needs. It will also address their health, education, and skill needs to help them lead a quality life. He mentioned that Alumni are the brand ambassadors of the institution. He highlighted the strength of the PSG Alumni Network with 1, 50,000 Alumni, and most of them are working in a reputed industry at the top-level management or doing their higher studies in renowned universities abroad.

Also, he stated that PSG iTech is always at top in Anna University Ranking among 526 colleges in Tamilnadu. He shared that 2017-21 batch students have secured 25 university ranks. He appreciated the alumni for setting up a benchmark for all the juniors. He expressed that PSG management is always humble and grateful for the love and devotion that loyal alumnae have for their alma mater.

Chief Guest Mr. N Krishna Samraj shared the importance of the alumni-institution relationship. He appreciated that PSG iTech is good in technical education, and mentioned that present alumni are the torch bearers of the institution. He requested the office bearers of PSG iTech Alumni Association to establish strong alumni connect through the advanced software and multimedia tools to support the growth of the parent institution. He also mentioned that the IT industry required a lot of training in the areas such as technical knowledge, communication skills, supervision, and financial management, etc. He insisted the alumni to offer courses related to the aforesaid key areas for the benefit of students and fellow alumni. He wished all the alumni to keep the legacy of PSG through alumni activities.

Secretary, Dr. Mohanram P V delivered the felicitation address. He thanked the Managing Trustee and PSG & Sons 'Charities for their noble service to the society through various initiatives such as Manavar Illam, Santham and Vishnugranthi etc. He also agreed to implement the special courses suggested by the Chief Guest for the benefit of the students and alumni through alumni association. He placed a record on the achievement made by PSG iTech alumni for their financial support to the juniors and also for their contribution to the institution in technical and placement activities. He requested alumni to build an industry-institute interaction cell that makes PSG iTech as a globally recognized institution.

Mr. K. Hariharan, Vice-President, PSG iTech- Alumni Association, presented the future plans of the alumni association. He mentioned that the alumni chapters will be inaugurated in Chennai and Bengaluru, and coordinators will be appointed for the effective coordination of alumni activities under each chapter. He also expressed that the webpage and login have been created to bring all alumni under a single platform for effective interaction. It is also planned to provide an option in the web login for the juniors and fellow alumni to have a one-to-one interaction.

He stated that the connections between Alumni and juniors will be established through "Alumni Talks" via College Clubs. He thanked all the alumni for their previous scholarship contribution of Rs. 4.2 Lakhs, and mentioned that many of the alumni have conveyed their willingness to contribute more in the next academic year. It is also decided to contribute Rs. 10 Lakhs as scholarship for the benefit of needy students. He mentioned that the Alumni Association decided to give Alumni Awards for their outstanding contribution towards their scholarships, placement and achievements in their profession career etc. He thanked PSG Management for providing the facility and support of organizing these events to help and interact with the alumni, students and faculty.

The 2016-20 Batch students and project supervisors have received the best project award certificates and prize from the dignitaries. PSG iTech alumni (2014-18 and 2015-19 batches) handed over the scholarship money of Rs. 85,000/- (Rupees Eighty five thousand only) to the Principal.



Best Final year project awards have been handed over by the Chief Guest and Managing Trustee to the top two project teams in each branch of 2016-20 Batch.

Mr. Navaneetha Krishnan S U, President, PSG iTech- Alumni Association thanked the Guests and Managing Trustee for their continuous support and encouragement. He thanked the Principal Dr. Chandramohan and Secretary Dr. P V Mohanram for their guidance and support. He also thanked the Alumni association faculty coordinator Dr. M Sathiyanathan for his motivation and giving full freedom to conduct alumni events in grand manner.

He thanked the alumni who contributed for student scholarship. He thanked Vice-President Mr. Hariharan and other office bearers for the support and coordination. He also thanked the PSG iTech students union headed by Mr. Akash and members of estate office for their help and coordination in successful conduct of second alumni meet. He thanked the iTech music band guided by Ms. Lakshmi Kalpana Roy, Assistant Professor, CSE and Mr. Mahesh, Incharge- PSG hostel mess and supporting staffs for their refreshment and dinner arrangement. He also thanked the excellent contribution made by Mr. Rathan Aswath and Ms. Shruthi for MOC.

He thanked all the alumni, parents, faculty and staff members who are present for the event and making the event a grand success. The gathering relished a musical treat given by iTech music band at PSG Convention Centre. The Principal and secretary presented the gifts to the members of iTech music band for their outstanding performance. The guests, alumnus, parents and faculties had enjoyed their dinner at food court.

## Faculty Awards (July – December 2021)

In order to recognize the research contributions and achievements made by faculty from 1<sup>st</sup> July 2021 to 31<sup>st</sup> December 2021, Faculty Awards Function was held on 16<sup>th</sup> February 2022.

Members of Faculty have been awarded as per the norms established in approval with management for each category of awards. The management was gracious enough to sanction Rs.1,38,721/- (One Lakh Thirty-Eight Thousand Seven hundred and Twenty One Only) for the same. The function was presided over by Dr J S Bhuvaneswaran, M.D, D.M (Cardio), Director, PSG Super Specialty Hospital, Coimbatore. As shown in the table below, around 47 faculty members were recognized for their accomplishments.

No of Faculty Receiving Awards - 47			
S.No	Category of Awards	Sub-Category	Count
1.	Patents	iTech Granted	1
		iTech Published	2
		Non-iTech Published	4
2.	Int. Journal Papers / Book / Book chapter Published	WoS & Scopus	35
		Book	1
		Book Chapter	5
3.	Online Courses Completed	NPTEL	10
4.	Conferences Organized	National	1 (CSE)
		International	1 (Mechanical)
5.	FDPs/PMKVY/Workshops Conducted for Faculty & Staff	-	3
6.	Value Added Courses/Workshops conducted for Students (Coordinators)	-	4
7.		Faculty Awarded	4
	PhDs	No of Students Guided	-
8.	Research Projects (DST, DRDO, TARE	Sanctioned	
	etc)	>10 L	4
		< 10 L	-
		< 1 L	-



Ms.D.Archana, Assistant Professor, Dept. of ECE, receiving the honorarium from the chief guest Dr. J.S.Bhuvaneswaran, Director, PSG Super Speciality Hospital, Coimbatore, Principal Dr. G Chandramohan, and Secretary Dr. PV Mohanram during the Faculty Awards Function held on 16<sup>th</sup> Feb 2022

#### Webinar on IEEE Xplore Digital Library

was jointly organized by Central Library and IEEE Students branch, PSG iTech, on 28<sup>th</sup>February, 2022. During the inaugural session, Dr.V.Krishnamurthy, Librarian, introduced the resource person Mr.Nanda Lal TS, Senior Training Manager - South India EBSCO Information Services & IEEE Xplore Digital Library. Around 16 participants actively taken part and they were interactive throughout the session. Mr.Nanda Lal TS, Senior Training Manager - South India EBSCO Information Services & IEEE Xplore Digital Library, gave a detailed view on IEEE Xplore Digital Library.



Webinar on IEEE Xplore Digital Library held on 28th Feb 22

## Online Webinar on "Academic Identity and Faculty Profile: An Overview"

An Online Webinar on "Academic Identity and Faculty Profile: An Overview" was jointly organized by Central Library and Institutions Innovation Council, PSG iTech on 01<sup>st</sup> March 2022. The webinar was inaugurated by our beloved Principal, Dr.G.Chandramohan. Dr.R.Ramesh, IQAC Director, briefed about the IRINS and VIDWAN ID. Dr.V.Krishnamurthy, Librarian, introduced the resource person Dr.P.Kannan, Scientist – E, INFLIBNET, Gandhi Nagar, Gujarat. The session started at 12.00 noon on 01<sup>st</sup> March, 2022. During the session, 54 participants participated and the session was interactive. During the questionnaire session, Dr.Manimegalai, HoD/CSE, Dr.R.Ramesh, IQAC-Director and Dr.V.Krishnamurthy, Librarian, raised some questions with regard to the topic. The resource person clarified their questions with real examples. Finally, Dr.P.Manojkumar, Associate Professor and coordinator of Institutions Innovation Council, proposed the vote of thanks.



Online Webinar on Academic Identity and Faculty Profile: An Overview held on 1st Mar 22

#### Celebration of Dr.G.R.Damodaran Birthday

The Staff club and Tamil Mandram, of PSG iTech organized the celebration of Dr.G.R.Damodaran birthday on 22<sup>nd</sup> March 2022. Mr.M.Jothibasu, Staff Club Coordinator, welcomed the gathering. Dr. G. Chandramohan, Principal, delivered the presidential address. He stated the good practices of Dr.G.R.Damodaran such as punctuality, dedication towards teaching and research. In the felicitation address, Dr P V Mohanram, Secretary, shared his memories with Dr.G.R.Damodaran and also shared his interest towards sports and other administrative activities. In lieu of the celebration, a Tamil Patti Mandram on the topic "மனிதனின் முன்னேற்றத்திற்குப் பெரிதும் துணை நிற்பது உறவுகளே!, நட்புகளே!" has been organized, the faculty and staff members were enthusiastically participated in it. Mementos were distributed to all the participants of Patti Mandram. Finally, Ms.N.Vasanthi, Staff Club Coordinator, proposed the vote of thanks.



Celebration of Dr.G.R.Damodaran birthday on 22.02.2022

## **The Eighth Governing Council Meeting**

The Eighth Governing Council Meeting was held on 04<sup>th</sup> March 2022 at Board room from 9.30 am to 12.30 pm both in-person as well as online mode using Google Meet platform. The following data pertaining to the academic year 2021-2022 were presented and approval was sought from the members.

- Action Taken Report on academic and other activities of the 7<sup>th</sup> GC meeting
- Faculty Accomplishments
- Summary of University Results
- Students' Achievements
- Placement Statistics & Training
- Accreditation/Ranking Status
- Improvement plan based on NBA team visit
- New Programmes Planned
- Students Feedback on General Facilities
- Budget for the year 2022 23
- Any other matter



Members at online during Eighth Governing Council Meeting was held on 04th March 2022



Members at board room of PSGiTech during Eighth Governing Council Meeting was held on 04th March 2022

## **National Science Day-2022**

The Science and Humanities Association along with the Astronomy club organized an event for National Science Day 2022 with the theme "Integrated Approach in Science and Technology for sustainable future" on 07.03.2022. The chief guest was Dr. Ravindra Naik, Principal Scientist, Central Institute of Agricultural Engineering, Coimbatore. Seventy eight students and 15 faculty members were present.



A talk given by Ms Dharsana of 1st year EEE about National Science Day

# Fourth International Conference on Sustainable Practices and Advancements in Civil Engineering (SPACE'22)

The Dept. of Civil Engineering (PSG iTech), in association with Deakin University, Australia, the Indian Society for Technical Education (ISTE), and the American Concrete Institute, organized the Fourth International Conference on Sustainable Practices and Advancements in Civil Engineering (SPACE'22) during 11<sup>th</sup> and 12<sup>th</sup> March 2022. Dr V Saraswathy, Chief Scientist and Head, Corrosion and Materials Protection Division, CSIR –CERCI, Karaikudi participated as the chief guest and delivered the inaugural address. Dr M I Abdul Aleem, Professor and Head, Department of Civil engineering, PSGiTech welcomed the gathering.

Dr R Rajkumar, Asst. Professor, Dept. of Civil Engineering, elaborated the conference theme and shared the unique features of the conference. It was stated that the two-day international conference will feature six keynote speakers from different parts of the world and eleven technical sessions on various interesting topics. Around 84 research papers were presented after a careful scrutiny of 124 papers received from various Colleges and Universities across the world.

Dr G Chandramohan, Principal, delivered the presidential address. In his presidential address, he appreciated all the members of the faculty for organizing a need-based conference in a professional manner. Dr PV Mohanram, Secretary, spoke about the significant role played by sustainability in the Civil Engineering.

Dr V Saraswathy, in her address, emphasized the importance of sustainability aspects and advanced materials used in the construction of infrastructure in recent days. Further, she appealed to civil engineers to learn from the traditional structures which are very good examples of sustainable structures. She also released the proceedings of the conference (SPACE'22).

Finally, Mr.V.Navinganesh, Assistant Professor, Dept. of Civil Engineering, proposed the vote of thanks. Dr. R. Rajkumar, Mr. V Navin Ganesh, Mr K Sakthi Prasanth, Asst. Professors, Dept. of Civil Engineering, were the organizing secretaries of the conference. Members of Faculty in the Dept. of Civil successfully co-ordinated the event.



Release of SPACE'22 Conference Proceedings

## "ICMDMSE 2022 Conference"

ICMDMSE 2022 Conference was held on 11<sup>th</sup> and 12<sup>th</sup> March 2022. Dr.G.Chandramohan, Principal, PSG iTech welcomed the gathering and Dr.P.VMohanram, Secretary, offered the felicitation address. Dr.R.Ramesh, Professor of Mechanical Engineering, explained the significance of the theme "Digital Solutions for Sustainable Earth". Also, he spoke about the necessity of the conference with relevance to the contemporary issues and shared activities schedule. Dr.Krishnakanth Pulicherla, Scientist D, Technology Development & Transfer Division (TDT), Department of Science and Technology, Govt. of India served as the chief guest for the function. He highlighted the importance of taking up R&D jobs in collaboration with industries instead of service-oriented jobs. He also emphasized the importance of industry supported higher studies and the student participation in the same. Finally, Dr.D.Elangovan, Professor of Mechanical Engineering, proposed the vote of thanks.

Total number of papers received: 90

Total number of papers accepted for Conference: 65

Total number of papers presented: 62

Total number of keynote address: 5

Total number of participants: 210

#### Paper presentation tracks

- 1. Track 1- Materials for Sustainability
- 2. Track 2 Design of Materials for Sustainability
- 3. Track 3- Manufacturing and Industrial Engineering
- 4. Track 4 Thermal and Fluid Sciences for Sustainability



Release of ICMDMSE 2022 Conference Souvenir by Dr.Krishnakanth Pulicherla, Scientist D, Technology Development & Transfer Division (TDT), Department of Science and Technology, Govt. of India along with Dr P V Mohanram, secretary, PSG iTech, Dr G Chandramohan, Principal, PSG iTech and Mechanical department faculty members

#### **International Women's Day Celebrations**

PSG Institute of Technology and Applied Research (PSG iTech), in association with the Women Empowerment Cell (WEC), organized a special lecture on the occasion of International Women's Day on 8.3.2022 (Tuesday). Dr. R.Manimegalai, Professor and Head, Dept. of CSE and Chairperson of the Women Empowerment Cell, welcomed the gathering. Mrs. Hemalatha Annamalai, Former Global Chair, TiE Women, Founder and Former CEO, Ampere Vehicles, President and Patron of Society for Smart E-mobility addressed the audience on her successful entrepreneurship journey, the various challenges encountered and the ways to handle challenging situations.



Dr.G.Chandramohan, Principal, welcomed the Chief Guest Mrs. Hemalatha Annamalai, Former Global Chair, TiE Women, Founder and Former CEO, Ampere Vehicles, President and Patron of Society for Smart E-mobility during the International Women's Day celebrations held on 8.3.2022

Dr. G.Chandramohan, Principal, delivered the presidential address and stated with pride the achievements of girl students and women faculty members at PSGiTech. Also, the commendable activities carried out by the women empowerment cell was appreciated and they were encouraged to do more activities in the future. Also, Dr.G.Chandramohan highlighted the crucial role played by women at home and office. Also, he emotionally recalled the sacrifices made by women and their selfless contributions. Later, Dr.G.Santhanamari, Member, WEC, introduced the chief guest to the audience. Mrs. Hemalatha Annamalai, in her insightful presentation, expressed that the most important attributes in business are swiftness and technical competency rather than the size. The four major points for making the most of ourselves are giving paramount importance to health and inner well-being, spending quality time with the family, working until last minute and taking up social responsibility.



Student receiving the book written by Mrs. Hemalatha Annamalai and Dr. M.Devasena, Co-Chairperson of Women Empowerment Cell are in the photo during the International Women's Day celebrations held on 8.3.2022.

Further, the key takeaways from her talk were "Small beginning, Incremental improvement, Sustained progress and Monumental possibilities are the eight words that will lead to success. Mrs. Hemalatha Annamalai, the former founder of Ampere vehicles, also talked about the hardships and challenges and her experience in breaking the barriers. Prizes were distributed to the winners of various events like cooking, drawing and painting, speech and poetry contest organized in connection with women's day celebration by various clubs. Students delivered brilliant speeches, recited poems and soulful songs praising womanhood. PSGiTech band rendered beautiful medleys. Dr.Kala I, Associate Professor, Dept. of CSE, member of WEC, proposed the vote of thanks.

#### Food Wizard- Women's day competition

PSG iTech, in association with the Women Empowerment Cell (WEC), Drawing and Cooking club, organized International Women's Day celebration on 8.3.2022. As a part of the celebration, the cooking club conducted a cooking (team) competition called "Payback time- Mom's or Sister's favorite dishes" on 07.03.2022. The participants were encouraged to prepare healthy dishes by using the ingredients like Sprouts, Groundnut, and fruits. Three teams of staff and students were selected for prizes based on comments given by the judges. Prize winners were awarded cash prizes during the Women's Day celebration on 8.3.2022 (Tuesday) by the Chief Guest Smt. Hemalatha Annamalai, Former Global Chair, TiE Women, Founder and Former CEO, Ampere Vehicles, President and Patron of Society for Smart E-mobility.



Ms K Jothimani, Technical Assistant and Ms V Sumathi, Junior Assistant, Library presented Roasted Gram & Pohaaladdu and AlloVera sarpath and won first prize

#### Visit of Dr. V Chandrasekar

Dr.V.Chandrasekar, Professor of Electrical and Computer Engineering, Colarado State University (CSU) visited PSG iTech on 7<sup>th</sup> March, 2022. Dr. G Chandramohan, Principal, Dr. R Ramesh, Prof (Mech) and Dr. C L Vasu, HoD (EEE) had a fruitful discussion with Dr.Chandrasekar regarding the master's program at CSU. Dr.Chandrasekar told that the Anna University rank holders from PSG iTech, who would like to do their masters at CSU, could be given a complete fee waiver and also scholarship. Principal Dr. G Chandramohan advised Dr. Manoj Kumar P, Associate Professor, Mechanical Engg. to be in touch with Dr. Chandrasekar and to identify the rank holders who are interested in pursuing their masters at CSU.



Visit of Dr. V Chandrasekar, CSU to PSG iTech on 7th March 2022

## **Best Spoke College Award**

PSG Institute of Technology and Applied Research has been awarded as Best Spoke Institution for IEDP promotional activities under PMO-IEDP scheme by Entrepreneurship Development and Innovation Institute of Tamilnadu Government (EDII) and ED Cell of Anna University regional centre. Cash prize of Rs.10,000 has been given to us. This amount can be utilized for conducting Entrepreneurship development programs in our campus. Principal Dr.G.Chandramohan and EDC Cell coordinator Mr.S.Elayaraja have received the cash prize and certificate from the Honorable Vice Chancellor of Anna University Dr.R.Velraj on 11.03.2022 at AURCC campus near Vadavalli.



Dr G Chandramohan, Principal, PSGiTech and Mr Elayaraja, AP, Civil Engg received a Best Spoke Institution Award for IEDP promotional activities for PSGiTech on 11<sup>th</sup> March 2022 from Honorable Vice Chancellor of Anna University Dr.R.Velraj

### Program on "Holistic Wellness Journey"

PSG iTech in association with the Women Empowerment Cell (WEC) and Staff club, organizedan activity-basedone-day workshop on "Holistic Wellness Journey" for all faculty and staff members on 12.03.2022 (Saturday). Around 35 faculty and staff members from various departments participated in the workshop. Dr. G. Chandramohan, Principal welcomed the gathering and introduced the resource person, Mr Saravana Prabhu, Software Quality Specialist, D.E. Shaw & Trainer-Art of Living Foundation. While felicitating the speaker, Principal appreciated the services being rendered by Mr. Saravana Prabhu for physical and mental wellbeing of people, guiding to attain happiness. He also explained the importance of happiness to do better always in life.Mr. Saravana Prabhu started the session by sharing his experience as a student at PSG College of Technology, Coimbatore. He briefed the activities planned for the session.



Participants involved in games and objects-based activities

Later, participants shared their feedback about their learnings and fun-filled experiences. Finally, Dr. E. Malar, Associate Professor, Dept. of EEE, offered her feedback and stated that the session evoked nostalgia of her childhood days.



Participants involved in meditation

### **Advaya - 2022**

PSG Institute of Technology and Applied Research celebrated the annual cultural festival 19<sup>th</sup> March 2022, Advaya-2022 on Saturday at the iTech Kalaiarangam. Dr.G.Chandramohan, Principal, delivered the welcome address and spoke about the importance of honing skills beyond academics and shared that organizing such events help students learn the art of managerial skills, leadership skills, negotiation skills, and various other skills required to sustain in the workplace. Further, he stressed that students should actively take part in all activities and explore multifarious opportunities provided by the college to identify their unique talents. Also, he appealed to all the students to enjoy their dav.

In his felicitation address, Dr. P V Mohanram, Secretary, appreciated the members of the Students' Union for organizing the event successfully amidst various struggles and explained the significance of the Advaya, which means oneness. He stated that the ideation behind Advaya is to bring all the students together, celebrate their unique skills and capabilities. Importantly, he pointed out that organizing such events will help to break the differences amongst students and work dedicatedly towards the mission. Also, he explained the importance of yoga and meditation for harmonious living. Finally, he urged the students to exchange love and share good thoughts for a peaceful life.

Later, the event kick-started with a beautiful welcome dance performance followed by *Pattimandram* judged by Mr. Venkatesh, Asst. Professor, on 90's Kids vs 2k kids. The speakers on both teams came up with excellent points in support of their teams. Then, the prizes were distributed to all the winners and certificates of appreciation to all the participants and event coordinators of the club. Various events were organized over the span of a week by different clubs to bring out the hidden talents of the students.

Further, the National Service Scheme (NSS) and Youth Red Cross (YRC) club members came up with a creative skit each and demonstrated their performative skills on stage. The skit performed by the members of YRC focused on 'Mental Health of Students' and the NSS with their fun-filled concept on the 'Butterfly Effect'. The post-lunch session commenced with the spontaneous 'Adapt Tunes' contest followed by a dazzling musical performance by the iTech band. Apart from these, various stunning dance performances by members of alumni, girls, and boys decorated the stage in the evening. Students powered their performances with full energy and cheers. Finally, Mr. B.Aakash, Chairman, Students' Union, proposed the vote of thanks.



From the right-side: Dr. P Vetrivelan, Dean, Students' Union, and Head, Dept. of ECE, Dr.V.Jayabalan, Former COE, Anna University and Dr.G.Chandramohan, Principal, distributing certificates for the participants during Advaya-2022 held on 19.3.22 (Saturday) at PSG iTech





Students performance during Cultural Fest - Advaya 2022

## Sankatahara Chathurthi Celebrations

Sankatahara Chathurthi was celebrated in the Vidhya Ganapathi temple on 21<sup>st</sup>March 2022 in the presence of Dr. G. Chandramohan, Principal. First, Second, Third-year Students, Faculty Members from Staff quarters with their family members, and Club Coordinators participated in the special pooja. On behalf of the Drawing and Painting Club, Ms. Bhuvaneswari (II B.E. ECE) and her team made a beautiful kolam at the entrance of the temple. Ms Lakshmipriya, Ms Preethi (II EEE) and their team performed special Bajans and Ms Chandrika (II EEE) and team from cooking club prepared and served Tamarind rice for the devotees.



Kolam made at temple entrance by Ms Bhuvaneswari (II ECE) and team



"Tamarind Rice" was prepared by Ms Chandrika (II EEE) and team

#### iTech Expo 2022

PSG iTech, Coimbatore, hosted iTech Expo for school students and the public during 26<sup>th</sup> and 27<sup>th</sup> March 2022 at PSG iTech campus. The ideation behind the event was to provide visitors with valuable insights about various programs, scopes, college life, and campus ecosystem. It provided a platform for the school students to interact with members of faculty and college students about their projects and infrastructure. The chief guest of the function was Dr.G.S.Sameeran I.A.S, District Collector, Coimbatore District. During the expo, events like treasure hunt, quiz competition, management games, project displays, and interactive seminars were organised for the school students.

Totally 3500 students from various schools in and around Coimbatore registered for the expo and 3000 students along with parents and teachers visited the campus. As part of "Coffee with collector" event, Dr.G.S.Sameeran I.A.S interacted with the students from Government School, Anamalai Block. In his interaction, he insisted them to work hard and focus on achieving their goals in life.

Dr. G Chandramohan, Principal, PSGiTech, Dr. P V Mohanram, Secretary, and all Heads of the Departments were present during the event. The school students visited around 31 venues (labs) which include centres of excellence in all departments. The interactive seminars were engaged by the Principal, Secretary, Heads of the Departments, and iTech alumni on the following topics: Best Practices at iTech, Materials in Everyday Life, Why Engineering?, Recent Trends in Communication Engineering, Potentials in Civil Engineering, Technological Trends in Electrical Engineering, Computer Science Pioneers, Virtual tour of BMW Factory, Role of Architect in Society and Expectations of Industries.



Dr.G.S.Sameeran I.A.S (Chief Guest) inaugurated the PSG iTech Expo-2022 on 26th Mar 22



Group photo taken during iTech Expo 2022

## **Indiaskills 2021 competition**

Ms. A. Susmeta, III B.E.CSE of PSG iTech, Coimbatore, Tamil Nadu, participated and secured the 4<sup>th</sup> place under the Mobile Applications Development category in the Indiaskills competition, organised by the National Skill Development Corporation (NSDC), held from 6<sup>th</sup> to 10<sup>th</sup> January 2022. Notably, Ms. A. Susmeta was the only woman contestant among the top 10 finalists and received the Medallion of Excellence Award among participants from various states and union territories. The inter-college and district-level of the Indiaskills competitions were conducted through online MCQ rounds and questions were asked from Java and other programming languages. In the regional-level, she designed and developed a snake game application and traveller's guide application.



Ms. A Susmeta, III year BE(CSE), PSG Institute of Technology and Applied Research, Coimbatore, Tamil Nadu



Ms. A Susmeta, III BE(CSE) PSGiTech felicitated by Dr. G. Chandramohan, Principal, PSG iTech and Dr R Manimegalai, Head, Department of CSE, PSG iTech