#### PSG INSTITUTE OF TECHNOLOGY AND APPLIED RESEARCH

# **Quarterly Report (Apr - June 2022)**

# **Events Organized:**

# Annual Day - Daksha: 2022

PSG iTech celebrated its 7<sup>th</sup>Annual Day on 8<sup>th</sup> June 2022 in the PSG Convention Centre. Dr. A Velumani, Creator, Thyrocare, Mumbai, participated as the chief guest and addressed the gathering. Shri. L. Gopalakrishnan, Managing Trustee, PSG &Sons' Charities, presided over the function.

Dr.G.Chandramohan, Principal, presented the Annual Report (2021-2022). During the presentation, principal highlighted the remarkable achievements made by the students and members of faculty in research, academics, sports, and other extension activities. Institutional achievements like NBA Accreditation for all the five programs, 131<sup>st</sup> in NIRF Ranking 2021, list of MoUs signed, and various programs like conferences and workshops organized during the academic year were underscored in the presentation.

In his presidential address, Shri L. Gopalakrishnan, Managing Trustee, PSG & Sons' Charities, congratulated the best outgoing students and appealed to all the students and faculty members to utilize the state-of-the-art facilities available on the campus and reach great heights in their lives. Importantly, he spoke about the knowledge explosion through technology, the influence of internet in learning, and various other factors demand students to further their skills in the continuously changing and challenging environment. While talking about the placements, he urged the students not to settle for what is offered instead should aim higher and reach the pinnacle of success. Further, he requested the young students to focus both on studies and participate in various activities to hone their skills. Later, the Chief Guest, along with Managing Trustee, Principal, and Secretary released the college magazine Tarangini and distributed awards for the best outgoing students.

Dr P Vetrivelan, Dean, Students' Union, announced the Overall Best Outgoing Students and Department-wise Best Outgoing Students. Mr B Aakash, Final Year B.E. ECE and Ms.R.Suchitra, Final Year B.E. Civil received the Best Outgoing Students awards in boys and girls categories, respectively. Dept. wise Best Outgoing Students awards were given to Ms.S.Rowena Rachel (Civil), Ms. B. Balakeerthana (CSE), Mr. C Kolappan (EEE), Ms.K.K.Shreenidhaa (ECE), and Mr.R.Krithik Jhawahar (Mechanical).

Dr. A Velumani, in his inspiring speech, shared his entrepreneurial journey with the audience and spoke about the various challenges faced during his early days to reach the success. Importantly, he urged all the students to realize their inner potential and utilize them for success in their personal and professional life. He appreciated the management for providing conducive learning atmosphere for all the students who come from various places. At the same time, the chief guest requested the students to set an optimistic and daring mind set for leading a successful life. In addition, he spoke about the role of taking risks and staying focused to convert dreams into reality. Also, he encouraged the students to explore their unique skills and passionate areas to become successful in their lives.

Finally, Dr PV Mohanram, Secretary, PSG iTech, recapitulated some of the significant points shared during the session and proposed the vote of thanks. Later, the iTech Music club along with Dance Club entertained the audience with mesmerizing dance and soulful songs.



Ms.R.Suchitra, Final Year B.E. Civil receiving the Best Outgoing Students awards in Girls Category

### Sports Day - 2022

The 7<sup>th</sup> Sports Day was celebrated at PSG iTech on 26.5.22. Principal of PSG iTech Dr. G. Chandramohan, Principal of PSG IAP Ar. K. Venkatesh Kumar, and Dr. V. Jailaxmi, Professor and Head, Dept. of Science and Humanities, presided over the function. Mr. S. N. Mohammad Salahuddin, a renowned Triple Jumper, participated as the Chief Guest and delivered the Sports Day Address. The event kick-started with flag hoisting by the chief guest. The chief guest along with the audience witnessed the impressive march past by the NCC cadets and sports students.

The finals of the 4x100 relay event were conducted for boys and girls and prizes were distributed to the winners by the chief guest. During the valedictory function, Mr.V.Vignesh, III B.E. Mech, and Sports Secretary of the college welcomed the gathering, and Dr. G. Chandramohan, Principal delivered the presidential address. In his presidential address, he highlighted the significant achievements made by students in various tournaments organized in the zonal and state-level matches and appreciated them. Further, he requested the physical education department to organize a 3 km run event and invited all the students and faculty members to participate during the first week of June 2022.

Speaking on the occasion, Chief Guest Mr. Mohammad Salahuddin stated that sports is not about making money out of it but meeting new people, having fun, and exploring one's inner potential. He urged the students to give their best every time rather than aiming for a win. Talking about the training methods, he appealed to all the students to update themselves with the latest training methods, research about it, and identify the capabilities required for the particular sport. Further, he mentioned that developing good health is more important as it helps to lead a healthy life and spend time with loved ones to make beautiful memories. Finally, the chief guest along with other dignitaries released the sports magazine of PSG iTech 'Fitech 2022'. Later, Sports Joint Secretaries Mr. J Raghul of II B.E. Civil and Ms. K. Anandhi of I B.E. EEE, delivered the Men's and Women's Annual Sports Reports. Finally, Women Sports Secretary Ms. Snehal Jain of II B.E. CSE delivered the vote of thanks.



Chief Guest Mr. S. N. Mohammad Salahuddin, Principal of PSG iTech Dr. G. Chandramohan, PSG IAP Ar. K. Venkatesh Kumar and Dr. V. Jailaxmi, Professor and Head, Dept. of Science and Humanities award the Overall Championship Trophy for Girls to Alaknanda House which scored 152 points

# Hostel Day – 2022 (Boys)

Hostel day (Boys) was conducted on 28<sup>th</sup> May 2022. Dr. P Vetrivelan, Head of Department – ECE, was the chief guest. Principal Dr. G Chandramohan and Secretary Dr P V Mohanram were present during the function. The games such as a three-legged race, food eating, cinema quiz, musical chair, and lucky draw were conducted prior to the hostel day for students and workers in the hostel. Later, prizes were distributed during the ceremony. The welcome address was followed by special address by the chief guest. Principal and Secretary delivered speeches and prizes were distributed to all the winners including hostel workers. The ceremony concluded with a vote of thanks. A vast and exotic dinner including vegetarian and non-vegetarian dishes were prepared for dinner.



Chief Warden Dr N Saravanakumar presenting a memento to the chief guest Dr P Vetrivelan, HoD (ECE) during the Hostel Day function held on 28th May 2022

# Hostel Day – 2022 (Girls):

Hostel Day Samartha: 2022was celebrated on 28<sup>th</sup> May 2022. Our alumni Ms. Harini.V, Software Engineer, AppViewX Pvt Ltd, Coimbatore and Ms. Preethi. K, Assistant Manager, Tamilnadu Grama Bank, served as chief guests. Dr. P V Mohanram, Secretary of PSGiTech, spoke about the development of PSG iTech college and hostels and shared the impact of universal human values on the right behaviour of the students.

Chief guest introduction was given by the Secretary Ms Kaviya (IV - ECE) and Joint Secretary Ms Nandhini (III-EEE) of the girls hostel council. Ms. Harini. V shared her experience in college, her life in hostel and gave us ideas on how to use the hostel resources to attain maximum productivity in sport, academics and the club activities. In addition to this, she provided important information regarding placements and advised everyone to show confidence during interviews. Ms Preethi. K, shared her experience on how she faced the outside world after finishing a UG degree and also insisted to ignore the negative things and failures to achieve targets and goals in the life.

Dr. G Chandramohan, Principal of PSGiTech shared a few words about the Hostel day arrangements and appreciated the great efforts of students in organizing the event. Finally, Deputy Warden of the hostel proposed the Vote of thanks. Various cultural events were conducted to showcase the individual talent on the stage for which the prize distribution ceremony was held to encourage the winners of the events conducted in connection with hostel day on stage and off stage programs as a part of the celebration.



Chief Guest with Secretary, Principal and Wardens during the Hostel Day held on 28th May 2022

### **Alumni Induction Programme - 2018-22 Batch**

The Alumni Induction Programme for the 2018-22 batch students was organized by PSG iTech Alumni Association on 25<sup>th</sup> June 2022. The event was attended by about 190 final-year students, and faculty members. Mr. S. Navaneetha Krishnan, President, PSG iTech Alumni Association welcomed the gathering. Principal Dr. G Chandramohan presided over the function. The chief guest, Dr.G.Ranganathan, Director, Rover Industries Ltd, Coimbatore inducted the 2018-22 batch alumni.

He shared his experience with the power of the PSG alumni network and mentioned that PSG Alumni Association is running in 14 countries. He also shared that the PSG alumni are working in reputed industries at the top-level management and doing higher studies in renowned universities in abroad. He advised the alumni that not to work for the money even if you are able to work more. The results of the work i.e. success will come and go but failures will give you happiness, he added.

Mr. K. Hariharan, Vice-President, PSG iTech - Alumni Association highlighted the future plans of the alumni association and introduced the student coordinators for 2018-22 batches, Mr. Raghav M (Civil), Ms. Chitra N (Civil), Mr. Sandeep V (CSE), Ms Bala Keerthana K B (CSE), Mr. Shiva Ganesh M (EEE), Ms. Sangavi BA (EEE), Mr. Karthik Prabu N (ECE), Ms. Sneha S V (ECE) and Mr. Tamilselvan U M (Mechanical) and Ms Rindhisha R R (Mechanical). The chief guest and Dr. Jayabalan, Director, Examinations, PSG Institutions presented the best final year project awards (first and second prize) to all the branches. Dr.M.Sathiyanathan delivered the vote of thanks.



Chief Guest, Dr. G. Ranganathan, Director- Rover Industries, handing over the best project awards to 2018-22 Batch CSE students

# **Global Running day**

The Department of Physical Education of PSG iTech organized the Global Running day event for the Faculty, Staff and Students on 3<sup>rd</sup> June 2022. Principal Dr. G. Chandramohan, PSG iTech along with Ar. K. Venkatesh Kumar, Principal, PSG Institute of Architecture and Planning led the 3-km run with the participants. Mr. A. Robinson, Physical Director, PSG iTech, started the event. Around 85 faculty, staff and students have participated in the event. The 3-km run started from the staff quarters' main gate and ended at PSG Institute of Architecture and Planning with refreshment.



Global Running Day held on 3rd June 2022

### **Physical Activity day**

The Department of Physical Education of PSG iTech organized a Physical Activity Day Awareness Rally for the members of faculty, students, and staff on 6<sup>th</sup> April 2022 from the College Entrance Gate till iTech Kalaiarangam. Mr. A. Robinson, Physical Director, PSG iTech, welcomed the gathering. Dr. G. Chandramohan, Principal, PSG iTech, offered his felicitations and spoke about the importance of physical activity in day-to-day life.

Also, he urged the participants to do some physical activity to stay fit and energetic. Around 200 members participated in the event and benefitted. Mr. Eashwar, Assistant Physical Director, PSG iTech, demonstrated cool-down and relaxation exercises to the participants. Finally, Ms. M. Subiksha, III-B.E. Civil, proposed the vote of thanks. The rally was led by Dr. G. Chandramohan, Principal, PSG iTech, and Ar. K. Venkatesh Kumar, Principal, PSG IAP.



Dr. G. Chandramohan, Principal, Ar. Venkatesh Kumar, PSG IAP, faculty, staff and students participated in the Physical Activity Day rally organized on 6<sup>th</sup> April 2022

### 8th International Day of Yoga

The Department of Physical Education of PSG iTech organized the 8<sup>th</sup> International Day of Yoga for the members of faculty, staff members and students on 21<sup>st</sup> June 2022. Our beloved Principal Dr. G. Chandramohan delivered the welcome address. The yoga session started with simple day-to-day exercises. Around 51 members participated in this mega event. Mr. M. Senthilkumar, Yoga Master, demonstrated various yoga asanas and pranayama (breathing exercises) for the participants. Later, Dr. P. V. Mohanram, Secretary, delivered a motivational talk on "Yoga for Human Excellence". Finally, the session ended with refreshment and group photo.



Dr. G. Chandramohan, Principal, Mr. M. Senthilkumar, Yoga Master, and Dr PV. Mohanram, Secretary, along with HoDs, members of faculty, staff and students during the 8<sup>th</sup> International Day of Yoga held on 21<sup>st</sup> June 2022

### Visit of Dr. Purush Damodaran

Dr. Purush Damodaran (Presidential Teaching Professor and Chair, Dept. Industrial and Systems Engineering) and Dr. Anitha Saravanan (School of Nursing) from Northern Illinois University (NIU) visited PSGiTech on 17<sup>th</sup> June 2022. Dr. Purush Damodaran gave a presentation about NIU to the Principal and Heads of the Departments. Fruitful discussions were carried out about student exchange, faculty exchange and other possible research collaborations. Dr. Purush Damodaran also interacted with the students of Higher Education Forum where he discussed the opportunities of doing internship during their final semester at NIU and also for doing post-graduation.



Visit of Dr. Purush Damodaran on 17th June 2022

# A Virtual Session on 'Opportunities to do Research or to Teach in the US

A virtual session on 'Opportunities to do Research or to Teach in the United States" through the fully funded Fulbright – Nehru, Fulbright – Kalam and other Fulbright Fellowships' was organized on 11<sup>th</sup> May, 2022. Dr. Pradeep Haldar (U.S. Fulbright-Nehru Scholar to India from the University of South Florida, Tampa, Florida) and Ms. Maya Sundararajan (Regional Officer, United States – India Education Forum (USIEF), Chennai) virtually addressed the faculty of PSGiTech and PSGCAS, where both of them briefed about the various Fulbright fellowship schemes available, eligibility requirements, their application deadlines etc.



A virtual session on 'Opportunities to do Research or to Teach in the United States"

### **Engineering Career in Armed Forces and Career Guidance**

5 TN Girls Battalion and 6 TN Medical Company NCC along with the Institution's Innovation Council organized a seminar on "Engineering Career in Armed forces and Career Guidance" on 1st April, 2022. Prof. V. Anto, Director of Nethaji Bose Defence Academy, Coimbatore was the guest speaker. The welcome address was given by Cdt. Nisha M H. The guest speaker detailed about the special entry of NCC cadets into defence and officer placement in defence. He also had a discussion on comparison of civil service exam and career in Armed forces. He discussed waive-offs for the NCC cadets in SSB selection process. He informed that around 435 officers are placed ever year in armed forces from in and around Coimbatore. In addition, he spoke about the naval selection board and air force administrative office in Coimbatore. Later, he made a presentation on officers who cleared SSB and serving as officers in Armed forces. He discussed the requirements for military applications and also on the work-life of technical officers in Armed Forces.



Prof. V. Anto, Director of Nethaji Bose Defence Academy, Coimbatore addressing the gathering on "Engineering Career in Armed forces and Career Guidance" on 1st April 2022

#### **Coder Series - Data Visualization**

A guest lecture on "Data Visualization" has been conducted on 04.05.2022 as a part of Coder Series for the benefit of students. Totally 127 students attended the guest lecture. Mr. Ismail Syed Mohammed, Managing Director, North America Oracle Utilities Industry Lead, Accenture – USA delivered the guest lecture to the attendees. The resource person started the session with the need for visualization using the interactive tool (menti.com) thereby students were engaged completely throughout the session. He gave real-time examples of the US delivery app's market data visualization. Number of inferences was made by the students through the interactive tool. He also explained the key concepts for data visualization with examples. Finally, he concluded the session by outlining the academic research areas in data visualization.



Guest lecture on "Data Visualization" conducted on 04th May 2022

# **Workshop on AWS Cloud Architecture Patterns to Build Highly Available and Scalable Solutions**

The Department of Computer Science and Engineering, PSG iTech organised a workshop on "AWS Cloud Architecture Patterns to build highly available and scalable solutions" on 06<sup>th</sup> April 2022. The chief guest of the workshop was Mr. Balasubramaniam Muthusamy, Senior Technical Program Manager, Amazon – Bangalore. He detailed on his personal experiences of over 20 years in software product development field.

He is an alumnus of PSG College of Technology (1990-1994). He kept the entire session informal and mainly interactive. All the students participated enthusiastically, raised many doubts, and got them clarified by the speaker. Students from 2<sup>nd</sup> and 3<sup>rd</sup> year and faculty members attended and were benefitted from the talk. The participants were interactive and they expressed that the talk was extremely useful in exploring the area of AWS further.



Mr. Balasubramaniam Muthusamy, Senior Technical Program Manager, Amazon – Bangalore sharing his experience during the workshop held on 06<sup>th</sup> April 2022

### Top Fools - 2022

A fun-coding contest named "Top Fools - 2022" was conducted by the Computer Science and Engineering Association on 1<sup>st</sup> April 2022 for all the students of PSG iTech in association with the Coding Club. Overall, 41 students participated from different departments. The contest was conducted with the help of Hackerrank online coding platform in online mode for 2 hours. There were 9 problems in total. The problem statements were not provided directly except hints to the problems. The participants gave positive feedbacks and wanted more such contests in the future.

### **Guest lecture on "Construction of Individual Villas"**

The Association of Civil Engineering organized the Guest lecture on "Construction of Individual villa-A to Z" on 12<sup>th</sup> April 2022. Dr M I Abdul Aleem, Head of Department of Civil engineering, welcomed the gathering. Ms K Govarthanambikai, Asst. Professor, Dept. of Civil Engineering, welcomed the chief guest. Chief guest Er C R Sriprasannarajh, General Manager- Projects, Shri Kubhera Parivar, explained about the entire construction process starting from marking and footing excavation to painting of Villas. He also shared about his entire journey in the construction field. Mr Prabhu S, III B.E. Civil student, proposed the vote of thanks.



Dr M I Abdul Aleem, Head of Department of Civil Engineering presenting a memento to the chief guest

## Guest lecture on "How to become a valuer?"

The Association of Civil Engineering organized a guest lecture on "How to Become a Valuer" on 20<sup>th</sup> April 2022. Dr M I Abdul Aleem, Head of the Department of Civil engineering, welcomed the gathering and gave a brief introduction about the chief guest. Chief guest Er.N. Elango, a registered valuer, Tiruppur, explained the various factors for the purpose of valuation, knowledge required for a valuer, and professional bodies related to evaluation. He also gave some insights about how to become a valuer and the growth of valuers based on their years of experience. Ms.Mirdula, Third year, Department of Civil Engineering, proposed the vote of thanks.



The chief guest Er.N. Elango, Registered Valuer, Tiruppur addressing the gathering during the Guest Lecture held on 20<sup>th</sup> April 2022

### "Connect with our Seniors" - EEE Association

A seniors-juniors interaction was organized the EEE Association on 28<sup>th</sup> May 2022. Mr. Madhugogul and Mr. Anirudh (Batch 2022) were invited by Dr. Malar (EEE) to share their experience with their juniors. The event began with the welcome speech by Ms. Varsha (Joint Treasurer of EEE association). Mr. Ahamed Nadeem (joint secretary of EEE association) briefed about the seniors, followed by Dr. Malar sharing her experience with the seniors and made the session interesting. Mr. Madhugogul and Mr. Anirudh shared their experience of the interview process and gave many tips for the students on placement preparation. The two hours session was interactive, the students were posting their queries to their seniors, and all their queries were answered. Dr. Malar, Faculty in-Charge EEE Association proposed the vote of thanks and concluded the session.



Session on "Connect with our Seniors" held on 28th May 2022

# **Guest Lecture on 'Breaking Down the IoT'**

The EEE Association organized a guest lecture on the topic "Breaking Down the IoT" on 01<sup>st</sup> June 2022. Ms. Kamali Devaraj, IoT Engineer, Kalycito Infotech Pvt. Ltd., gave a lecture to the first and second-year students of the EEE department. EEE Association office bearers, Mr.Ahamed Nadeem M and Ms Varsha N introduced the chief guest and welcomed her to share her knowledge with the audience. Ms. Kamali began by giving a brief explanation of the Internet of Things (IoT) before delving into its applications, real-world examples, and societal implications. She compared and contrasted the interconnectivity and future of IoT with daily software usage. She also spoke about her line of work and provided comprehensive explanations of their internship and employment procedure for recent grads, which was beneficial to the students.



Faculty coordinator of the EEE Association, Dr.E.Malar gave the vote of thanks during the session

#### Technical talk on "Hardware threats in SoC"

The Department of Computer Science and Engineering (PSGiTech) in association with the Indian Society for Technical Education Students' chapter(TN 366) organized a Technical Talk on "Hardware Threats in SoC" on 25<sup>th</sup> May 2022. The resource person was Dr.Sree Ranjani Rajendran, Postdoctoral Research Fellow at Florida University, USA. The session started with a welcome address by Dr.R.Manimegalai, HoD, Department of CSE who felicitated the gathering. Ms. K. Lakshmi Kalpana Roy, Assistant Professor, Dept. of CSE introduced the resource person. Ms.V.Vilasini, Assistant Professor, Dept. of CSE coordinated the event. Dr.Sree Ranjani Rajendran started with basic concepts of 'System on chip' after which she geared up the students' minds by demonstrating a video describing various stages involved in the manufacturing of chips.

She took the audience to the heart of the talk with a detailed and intricate discussion on various security threats that are introduced during different stages of chip manufacturing. Some of the security threats include Counterfeiting, IP piracy, IC piracy, Reverse Engineering etc. She also precisely indicated the goals behind the introduction of those kind of threats. Then, she elaborated on various solutions and testing methods that are undertaken to overcome the shortcomings of those threats. Finally, the students and other faculty members actively interacted and discussed various details on solutions to hardware threats with the resource person and career opportunities in the domain of SoC during the question and answer session. The technical talk was concluded with a vote of thanks by Ms.Vilasini, Assistant Professor, Dept. of CSE.



The participants along with the Chief Guest Dr. Sree Ranjani Rajendran, Postdoctoral Research Fellow at Florida University, USA during Technical Talk on "Hardware Threats in SoC" held on 25<sup>th</sup> May 2022

#### Hands-on Session on Exploratory Data Analytics using R

A lecture cum hands-on session on "Exploratory Data Analytics using R" was conducted on 25<sup>th</sup> May 2022 as a part of Coder Series by the Department of Computer Science and Engineering in association with Indian Society for Technical Education (ISTE) Students' Chapter (TN366). Totally 48 students of I year BE-CSE attended the event. Dr.V.Bhuvaneswari, Associate Professor, Department of Computer Applications, Bharathiar University, Coimbatore engaged the session. The speaker gave a detailed overview about the big data analytics. She also engaged the students to work on R to get the hands on feel. It helped the students to realize the real essence of data analysing. She also described about the language R from the basics and the hands-on session was conducted using R Cloud. Since the first year students were already trained in Python, they felt comfortable with R and also did their hands-on session with complete interest.



The resource person, Dr. R. Manimegalai, HoD and faculty members of Department of CSE along with the student participants

# Guest Lecture on "VLSI Design for Low power SoC design"

The ECE Association (ECA) and IETE Students' Forum (ISF) organized a guest lecture on the topic "VLSI Design for Low power SoC design" for II and III year students on 15<sup>th</sup> June 2022. Mr. N Sundara Balaji, Director Engineering, Qualcomm India Pvt. Ltd, Chennai, was the resource person. The resource person joined virtually and around 50 students benefitted. The session started with a welcome address by convener Dr. P Vetrivelan, HoD-ECE. The lecture began with low-power SoC design and plans to design low-power circuits.

Clock distribution, different types of voltage scaling, Gate level optimization technique, multi Vdd technique, PowerGating and various low power techniques used in the industry were discussed. He concluded the talk with a brief explanation on the design elements required to design low-power SoCs with Retention Flip Flop and level shifters. The session ended with a 10-minute interactive question and answer session. Student coordinators of the event were Mr Pranuv.R, Vice-President (ECA) and Ms Rama Lakshmi.S, Joint Secretary (ECA).



Mr. N Sundara Balaji, Director Engineering, Qualcomm India Pvt. Ltd, Chennai, addressing the audience on 15<sup>th</sup> June 2022

# **Lecture on Intellectual Property rights for Engineers**

The Department of ECE in association with the Entrepreneurship Development Cell (EDC) & Institution's Innovation Council Organized a lecture titled, 'Intellectual Property rights for Engineers' on 14<sup>th</sup> June 2022. Around 70 students, including the third ECE students who undergo curricular elective course 'Professional Ethics in Engineering' attended the special lecture. The speaker, Mr. H. Sundar Athreya, Assistant Professor KIIT School of Law Bhubaneswar, Odisha, joined via video conferencing and gave various real corporate examples and cases in order to give the students a clear glimpse on the aspects of IPR, which an engineer should be aware. The faculty in-charge of the elective course, Ms. N. Susithra (AP-ECE) coordinated the lecture along with Dr.Manojkumar (Mech) and Mr. Elayaraja (Civil).



Students listening and interacting with Mr. Sundar during the session on "IPR for Engineers" held on 14th June 2022

# Third National Conference on Communication and System Design 2022 (NC<sup>2</sup>SD 2022)"

The Department of ECE in association with IETE, IE(I) and ISTE organized the third National Conference on Communication and System Design 2022 (NC<sup>2</sup>SD 2022) on 11<sup>th</sup> June 2022. The Inaugural function started with a prayer song. Dr. P. Vetrivelan, HoD, ECE department welcomed the gathering. Dr. P Reba, Asso. Professor ECE, Organizing Secretary briefed about the conference. She cited that 33 papers from various institutions will be presented in the conference out of around 60 papers received for review. Dr. G. Chandramohan, Principal, PSG iTech, delivered the inaugural address he encouraged the participants to make use of this conference to get connected with the research community and incorporate the new ideas and emerging concepts in their project work. He also appreciated the efforts taken by the faculty members for organizing the conference.

Dr. P. V. Mohanram, Secretary, delivered the felicitation address and he insisted on the importance of research publications. He also informed the participants about the new journal under publication by PSG CARE, indexed by UGC. Mr. K. Paldurai, Organizing Secretary, proposed the vote of thanks. Later in the keynote talk by Mr. KRS Ravikumar on "Machine Learning in Communication Design", the resource person spoke on the significance of incorporating intelligence while building communication systems and latest technologies like LIDAR etc.

He also explained the design and construction of microwave components like resonators, miniaturization of microwave components and characterization of materials used in microwave components. He also encouraged the participants that the research outputs can be converted into products by establishing incubation centres.

The topic of his speech was "Ever-evolving World of Trends and Challenges". He explored AI's abilities, accomplishments, and its contribution to human society. He also pointed out that AI will require a different skill set and will open up more job opportunities. He shared his experience as a software engineer in the industry. Also, he shared how technologies are evolving over the decades and he advised the future engineers to be flexible to work with the new technologies. At the end, participants had a discussion with the speaker about the social impact of AI and the adverse effects of AI.33 papers were presented by students and faculty from various institutions.

Among them, 12 papers were presented in Track I – Communication Systems track, 6 papers were presented in Track II- VLSI track and 15 papers were presented in Track III - Applications of machine learning. Three panels were arranged, and chaired and co-chaired by Professors from PSG iTech, PSG College of Technology and Industry experts.



Dr. P V Mohanram, Secretary, Dr. G Chandramohan, Principal, PSG iTech along with Dr. P Vetrivelan, HoD, ECE Department and organizing team of third National Conference on Communication and System Design (NC<sup>2</sup>SD 2022) releasing the Conference Proceedings on 11<sup>th</sup> June 2022

# **Inauguration of CSI PSG iTech Student Branch**

PSG iTech in association with the Computer Society of India Coimbatore Chapter, installed the CSI PSGiTech Student Branch on 06<sup>th</sup> June 2022 inaugurated by the Chairperson of CSI Coimbatore Chapter, Dr. E. Chandra Blessie. The idea behind the inception of the CSI Student chapter at PSGiTech is to hone the skills of the students. The activities conducted for the students associated with the Society include lecture meetings, seminars, conferences, training programs, programming contests, and practical visits to installations. CSI has a strong Educational Directorate that undertakes activities related to the Certification of professionals related to the latest technologies. Dr. R Manimegalai, Professor and Head, Department of CSE, welcomed the gathering and motivated the students with her own experience across various professional societies. The student got insights regarding the EDA tool, VLSI Society of India, and many more. Following this, Sandeep V, Chairperson of PSGiTech's CSI Student Branch introduced the chief guest.

Dr. E. Chandra Blessie, Chairperson of CSI Coimbatore Chapter inaugurated PSGiTech CSI Student Branch. She gave a brief description of the initiatives of the Computer Society of India which promotes and improve the quality of life and growth in the life of Computer Science professionals and student. Also, she told how different areas of the field which involve Computer Science and being a part of CSI will be great opportunities to interact with eminent Professional people in and around the world. Dr. D Sivaganesan, CSI Student branch coordinator introduced the newly appointed office-bearers of CSI PSGiTech Student Branch. Finally, S Rathan Aswath, Secretary, PSG iTech's Student Branch proposed the vote of thanks.



Dr. R Manimegalai , CSE Department Head, Dr. E Chandra Blessie, Chairperson-CSI Coimbatore Branch along with faculty coordinators and Student representatives of PSGiTech CSI Student Branch during the Installation Ceremony of CSI Student branch on 06<sup>th</sup> June 2022

# **Guest Lecture on "How to get a Patent?"**

PSG Institute of Technology and Applied Research, in association with the Kalam Program for IP Literacy and Awareness (KAPILA), Ministry of Educations Innovation Cell, Indian Society for Technical Education (ISTE), All India Council for Technical Education (AICTE) and Institutions innovation council (IIC) organized a guest lecture on "How to get a Patent?" on 21<sup>st</sup> June 2022. Dr.M.Alagar, Research Consultant delivered the welcome address. He emphasized the importance of getting patent.



Dr.M.Alagar, Research consultant, delivering the welcome address during the guest lecture held on 21st June 2022

Mr. Udhaya Shankar, Assistant Controller of Patent, Patent Office, Chennai, delivered the lecture on "How to get a patent?" In his address, he elaborated on "Intellectual property rights" and the importance of protecting knowledge. Around 24 faculty members and 22 students of PSG iTech have participated in the session. Mr.D.Venkatesh, Asst. Professor (Sr.Gr.), Dept. of ECE proposed the vote of thanks.



Dr. M.I.Abdul Aleem, Professor and Head, Dept. of Civil Engineering presenting a memento to the chief guest on 21st June 2022

# **Workshop on Intellectual Property Rights**

The Workshop on "Intellectual Property Rights" was organized on 09<sup>th</sup> April 2022 by EDC Cell. The Resource person of the program, Dr D. Balaji was a recognized Patent Agent & Head- Centre for IPR, KPRIET, Coimbatore. He explained the ways and means to improve our intellectual knowledge and also explained about, how to safeguard our inventions. Students went on discussing patent filing. Various doubts on Patent, design and copyrights were clarified by the resource person. The guest shown various patents registered. To motivate the students, he has shown few patents on our daily usage materials such as peeler, sticky notes, etc. The EDC coordinator Mr.S.Elayaraja, AP (Sl. Gr), Civil Engg. has organized the program.



The chief guest during the interaction with the students held on 09th April 2022

### Lecture on "Introduction to CFD"

The Lecture on "Introduction to CFD" was conducted on 26<sup>th</sup> May 2022 for II and III year Mechanical Engineering Students on an online platform. Dr Sandeep Mouvanal, Senior researcher, Nottingham University was the resource person. The Invited lecture began with the welcome address by Mr Keerthivasan, III year Mechanical engineering department by welcoming the chief guest, participants and detailed overview of the chief guest and his technical background. The speaker started with the background of CFD software and its importance. Computational fluid dynamics (CFD) is a technique of flow predictions by numerically solving governing equations of fluid flows. Governing equations are conservation of mass, momentum, heat, and mass transfer.

Numerical methods are used to convert partial differential equations into algebraic sets of equations. After solving iteratively using computer programs, engineers visually predicted velocity, pressure, and temperature. Programming tools like C or C++ need to be learned by CFD users initially. Familiarity with CFD software is essential for geometry, meshing, simulation, and post-processing. Parallel computing may need for complex industrial problems, large eddy simulations (LES), and DNS. Most CFD solvers are developed in C or C++ which are easy to run multiple processors (HPC). Python or scripting languages is used to control the simulations on hardware. Finally, the session ended with a vote of thanks by Mr Kabilan, II year Mechanical engineering student.



Dr Sandeep Mouvanal, Senior researcher, Nottingham University, delivering the guest lecture titled "Introduction to CFD" on 26<sup>th</sup> May 22.

# Talk on "The Wandering Earth"

The Astronomy club of PSG Institute of Technology and Applied Research, Coimbatore conducted a talk event on the topic "The Wandering Earth" on 28<sup>th</sup> May, 2022 between 11 am to 12:30 pm in the seminar hall of Civil block (E5). Dr M Chrisphin Karthick, Scientist-C & Deputy head SCOPE, Indian Institute of Astro Physics (IIA), Bangalore was the chief guest for the event. The event was graced by the presence of Dr G Chandramohan, Principal, Dr M R Srinivasan, HoD Physics and the faculty In charge of Astronomy club Dr S Maruthamuthu, Associate Professor, Department of Physics, along with the other department faculties and 70 students.

The event was coordinated and organized by the club President Mr Manish R K of 3<sup>rd</sup> year Civil, the Vice President Ms Gowsika D of 3<sup>rd</sup> year ECE, the Secretary Subiksha M of 3<sup>rd</sup> year Civil, the Joint Secretary Ms Mirdhulaa K B of 2<sup>nd</sup> year EEE, the Treasurer Mr Pandiaraj of 3<sup>rd</sup> year Civil and student members of Astronomy club. The MC was elegantly done by Ms Aakarshna, 1<sup>st</sup> year EEE and Ms Dharsana J, 1<sup>st</sup> year EEE. The moments of the event were captured by Mr Jarvis Chellizelig R of 1<sup>st</sup> year Mechanical.



The Talk on "Wandering Earth" held on 28th May 2022

The event started with a soulful prayer song by Ms Hari Nandhana, 1<sup>st</sup> year EEE. A short video was played for the audience about the "Stargazing Treat" event which was held on 27<sup>th</sup> May - Friday from (8 pm to 10 pm) on E7 block roof top in which 80 students from (I to III year participated). The video also showed the same event, which was continued on 28<sup>th</sup> May - Saturday from (4 am to 6.30 am) in which 20 students participated to view the planets using the Celestron Nexsatar 4SE and Celestron Astro Master 130 EQ telescope.

The stargazing Treat was felicitated by the chief guest and the faculty In charge along with the support of Mr Naveen Prakash M S of 1<sup>st</sup> year Mechanical, Mr Vetriselvam S B and Mr Dhruwin Raj D of 1<sup>st</sup> year Civil. The presidential address was delivered by the Principal, Dr G Chandramohan followed by the chief guest introduction, by Ms Gowsika D of III EEE. The chief guest Dr M Chrisphin Karthick started to address the gathering by 11.30 am by explaining the various concepts in Astronomy.

To start with, he spotted different fields in Astronomy—Solar studies, planetary sciences, Galactic research, Extra galactic research, cosmology (Big Bang), Theoretical studies, Instrumentation and Celestial Mechanics. He then highlighted the fact, how the earth is just a tiny spot by giving the "The Pale Blue Dot", photograph of Earth taken Feb. 14, 1990, by NASA's Voyager 1 at a distance of 3.7 billion miles (6 billion kilometres) from the Sun.

He also highlighted the recent first image of black hole known as Sagittarius A\* that was produced by a global research team called Event Horizon Telescope Collaboration using observations from a world-wide network of radio telescopes. He played many short videos that gave the basic understanding of the relative motion of celestial bodies in the space that highlighted the fact that nearest objects move faster relative to the farthest objects. The Sun rises in the south and sets to the southwest. Finally, he concluded by giving various interesting insights on Astronomy.

## **Students Achievements:**

# Fluid Power Challenge - 2022

Fluid Power Challenge 2022, a national-level event was conducted by the Fluid Power Society of India (FPSI) on June 10th 2022.A team of four students Ms Thaarikaa N, Ms Hareni M, Ms Janani M, Ms Preyaa Dharesheni N from 3<sup>rd</sup> year Mechanical Department guided by faculty Mr M Senthilvel (AP, MECH) participated in the Design challenge. The Innovation Topic presented was the design and fabrication of a "Gravity Fed Electro Pneumatic Portable Can Crushing Machine". PSGiTech team bagged the Second Prize and received the "Yoganarashima Award for Innovation in Design 2022" on 18<sup>th</sup> June 2022 at Bangalore, Capitol Hotel on Fluid Power Professionals Day 2022. The team also received a cash prize of Rs 5000.



PSGiTech team bagged the Second Prize and received the "Yoganarashima Award for Innovation in Design 2022"on 18th June 2022

# **Dhruva 2022**

The Battle of Bands competition Dhruva 2022 a national-level techno management cultural fest was conducted by Karpagam College of Engineering, Coimbatore on 04<sup>th</sup> June 2022. Students of iTech Music Club, Mr JagatheaswaranS (4<sup>th</sup> B.E. Mech), Mr Sanjit M M, (4<sup>th</sup> B.E. ECE), Mr Kiritin Srinivas R (4<sup>th</sup> B.E. ECE), Mr Sreehari Prasad K (3<sup>rd</sup> B.E. Mech), Mr Athul Krishna R (3<sup>rd</sup> B.E. ECE), Mr Rama Meyyappan C (3<sup>rd</sup> B.E. ECE), Ms Dharshini S (3<sup>rd</sup> B.E. ECE) and Ms Nehya Ragavan V A (2<sup>nd</sup> B.E. CSE) have participated in the competition and bagged 2<sup>nd</sup> prize with a cash prize of Rs. 5000.



iTech Music Club performing on the final stage @ Dhruva 2022

# Sight on Site

Students of 2<sup>nd</sup> year B.E. CSE Mr Arvind Madhavan, Mr S. Sai Santhosh and Mr K. Hariharan participated in the Sight on Site event and secured 1<sup>st</sup> place with a cash prize of Rs. 2000/- conducted at CARTE BLANCHE organized by Computer Society of MIT, Madras Institute of Technology, Anna University, Chennai on 14<sup>th</sup> and 15<sup>th</sup> May 2022. In another competition Adzap, Mr Arvind Madhavan has secured the Runner-Up place with a cash prize of Rs. 1000.

## E-GRAPHIE 4.0

Students of IB.E. CSE (PSG iTech) participated in E-GRAPHIE 4.0 national-level technical contest conducted by the Department of Mechanical Engineering at Jansons Institute of Technology, Coimbatore on 18.6.2022. Mr Sarvesh S M, Mr Parthasarathi M participated in E Graphie 4.0 (Quiz) and secured Second Runner-Up with Certificate and Cash Prize Rs.500.

## Event Participation at Anna University, Regional Campus, Coimbatore

Students of I B.E.CSE(PSG I Tech) participated in the One-day national-level Symposium GENIO 2K22 organized by the Department of Computer Science and Engineering held at Anna University, Regional Campus, Coimbatore on 09<sup>th</sup> June 2022. Mr Renil Shaji, Mr Srinitish.D participated in GENIO 2K22 (Marvel Trivia) and secured 1<sup>st</sup> Place; Mr Harshavardan.K.K participated in GENIO 2K22 (Competitive Coding) and won Second Prize. Mr Nirmaliswaran, Mr Isaac Abraham, Mr Suriya Sampathkumar participated in GENIO 2K22 (Debugging) and won First prize; Mr Harshavardan.K.K, Mr Karthikeyan.A.S and Mr Vigneshwaran also participated in GENIO 2K22 (Debugging) and won Third Prize.



Mr Nirmaliswaran, Mr Isaac Abraham and Mr Suriya Sampathkumar of First year CSE received a certificate and medal from Dr.J.Preethi, Assistant Professor, Anna University on 09th June 2022

# **Genio - National Level Symposium**

Mr Shyam Vikram S of III ECE has participated in Genio, a National-Level Symposium conducted by the Computer Science department of the Anna University- Regional Campus on 9<sup>th</sup> June 2022. He secured the first place in the trivia along with his teammates Mr Renil (I CSE) and Mr Sri Nithish (I CSE). There were about 50 participants.



Prize winners receiving certificates from the event organisers

# **TNSI Competition**

TNSI (Tamil Nadu Student Innovator) is a flagship event of EDII-TN to promote student Innovators. The program was organized in Four Stages - Awareness Program, Ideation Program, Bootcamp Program & Final Pitching at EDII, Chennai. ZIG-MET, an innovative idea, was proposed by Ms Aswathi R, Ms Prakalya E and Ms Swedha R of III B.E ECE. It is about a smart and safety helmet equipped with multiple sensors that help to detect toxic environmental conditions, and a personal area network that connects all the workers to the base station. Among the 4067 ideas received, five teams were selected from Coimbatore Zone and cash prize of Rs.One lakh was awarded. Team ZIG-MET is one among the five teams.



Students receiving certificates from the Event co-ordinators of Tamil Nadu Student Innovator award

## PSG iTech Students at KPR Engineering College for Technical Symposium

The students of II B.E. ECE participated and bagged several prizes in the national-level techno-cultural fest FIESTAA '22 held at KPR Engineering College during 8<sup>th</sup> and 9<sup>th</sup> April 2022. Ms.Amirtha and Ms.Jahnavi won the first prize in Ideathon contest and second prize in Project presentation. Ms.Kaniskaa and Mr.Sriniketh won the second prize in Hackathon. Also, Ms.Kanishka won the first prize in JAM event conducted by the Toastmasters Club.



Principal congratulating the winners of "National Level Techno Cultural Fest"

# National level Technical Symposium 2k22 at SREC

Ms. Keerthana Vasan S (II Year ECE), Ms. Subiksha E (II Year ECE), and Mr. Harshavardhan M (II Year ECE) participated as a team in the ROBOFIESTA, a national-level technical symposium, organized by the Department of Robotics and Automation of the Sri Ramakrishna Engineering College (SREC), on 12<sup>th</sup> May 2022. They secured the first place and received a cash prize of Rs.1000 in the event IDEATHON, where they presented their innovative and technologically advanced ideas for the given problem statements. Around 50 teams participated in the event, which had two rounds.



iTech students receiving the certificates and prize money during the technical symposium

# Palamalai Trekking-2022

The NSS and Eco Club of PSG iTech jointly organized a trekking to Palamalai on 12<sup>th</sup> April 2022. During the trip, students visited a temple and served food to the tribes living in the hill and donated clothes. Also, the team visited Jeeva Karunya Ashramam to give the donation. Dr.P.Chinnaraj, Dr.R.Ravikumar, NSS Program Officers and Dr.A.Kumaravel, Eco Club co-ordinator have coordinated the event.



Trekking to Palamalai

# **Awareness Program and Plastic Cleaning Drive**

The ECO Club along with NSS of PSG iTech has organized a Plastic Cleaning Drive at Anuvavi Subramanyaswamy Temple followed by Nature Awareness Program at the Nilgiri Biosphere Nature Park on 11<sup>th</sup> May 2022. The Volunteers reached the destination, Anuvavi Subramani Temple, Anaikatti and they cleaned the surrounding areas filled with plastics and disposed them safely. They took off from Anuvavi Subramani temple and reached the Nilgiri Biosphere Nature Park at 12:45 pm. They explored the biosphere nature park and learnt about the flora and fauna of the surroundings. Dr.A.Kumaravel and Dr.R.Ravikumar, Eco Club Coordinator and NSS Program Officer coordinated the event.



Awareness Program and Plastic Cleaning Drive at Anaikatti

### **Orphanage Visit:**

The NSS and the Drawing and Painting club jointly organized an orphanage visit to Universal Peace Foundation, Nallakoundanpalayam, Annur on 13<sup>th</sup> May 2022. Around 35 students along with Dr.P.Chinnaraj, NSS PO and Ms.M.Deepa, Drawing and Painting club Coordinator participated in the program. Students collected and donated Rs.23,850 and groceries(worth Rs.1000) to the Orphanage for the welfare of Students and old age people and also they served lunch to all.

There are 392 orphans and 10 office assistants. Volunteers taught drawing and painting to the children and spent time with mentally-challenged people. The program was a rewarding experience for the students.



Visit to Universal Peace Foundation on 13th May 2022

# Mass Cleaning Campaign

The NSS team of PSG iTech conducted a 'Campus cleaning program' on 01<sup>st</sup> June 2022 from 11.45 am to 12.45 pm in and around the college premises. Around 25 NSS volunteers participated and collected 15 kg of garbage. Dr.P.Chinnaraj, NSS Programme Officer organized the program.



Campus cleaning program

## Mass Cleaning Program in Singanallur Bus Stand

The NSS team of PSG iTech participated in the 'Mass Cleaning Program' in Singanallur Bus Stand, which was organized by Coimbatore Corporation on 11<sup>th</sup> June 2022 from 8.30 am to 11.30 am. Assistant Commissioner of Coimbatore Corporation addressed the gathering and requested the students to maintain the city clean and healthy. Forty one NSS volunteers have attended the programme. Dr.P.Chinnaraj, NSS Programme Officer organized the Mass Cleaning program. NSS volunteers have collected 25 kg. waste and also water washed the bus stand.



Mass cleaning program

### **SBI Life Insurance**

Staff club organized a talk on "SBI – Future Guarantee Plan with Fixed Interest Rate" on 26.04.2022. Around 45 faculty and staff members participated in the program. Mr.S.Rathakrishnan explained the benefits and plan of the above-mentioned scheme.



Talk on "SBI – Future Guarantee Plan with Fixed Interest Rate" on 26.04.2022

# **Faculty acted as a Resource Person:**

# Workshop on "Farm Machinery"

Dr.M.Devasena, Associate Professor, Department of Civil Engineering served as the special guest for a demo Workshop on "Farm Machinery" organized jointly by Coimbatore's Farmers Association and STIHL Coimbatore at High Tech Organic Farming, Coimbatore on 04<sup>th</sup> June 2022. Around 25 farmers participated in the workshop along with resource persons from STIHL.



Special Guest in the Workshop on "Farm Machinery" held on 04th June 2022

# Workshop on "Sustainable Living"

Dr.M.Devasena, Associate Professor, Department of Civil Engineering served as a resource person in the Workshop on "Sustainable Living" held at Gia Mantra Global Village, Tiruvannamalai from 20<sup>th</sup> to 29<sup>th</sup> June 2022. The workshop explored various aspects of sustainable living including sewage treatments for stand-alone homes.



Students' participation in the workshop