

KCG COLLEGE OF TECHNOLOGY
KARAPAKKAM, CHENNAI 600 097

ANNUAL REPORT FOR THE ACADEMIC YEAR 2013-2014

I would like to begin by quoting the words of our late founder Dr. KCG Verghese , “The role of an educator is to bring out the best in every individual and that of an educational institution is to provide the best facilities and the right ambience.” This 16th college day is an important occasion for all of us to rejoice, a day to celebrate the laurels achieved in varied fields, a day to feel proud that our commitment to excellence has resulted in so many success stories. At the same time, it is a day to rededicate ourselves to our founder’s vision and commit ourselves to overcoming all challenges that are bound to rise.

On this occasion, I am honoured to present the annual report of KCG College of Technology for the academic year 2013 – 2014, and place on record our remarkable achievements and successful journey towards excellence . KCG College of Technology established in the year 1998 offers B.E programmes in Mechanical, Civil, Electrical & Electronics, Electronics and Communication, Electronics and Instrumentation, Computer Science and Aeronautical Engineering and B.Tech. programme in Information Technology. The College also offers Post Graduate programmes in MCA (Master of Computer Applications), ME (VLSI Design), ME (Engineering Design) and ME (Computer Science), ME (Communication Systems), ME (Manufacturing), ME(Power Electronics and Drives) With 3000 students, 206 teaching staff and 105 non-teaching staff, KCG College of Technology is an Institution approved by AICTE and affiliated to Anna University. Four of our Engineering departments have been accredited by National Board of Accreditation (NBA). The teaching staff comprising of highly qualified persons from academia and the industry include 21 faculty members with Ph.D qualifications.

ISO Report

The ISO Continuous Assessment visit was conducted on 29th November 2013 for the renewal process. The audit was a success and KCG College of Technology was ISO 9001:2008 recertified. It has been decided to revise the documentation of ISO procedures complying with NBA Accreditation process. It has also been planned to conduct an audit training program for internal auditors.

Academic Highlights

I am happy to announce that our tally of University Ranks rose to 25 this year. Shwetha P of EEE Department did the college proud by securing the third rank in Anna University. Nandhini S of Aeronautical Engineering Department secured Ninth Rank. Over all EEE Department secured two ranks, Aero four ranks, while Mechanical Engineering department and Information Technology secured one rank each. Narmadha N of M.E. - Communication Systems secured First Rank in Anna University and Praveen Kumar A of M.E. – Engg. Design secured First Rank in Anna University. ME students of the VLSI and Communication Systems got 3 and 4 university ranks respectively in the academic year 2013 -2014. ME students of Computer Science secured 4 university ranks and MCA students secured 5 University ranks. My congratulations to all the rank holders.

I would also like to extend my hearty congratulations to the faculty members who received their Doctorates this academic year: Dr V Subbaroyan, Professor – ECE, Dr J Frank Vijay, Professor - IT, Dr R Dhanalakshmi, Professor - CSE, Dr P Deiva Sundari, Asso.Prof. - ME-PED, Dr C Emylin Shyni, Asso.Prof. - CSE.

Important events at KC Tech

The year saw various key days being remembered and celebrated in the campus:

- **Orientation Day:** The First year students (Management Quota) were given a warm welcome on 17 July'13 and (General Quota) on 31 July'13. The chief guests were

Ms. Hema Gopal, Vice President, TCS and Rev. E. James Daniel, Former Principal, Scott Christian College, Nagercoil.

- **Founder's Day** was celebrated on 20.06.2013. Faculty and students from the various institutions of the Hindustan Group were present. Rich tributes were paid to the Founder Chaiman Dr. KCG Verghese. Shri C Sarat Chandran, Director, Indo-Australian Chamber of Commerce, Chennai was the chief guest.
- **Teacher's Day** was celebrated on 5 September. The chief guest was Ms. Hema Gopal, Vice President, TCS. The occasion was marked by a debate for staff in tamil which was judged by Mr Santhanakrishnan, HoD-Tamil Department, Annai Violet College of Arts and Science.
- **Engineer's Day**
- **National Education Day** was celebrated on 11 November
- **National Science Day** was celebrated on 28 Feb'14. To promote better understanding of scientific concepts, and to encourage scientific thinking among students, Science and Humanities Department, arranged various events over a week. The Chief Guest on the final day was Dr. D Mohan, Professor of Chemistry and Director, Centre for Faculty Development, Anna University.
- **Women's Day** was celebrated on 7 March 2014. Competitions in English (students) and Tamil (staff) were held on the topic 'Women's Safety: whose Responsibility?'. Ms Padma Shankar, eminent violinist was the Chief Guest and provided a great opportunity for the female staff and students to relax and have fun.

Student Achievements

KCG students have proved their mettle and caliber in varied fields.

- Venkateswaran, III Year ECE, submitted a project on "SPI QUAD" & got selected for entrepreneurship development cell. A fund amount 2.5 lakhs has been sanctioned. He also

won 2nd Prize in Robo Champions League Southern Level And 1st Prize in Accelero - Botix Zonal Round Conducted By Technophilia.

- Arun C, Harish J., Gopi Krishna V.R. and Kavin C, III year- CSE have won the second prize in spent Quiz in the national level symposium SARANG'14 in IIT, Madras on 23-01-2014.
- Jayaprakash of III Year ECE won the First Prize for a paper on “QR Code on Stenography” at Krishna Engineering College, Vellore.
- Mr.Zubair M.D.and Mr.Nithin Kumar Vashishth, IV year CSE presented and won second prize for the paper “Eye Gesture Analysis for the prevention of Road Accidents” and first prize in Quiz in the national level symposium Kerberos'13 at Sai Ram Engineering College.
- Ms.Hema E., III year CSE won second prize for the Quiz in the national level symposium Xploits 2013 at Valliammal Engineering College.
- Mr.Rohit John Kurian, IV year CSE secured First in the national level symposium Technokratz'14 at Anand Institute Of Higher Technology for his paper "Signature Authentication In Smart Phones" and won second prize in the National Level Symposium Fomra Quest 2014 at Fomra Institute Of Technology for his paper "Signature Authentication".
- S.Shamili, II Year EEE secured 1st prize for her paper “A Universal Multistage High Brightness LED Driver for Street Lighting Application” in Sri Sai Ram Engineering college, August 2013. A paper on “Design, Fabrication and testing of a regenerative strut” by M N Pragadish, IV year, Mechanical, has been accepted for SAE World Congress, Michigan, USA in April, 2014.
- S. Elanthamizhan of II year Aero, won first place in Robotics Championship conduct at Sri Venkateswara Engineering College by IIT, Delhi in association with Technophilia.
- Patrick Pious R, III Year EEE secured 2nd prize for her paper “Application Of Power Generated From Road Speed Breakers” in VIT institute of Technology, February 2014.
- Patrick Pious R & Payal Dasbarma III Year EEE secured 2nd prize in presenting a paper “Application Of Power Generated From Road Speed Breakers” in Sri Sai Ram institute of Technology, August 2013.

- Mr. S.Vignesh of II year IT bagged the “IET Trend Setter Award” on 21.09.2013.
- Mr.Logesh .S of II year IT won Second prize in Technical Symposium(WISTERIA) on 04-10-2013.
- Ms.Priyanka.V of II year IT won Second Prize in “Software debugging” in Panimalar Engg. College.
- Mr.Harikrishnan M & Athi Arun Kumar S of IT / IV won First Prize in PC Assembly in Symposium conducted at MNM Jain Engg. College.
- Mr. Melvin Paul Vikas of IT / IV won Second Prize in PXLN Event in Symposium conducted at MNM Jain Engg. College.
- Mr. K.Gautham of IT / IV bagged Award for Best student by Tamil Nadu Govt. on 26.02.2014.
- Mr.K.Gautham of Final Year IT got the judges choice award and people’s choice award for startup entrepreneurs in TATA First dot 2013.

Faculty Achievements

I am proud to say that students at KCG are enabled and empowered by a team of dedicated and highly qualified faculty who are constantly engaged in updating their knowledge through intense research. This has resulted in numerous publications by our faculty in reputed international and national journals. This academic year saw more than fifty two publications by our faculty. Over and above this, they have presented research papers at numerous international and national conferences.

Our faculty have also served as resource persons at various conferences and seminars and delivered guest lectures. They serve as reviewers and editorial board members of international and national journals. A few of them are also guiding doctoral students at Anna University and Hindustan University.

Three of our faculty members have received awards from external institutions:

- Dr .P. Deiva Sundari of Electrical and Electronics Engineering Department has been selected as **Honorary Secretary** in IET CLN Women Engineering Forum. She received the Teaching Award in Engineering by Staffordshire University, UK & Education Matter for Securing 3rd Rank in Anna University (2009 -2013).
- Dr. C.Vaithilingam & Dr .P. Deiva Sundari of Electrical and Electronics Engineering Department received Man & Woman Engineer Awards respectively from the Institution of Engineering and Technology (IET), United Kingdom.
- Dr. R. Amrutha of S & H Department was awarded 'Senior Educationist and Scholar' from NFED (National Federation of Entrepreneurship Development).

Funded Projects

The Civil Engineering Department, though a comparatively new Department has already three funded projects: Two IEDC students project for Rs.2,00,000/-, and one DST funded project for Rs.1,00,000/-

Guest Lectures

The Civil Engineering Department arranged various guest lectures on "Construction Practices, Pavement Engineering Salient Aspects, Traditional vs Modern Irrigation Technology, Green Building, Geology and its applications".

The Computer Science and Engineering Department arranged guest lectures by experts on Wireless Technologies - 3G & Above, Networking Java, Open Source Cloud, Wireless Adhoc and Sensor Networks, Network Security, Algorithms, Risk Management, Query Optimization, Cryptography.

The Electronics and Communication Engineering Department organized a number of workshops and lectures for their students on Career & Personality Development, Career Management, Becoming Creative, PCB Design on Orcad, Image and Video Processing using MATLAB, Robotics, Recent Advancements in the Field of Communication Engineering, Embedded System Workshop,

Network Simulator Version 2, and VLSI Technology and its Applications Workshop, Glimpses of Indian Space, Embedded Technology and ARM Certification - GLYTON Solution.

The Electrical and Electronics Engineering department organized a number of lectures on Recent trends in Electrical Drives & its application, Energy conservation & Electrical Safety, Recent Trends in Power Electronics & its application, Electrical Systems in Thermal Power, Embedded System & PLC, Netpreneurship, Transistor & its Applications, The Smart way to reduce the Global Warming, and Embedded & PLC Systems.

The Information Technology Department conducted a number of workshops and guest lectures on Face book hacking and investigation scams, Research in Wireless Sensor Network using NS3, Resume Writing, Career Growth Development, Grid computing and its Applications, Software Testing using Selenium Tool, Linux Essentials, Operating System, Android Application, Network Security, Combinational logic design using divide & conquer, and JAVA & J2EE.

The Electronics and Instrumentation Engineering Department conducted workshops and guest lectures on Instrumentation Engineering, Embedded System and PLC, Analog Electronics, PCB Design, Supply Chain Management, Different types of control in Process industries, Technology Management, Instrumentation Design,.

The Mechanical Engineering Department organized “**Two days BAJA Software Workshop – CARSIM**” on July 11th & 12th 2013. Students from various colleges around Tamil Nadu were participated. The Chief Guest of the Workshop was Mr. Arun Sundaresan Application Engineer, Xitadel Technologies, Bangalore. It also organized guest lectures on Changing Trends in Automobiles, 3 D Design Challenge, Six Sigma, Supply Chain Management, Introduction to design components, Application of failure mode analysis in Industry, Gear and Gear box design in Industry, Belt and Clutch design and Project works – Consultancy projects.

The students were also provided real-time industrial exposure through visits to leading multinational companies as well as in-plant training.

National Seminar

The Department of Mechanical Engineering organized a “**National Seminar on Frontier Techniques in Automotive Manufacturing**” during 9th and 10th October 2013. Mr. Swithun Manoharan, Vice President, TAFE inaugurated the session and delivered a talk on the challenges in Farm Machinery Manufacture. 10 Sessions were held and nearly 60 participants from various institutions participated in the seminar. Resource persons from premier organizations like Volvo, Ashok Leyland - Nissan, Royal Enfield, Hitachi, Tafe, Ford India, Schwing Stetter participated and delivered lectures on various topics. Mr. Arthur Devadawson, General Manager of Ford India delivered a valedictory lecture.

SEISCON International Conference

IET Chennai Network's three day 4th International Conference SEISCON 2013 (Sustainable Energy and Intelligent Systems Conference) was organized by KCG from 12 to 14 December. The chief guests were **Mr. Ashok K. Baweja** Head QuEST Global Defense Engineering Services, Former Chairman, Hindustan Aeronautical Ltd. (HAL), Bangalore and **Mr. S. Gomathinayagam** Executive Director, Centre for Wind Energy Technology, Autonomous R&D (CWET MNRI, GOI), Chennai. A total of 275 papers were received. After a six stage review by international and national reviewers 75 papers were selected for presentation.

SEISCON 2013 saw many renowned academicians and industrialists from around the world presenting their experience and views on recent trends in sustainable energy and intelligent systems as keynote address in various paper presentation sessions. Dr. Theo Gevers, Professor, University of Amsterdam, The Netherlands, Dr. C. Palanichamy, Professor, Curtin University, Malaysia, Dr. Selvakumar Manickam, Deputy Director, National Advanced IPv6 Centre, University Sains Malaysia, Dr. Padmanaban Ramasamy, Director, Nexgtech Wireless Systems Pvt. Ltd., Bangalore, Dr. Kandhasamy Ganapathy, Ford Technology Solutions Ltd., Chennai, Dr. Niladri Chakraborty, Professor, Jadavpur University, Kolkatta, Mr. Vineeth Vijayaraghavan, Founder and Editor, Panchabuta Renewable Energy and Cleantech, Chennai, Mr. P.S. Senthil Kumaran,

Associate General Manager (R&D), HCL Technologies, Chennai, Ms. R. Bhanumathi Rasappa, Vice President, Polaris Financial Technology Ltd, Chennai to name just a few of the experts who shared their knowledge.

Placement Cell

KCG Students are trained from the first year by external agencies to prepare them for placement. The Training Cell has designed the programme offered through the eight semesters systematically to instill employability skills in the students. The Campus Placements for 2014 batch of B.E / B.Tech. / M.E / MCA students started on a pleasant note. INFOSYS TECHNOLOGIES, as usual, in the Day 1 status, recruited 58 of our students on 09th October, 2013. As on 12th February 2014, 9 Companies have recruited 82 students. Interview processes were held in our campus and at the office of the companies.

Some of the companies, besides Infosys, which have recruited our students, are Sanspareil, KJK Meister Honen and Vinayaka Infotech. Our students also attended the placement drives organized by TNSLPP of Anna University. Students have attended interviews at Sanmar, Sensiple Solutions and Oxlame. This year on / off campus placements will continue beyond March.

i-cell & e-cell

Our college has a very productive i-cell and e-cell. A zonal level Workshop and competition on 'Autonomous Robot ' of Robotryst 14 was conducted on 3rd & 4th October, 2013 in association with IIT, Delhi and Robosapians About 90 students of First and second years students attended the programme. Five teams were selected for next level of competition.

M N Pragadish IV year, Mechanical Engineering department, applied for provisional patent for his innovation 'Hybrid Shock Absorber' – '4306/CHE/2013'. A workshop on "Experience the entrepreneurship excitement" was conducted for first year B.E./ B.Tech students by Ms.Radhika Shankar, Wise Owl Consultancy, Hyderabad on 14th August, 2013. Students entrepreneur Mr.Vignesh and Mr.Sri Prakash of IVB.E. CSE running their business "Landmark Caters"

participated in the Global student entrepreneur award at Bangalore on 24th August, 2013 and ranked fourth at the Regional level.

KCG Bazaar, the annual event of the IEDC was held on 15th and 16th March, 2014 serving as a platform for the Engineering students to hone their business and trades skills. The Bazaar attracted 240 students to test their entrepreneurial potential. The Bazaar had footfall of over 4600 visitors who encouraged the budding entrepreneurs with a purchase to the tune of Rs.2.50 lakhs.

Young Minds Innovation Challenge (YMIC)

Young Minds Innovation Challenge (YMIC), an inter college / inter school project expo, was spearheaded by DST supported Innovation and Entrepreneurship Development Centre (IEDC) of KCG College of Technology on 24th and 25th Jan 2014. The event focused on merging innovations and ideas with practicality and encouraging entrepreneurship in school and college students and was completely managed by a KCG student startup Enchanter Corporation which had emerged from IEDC two years ago.

The event was inaugurated by the Principal Vice President of ITCOT, Shri.P.Mishra who expressed that students needed to move from the employment mindset to creating employment opportunities. Students from as many as 40 schools and colleges from around the city participated and displayed innovative ideas. The event focused on issues such as alternative energy, rural education, safety of women, technological aid for disabled and waste management.

Cultural Report

Students participated actively in various inter-college cultural events held by various colleges nationwide, like Techno Cultural Fest Elastoplaz 2013 conducted by Madras Institute of Technology, Saraang 2013 conducted by IIT Madras. Festivals like Christmas and Onam were celebrated on a grand scale.

Our students have been winning at various MUN's which are simulations of the United Nations. Prathik Bathija, III year Aeronautical Engineering department won The Best Delegate (1st Prize) at

MUN conducted by Christ University Bangalore, and Marvin Diaz of II year Aero secured High Commendation (2nd Prize) for the same event. At the Deccan Summit conducted by CMR Hyderabad, Marvin Diaz of II year Aero won The Best Delegate (1st Prize) while Prathik Bathija , III yr Aero secured High Commendation (2nd Prize). At the MOP Vaisnav MUN, both Prathik Bathija and Marvin Diaz won High Commendation (2nd prize).

Ayush of First year Information Technology came first in English Extempore at MOP Vaishnav College. Delvin First year Mechanical Engineering came second in English Speech competition conducted by Tamil Nadu Science Centre at Birla Planetarium. O.V Prashanth of Aeronautical Engineering Department won special prize at Milan conducted by SRM University for Short Film Making. Divya S, EIE II yr secured the second prize in Tamil Essay Writing on World Book Day.

Interdepartmental cultural competitions were held for two week s and culminated on 28 March morning with the finals of group dance and music.

KCG Toastmasters Club

The members of this club meet every week. Such meetings help them to become better speakers, develop their interpersonal skills and hone their leadership skills. TM Jayaprakash was awarded the 'Best Secretary' of Area G4 during the Area level contest held at WIPRO Technologies Ltd, Sholinganallur on 8th March 2014.

NCC, YRC & NSS

KC Tech inculcates the desire to serve society among students through NCC, YRC (Youth Red Cross) and NSS. The members have been very active. Perungudi Village Panchayat School was identified for help in various forms like the conduct of Computer Training sessions, Motivation Programmes, organization of sports events and donation of stationary items. NSS Unit and Youth Red Cross of KC TECH in collaboration with Y's Men's Club, Mylapore conducted the Health & Awareness programme as well as a Blood Donation Camp. They also planted 350 saplings in the

campus and undertook a cleaning drive in the neighbourhood. They also helped conduct the Independence and Republic Day celebrations.

NCC students participated in nos. of events this year such as Y'Mens Sports Meet, Coastal Cleaning Programme, and CM Rally. For the 1st time 7 of NCC Cadets from KCG College performed Contingent Drill at Velammal Mat. Hr. School, Panchetti NCC Camp and the performance was appreciated. 15 NCC cadets wrote NCC B Certificate Exam and secured good marks.

Sports and Physical Education

Sports is very important for the overall development of students and so KCG encourages students to take part in various sports events. The Volleyball Men and Women team has won a number of matches. To mention just a few - the volleyball men's team came first at BHARATH UNIVERSITY" State level Inter Collegiate Volleyball men Tournament, and won first place at PRATHYUSHA TROPHY" held at Prathyusha Engineering college. Volleyball Men and Women team has won the Second place and received Three Thousand Rupees Cash Prize each in the "SASTRA COLOSSEUM13" held at SASTRA UNIVERSITY, Thanjavur. The men's team secured second place at the Dr KCG VERGHESE MEMORIAL TROPHY and won five thousand rupees. The Men and Women Team also secured the Second place in the "ANNA UNIVERSITY ZONE-III" Volleyball men Tournament.

G.Bakiyalakshmi-IV-EEE was selected to represent All India Inter University Volleyball Competition held at SRM University, Chennai.

T.M.Nishanth, III-EEE was selected to represent All India Inter University Volleyball Competition held at Venkateshwara University, Thirupathi- Andhrapradesh.

N.Indhra, I-ME VLSI was selected to represent All India Inter University Handball Competition held at Bharathidasan University, Tiruchirapalli.

Dhilipan, II-Mechanical Engineering department was selected to represent Tamil Nadu Cricket Team. Sakthish Kumar EIE II yr came second at the State Level Chess Tournament.

Interdepartmental competitions were held in field and team events culminating with the Sports Day on 22 March 2014. The Electrical and Electronics Engineering Department won the Overall Championship.

Final Words

As I conclude, I leave the students the words of Nelson Mandela. He described education as “*the most powerful weapon to change the world*”. At KCG it has been our endeavour to instill in our students not only academic learning but also right values and encourage a holistic development. It is our sincere aim and hope that students go forth from this institution and serve the nation and the world at large with integrity, and in their small or large way help to create a more just and equitable society.

PRINCIPAL