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■ Principal's Column ■



Seasons Greetings to All!

Last couple of months has been really hectic with a variety of activities that enabled the institution to showcase its talent pool, be it is Zonasa-06, Dhvani-06, Kalpatha-06, CETAA Day-06, or NCTT-06. The sound and fury of Zonasa and Dhvani still reverberate in the corridors, with 16 parallel technical sessions NCTT-06 has been a real morale booster, while CETAA Day brought in all nostalgia. The highly professional manner in which these events were organized once again prove that CET can do it, what ever it yearns. As the head of the institution, I am elated and I personally thank every one who have toiled hard for this achievement. Any success also unearths so many shortcomings. All the big events reminded us of one major limitation, the absence of a proper indoor auditorium with a seating capacity in excess of a thousand. We have a dream, blueprint, model, and a project proposal. Definitely with a strong conviction, the major hurdle of funds can be overcome in the near future. Now that the examination is round the corner, I wish all students the very best for their exams. I am sure that our students will bring laurels to the institution. TEQIP activities are on a high note and I feel it is time to think seriously on the community and network activities. Engineering enables us to direct sources of power of nature for the use and convenience of mankind. It is said to act as a bridge between man and nature. The ultimate aim of engineering education shall be to build this link so that the community gets benefited. The research and activities that we undertake at our institution shall also aim for the benefit of the community else all the exercises we undertake become a waste. Man is a social animal and cooperation and sharing is the key to success. The gist of networking is sharing the resources synergistically, for mutual benefit. While planning the activities for the next year let this be in your minds. It is heartening to note that the first issue of the campus news has been well received. Let me congratulate the editorial team for their good work. I hope that in the succeeding issues the news letter will be able to give better visibility to the departmental activities and also act as documentation.

With best wishes,

Dr. R Ibrahimkutty

NCTT - 06



The 7th National Conference on Technological Trends (NCTT- 06) was conducted on 17th and 18th of November, 2006 in the college campus. The conference was inaugurated on 17th in a colourful function at CGPU Hall. Sri. P J Thomas, IAS, Addl. Chief Secretary and Principal Secretary (Higher Education) to Government inaugurated the conference. Prof. M S Ananth, Director, IIT, Chennai, delivered the keynote address. Dr. R Ibrahimkutty, Principal presided over the function. The conference proceedings were released by Sri. P J Thomas by handing over a copy to the Principal. The conference proceedings CD were released by Prof. M S Ananth by handing over a copy to Prof. M R Saratchandra Das, HOD (Dept. of ME). Invited Keynote Addresses have been delivered after this by experts at department venues; Prof. S Mohan, HOD (Civil), IIT, Chennai - in the Dept. of CE, Dr. S Ramakrishnan, Project Director, GSLV Mk-III Project, VSSC - in the Dept. of ME, Er. T Sunil, Chief Manager, Power Grid Corp. of India - in the Dept. of EE, Dr. K George Thomas, Scientist, RRL, TVM - in the Dept. of EC, Prof. K S Anantha Krishna, HOD (Arch.), R V College of Engineering, Bangalore - in the Dept. of Arch.

The National Conference on Technological Trends is intended to encourage effective participation of young and talented minds in engineering research in the country and to inculcate scientific temper. Initially the conference has been planned as a forum for presenting the research work of post graduate students of CET and in its 7th edition the conference has grown into a full fledged National conference attracting participation from major research institutions in the country.

The first announcement of conference was released on Sep/06. The conference brochure and the invitation for papers have been forwarded to all institutions in India having post-graduate programme in engineering (250). In addition, brochure was also sent by email to around 300 professors and researchers. The web site for NCTT-06 has also been hosted in the server of M/s. Torque, allowing on-line registration and paper submission. The response for the conference call has been reasonably good and 180 papers were received. The papers have been evaluated and reviewed by experts in respective fields of specialization. After rigorous review, 131 papers have been accepted for presentation and inclusion in the proceedings. A standard format has been followed for the proceedings. The proceedings are brought out in three volumes: Volume-I includes topics on Civil Engg; and Architecture, Volume-II includes papers in Mechanical Engg; and Industrial Engg;. All papers in the area of Electrical Engg; Electronic and Communication Engg; and Computers are included in Volume-III. 464 Delegates have registered for the conference, including 37 from 12 different institutions. 111 final semester PG students of this institution have registered. 16 Parallel sessions have been organized at departmental venues. Best paper awards for each discipline and merit certificate for deserving cases as recommended by the awards committee were presented during the closing ceremony.

An organizing committee was constituted for this with Dr. R Ibrahimkutty, Principal, as Chairman, Prof. Tomy Micheal and Prof. M R Saratchandra Das as Vice-Chairmen and Dr. B Anil as Organizing Secretary, and 25 executive members from departments. The conference has been sponsored by World Bank Aided TEQIP project.

WELCOME TO CET

CET warmly welcomes all the first year B.Tech students and wishes them all success and bright future. On the opening day Principal addressed the students and their parents at CGPU hall. After that a welcome function was arranged in the respective departments. HOD's gave a brief description of the facilities available in the departments and introduced the faculty to the students. The staff advisors briefed the students about B.Tech curriculum and procedures to be followed. Motivating talks, an interactive session, were also given from which the students could gather valuable information about the carrier prospects in their engineering specialization.



The **CET Newsletter** was officially released on 27th October, 2006 in a colorful function at CETAA Hall by Dr. R Ibrahimkutty, Principal by handing over a copy to Prof. Tomy Micheal, Dean (PG Studies). More than 250 members gathered during the occasion.



HEARTY CONGRATULATIONS!

- Prof. D Thankamony (Dept. of CE) - Received the Gandhidarsan Vrikshamitra Award/06 from Information and Public Relations Department, Kerala & Centre for Gandhian Studies, University of Kerala on 8th Oct/06.
- Prof. Sunil Edward (Dept. of Arch.) was awarded Ph. D for study on “*Traditional Church Architecture of Kerala before 15th Century*” from the Indian Institute of Roorkee.
- Prof. Mini K. Idikkula (Dept. of MCA) was awarded Ph. D for study on “*Voltage Frequency Spectrum and Profile Optimization of Claw Pole Alternator Based on Electromagnetic Field Evaluation*” from the University of Kerala.
- Dr. B Anil (Prof. in ME) presented the technical paper “*Application of Particle Swarm Optimization in Multi-objective Flow Shop Scheduling*” on the 48th National Conference IIIE, Bangalore, 29-30 Sep/06. Another technical paper entitled “*A Swarm Intelligence Based Algorithm for a Combinational Optimization Problem*” is accepted for presentation in 10th SOM International Conference to be held at IIM, Ahmedabad, Dec/06.
- Prof. Z A Samitha (Dept. of ME) presented the technical paper “*Design and Testing of Clover Nozzle*” in the 14th International Conference on Space Planes and Hypersonic Systems and Technologies, organized by the AIAA/AHI held at National convention centre Canberro, Australia, 6-9 Nov/06.
- Sri. Ranjith R (M. Tech Scholar, Dept. of EE) - The technical paper titled “*A Decentralized Guidance Strategy for Multi-Aircrafts Flight Formation*” is accepted for presentation at the International Conference on Advances on Control and Optimization of Dynamical Systems (ACODS-07), Indian Institute of Science, Bangalore, 1-2 Feb/07.
- Sri. Abdul Naseer P (M. Tech Scholar, Dept. of EE) - The technical paper titled “*Robust Autopilot for Atmospheric Flight of Launch Vehicle Based on H_{∞} Control*” is accepted for presentation at the International Conference on Advances on Control and

Optimization of Dynamical Systems (ACODS-07), Indian Institute of Science, Bangalore, 1-2 Feb/07.

- Ms. Sheeba P S (M. Tech Scholar, Dept. of E&C) - The technical paper “*Emotional Analysis for Malayalam Text to Speech Synthesis System*” is accepted for the International Conference SETIT/07, Tunisia.
- Ms. Hema S (M. Tech Scholar, Dept. of E&C) - The technical paper “*FPGA Implementation of Viterbi Decoder*”, is accepted for the International Conference WSEAS/07, Greece.
- Sri. Sinith M S (M. Tech Scholar, Dept. of E&C) - The technical paper “*Hidden Markov Model Based Recognition of Musical Pattern in South Indian Classical Music*”, is accepted for the International Conference IEEE ICSIP Dec/06, Hubli, India.
- Ms. Nimmy Mathew (M. Tech Scholar, Dept. of E&C) - The technical paper “*Duration Analysis for Malayalam Text to Speech Synthesis System*”, is accepted for the International Conference on IT, Dec/06, Bhuvaneshwar, India.
- Sri. Padmaraj E (S5R) – Received Ist prize in Quiz competition at National Tech Symposium by Amritha School of Engg., IInd prize in Vastheya Quiz competition RIT, Pampady and IIIrd prize at Technical Fest Quiz, Lourde Matha.
- Sri. Ashwin Sudheer (S7R) – First in the preliminary round of South Indian Bank Quiz competition.
- Sri. Koshy P Rajan & Sri. Yashin Jalal (S5R) – Received IInd prize in Web-designing contest held at TKM College of Engg; Kollam.
- Ms. Sheeja S Kurup (S3R) – Received IInd prize in the Incredible Machine Contest at Shastra Tech Fest, IIT – Chennai.
- The following PG students received the best paper award in the respective specialization in the NCTT - 06 held at CET – Ms. Resmi P Nair (Hydraulics Engg; ‘*Study of hydraulic jump on various types of beds*’), Ms. Reji U R (Structural Engg; ‘*Flexural behavior of hybrid fibre reinforced self compacting concrete*’), Ms. Shaina Hashim (Transportation Engg; ‘*Structural analysis of concrete block pavement using FEM method*’), Ms. K R Resmi (Environmental Engg; ‘*Rapid EIA of Vizhinjam deep water international container transshipment terminal*’), Ms. Anu Mary Jacob (Geotechnical Engg; ‘*Heave study of geo pile reinforced black cotton soil*’), Sri. Gopi Krishnan (Industrial Engg; ‘*Optimization in DNA micro array manufacture*’), Sri. Karthik K J (Machine Design; ‘*Development of elliptical gear operated steering mechanism for automobiles*’), Sri. Vinoy Kurian (Thermal Science; ‘*Analyzing natural convection through transient simulation*’), Sri. Pradeep M Kamath (Propulsion Engg; ‘*An equal order projection method for unsteady viscous incompressible flow on unstructured grids*’), Ms. Sharafunnisa K H (Control Systems; ‘*Fault detection and isolation in a speed control system*’), Ms. V P Shimnamol (Power Systems; ‘*A new technique for transformer inrush current reduction*’), Sri. Vinod V (Guidance & Navigational Control; ‘*Controller design for ascent phase of reusable launch vehicle using back stepping*’), Smt. Swapna Prabhakaran (Electrical Machines; ‘*PIC controlled PWM inverter with load independent sinusoidal output*’), Sri. V Devaraj (Microwave and TV Engg; ‘*Optimization of a wide band E shaped patch antenna using genetic algorithm*’), Ms. Nimmy Mathew

(Applied Electronics; ‘*Duration modeling for Malayalam text to speech synthesis system using CART*’), Ms. Lakshmi A (Planning; ‘*Development strategies for reviving shaliyar community weavers village in Balaramapuram*’).

SHORT-TERM COURSES/TRAINING

- *Mechatronics and Machine Vision System: 25-27 Oct/06.* The course was inaugurated by Sri. N P Giri, Project Director, VSSC. The Co-ordinators are Prof. A Farook (Dept. of ME) and Sri. M Unnikrishnan (LME).
- *Computational Fluid Dynamics: 20-24 Nov/06.* The short-term training course was inaugurated by the Principal. The Co-ordinators are Dr. K Krishnakumar and Dr. S Anillal of Dept. of ME.
- *Finite Element Method: 13-17 Nov/06.* The short-term training course was co-ordinated by Dr. S Anillal (Dept. of ME) and Mr. K S Santhosh (LME).
- *Network Security and Cryptography: Two day workshop was coordinated during 13-14 Oct/06,* under faculty development program, for a team of 22 members by Smt. Shreelakshmi R of Dept. of CSE.

INVITED LECTURES

- Prof. M R Sarathchandradas, HOD (Dept. of ME) – Delivered a lecture on “*Advanced Developments in Mechanical Engineering – Manufacturing*” at the National Conference organized by CSI College of Engg; Nagercoil, TN.
- Dr. B Anil, (Prof. in ME) – Delivered a lecture on “*Fundamentals of Flight*” organized by Aeronautical Society of India, TVM and on “*Fundamentals of Aeronautics*” at Loyola School, TVM.
- Dr. Kuncheria P Isaac, (Prof. in CE) – Presented the technical paper “*Ready Mix Concrete for Quality Construction*” in the Technical Seminar organized by Kerala Irrigation Engineers Association at Trivandrum.

TEQIP ACTIVITIES

The world bank assisted Technical Education Quality Improvement Programme (TEQIP) is in progress. The new CIM Lab set up in the Dept. of ME was inaugurated jointly by Dr. Ibrahimkutty, Principal and Dr. N V Giri, Project Director, VSSC, TVM. The lab has latest equipments like Robot, CNC Machines, PLC, etc. The refurbished office space for Centre for Water Resource Management and Hydraulics Division was inaugurated by Sri. P K Ramesh, Superintending Engineer, Public Works Department in the presence Principal, and other senior Professors. The newly set up hydro-informatics lab under project TEQIP is housed in this new space. The campus wide networking with fibre backbone and structure cabling has been completed. The communication lab in the Dept. of CSE is now equipped for conducting International certification courses. Water supply system in the campus, construction of building for central computing facility, and the watchman cabin are in progress.

MESC SCHOLARSHIP

Mechanical Engineering Staff Club (MESC) has instituted a scholarship for two meritorious students in the Dept. of Mech. Engg;. The scholarship amount is Rs.500/- each per month. Currently this is awarded to 4th semester students Sri. Sinith P (Kannur) and Sri. Suneesh K P (Wayanad).

COMMUNITY SERVICES

- Short-term training courses on “*Advanced Welding Technique*” by Dr. B Anil (Prof. in Dept. of ME) and on “*Aluminium Fabrication*” by Sri. K Sajikumar, Ist Gr. Instructor, Dept. of ME, were conducted.
- A workshop on “*Enhancing career prospects through self development*” was conducted exclusively for PG students of all branches of engineering in the college by Prof. Sheela S and Smt. Suja R (LCE) of Dept. of CE. The main objective is to help the post-graduate students in improving their overall personality, social behavior, power of assertiveness, public speaking and presentation skills etc. About 35 students participated.
- Hands on training on “*Electronics and Computer*” for high school and higher secondary students were coordinated by Prof. J David (Dept. of E&C) from 4-31 Oct/06. The course duration was 45 hours and about 250 students participated.
- Hands on training on “*DSP Platforms (ADSP)*” were conducted on 2-3 Nov/06 for PG students by the Dept. of E&C.
- Two months short-term training on “*Microprocessor and Applications*” was conducted by Dept. of EE for the public, having degree/diploma in engineering, under continuing education programme. Prof. M S Jagannath, (Dept. of EE) coordinated the programme.
- Sri. Francis M Fernandez (Sr. LEE) delivered a talk on “*Effective Presentation*” for the PG students.
- Dept. of CSE has donated 5 Pentium IV machines to Government Women’s College, TVM.

SPECIAL ACTIVITIES

- Under INDO-US (Amrita) Edusat programme Dr. Kasturi Rangan, Director, NIAS, IISc, and MP addressed on the topic “Chandrayaan – 1, Indian Foray into Planetary Exploration” on 1st Nov/06.
- Dr. Mukhopadhyay, Adviser DST, visited the Dept. of E&C on 29 Nov/06 for the review of FIST project and to give a presentation on DST Schemes and Projects.
- Prof. M R Sarathchandradas, HOD (Dept. of ME) has participated in the ‘*surprise inspection*’ for AICTE at Rajamandiri, Andhra Pradesh on 14-15 Nov/06.
- Prof. M M Mathews Panicker, HOD (Dept. of EE) is a member in the interview board for licensing by Electrical Inspectorate of Kerala.
- Dr. Kuncheria P Isaac (Prof. in CE) is nominated as member in the Task Force on ‘*Housing*’ set up by Govt. of Kerala to evolve the State Housing Policy and ‘*House for all by 2010*’. Term of task force is 3 years.
- Dr. B Anil (Prof. in ME) is selected as an organizing committee member of Silver Jubilee National Seminar, Dec/06 of IIEE, Trivandrum Chapter.
- Prof. S Krishnankutty, Prof. A S Shajilal of Dept. of EE are nominated as members in the PSC interview board.
- Prof. V Santhakumari, HOD (Dept. of CSE) is a member in the interview board for the selection of Lecturers and Asst. Prof. in Computer Science, University College of Engg; Kariavattom, and at Lourde Matha College of Engg; Kuttichal. Also a member of the mock inspection team for accreditation of N I College of Engg; Thakkalay.

- Sri. Francis M Fernandez (Sr. LEE) is a member in the student’s project evaluation committee in Agency for Non-conventional Energy and Rural Technology.
- Smt. Shreelakshmi R (Dept. of CSE) was a judge for the programming contest in the technical fest at TKM College of Engg; Kollam.
- One day technical visit to the Nuclear Power Station, Koodankulam was conducted on 7th Oct/06 for a team of 20 faculty members of Dept. of EE.
- The activities of the Society of the Students of Architecture, 2006 (SSA) was formally inaugurated on 1st Nov/06, the Kerala Piravi day, by Ar. Viswanathan.
- An exhibition of M. Tech projects in the Dept. of E&C was conducted on 24 Nov/06.

SPORTS

CET won the Kerala University Inter Collegiate Championships in chess, shuttle badminton, table tennis, and runner-up in basket ball for men. The shuttle badminton team won the championship for the last 4 years continuously. Sri. Aravind Sankar (S7C), Sri. Ayyappan S Krishnan (S7EE), Sri. Tony Mathew Abraham (S7M) are selected to the Kerala University badminton team for the last 4 years, which is a record. Sri. Sumaj K V (S5R) has created a new record in the Kerala University Power Lifting; squat, bench press, dead lift, and lifted total 487.5 Kg in 56 Kg category. Sri. Ayyappan S Krishnan has participated in All India Tournament held at Sikkim and won the gold medal. He has also participated in Asian Satellite Badminton Tournament held at Sri Lanka. Sri. Hari Suresh (S5T) represented Kerala University in the Inter University National Chess Championship at Nagpur. Ms. Anila A (S5T) became the Kerala University Women’s Champion for Chess. Sri. Sharan Chandran (S5R) is Kerala University Table Tennis team member.

TECHNOLOGY BUSINESS INCUBATION

Torque – A Technology Business Incubation venture, started on 3rd Aug/05 by seven aspiring entrepreneurs, five currently being seventh semester B. Tech students of CET (Sri. Anil K Antony, Sri. Jose Luke, and Sri. Sanjay V of Industrial Engg; Sri. Pranav Kumar S of Mech. Engg; and Sri. Sony Joy of E&C Engg;) is based at Technopark, TVM. This is the first TBI Company to incubate jointly by Technopark, National Centre for Incubation, Innovation and Entrepreneurship, and IITM–K with Sri. Kris Gopalakrishnan of Infosys as the Chairman. Torque today is a 360 degree wireless solution and service provider, leveraging a blend of rapid information delivery and communication streams. The technology team is working on developing applications in cutting edge fields of RFID’s and PDA’s and have tie-ups and channel partners in US, UK, Middle East, Australia, and Slovakia. Torque is also working on projects with IT Mission, CDIT, IT@School and Government of Kerala to implement various mobile platforms. Today, Torque values over 2 Crore with a staff strength of 23 employees.

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