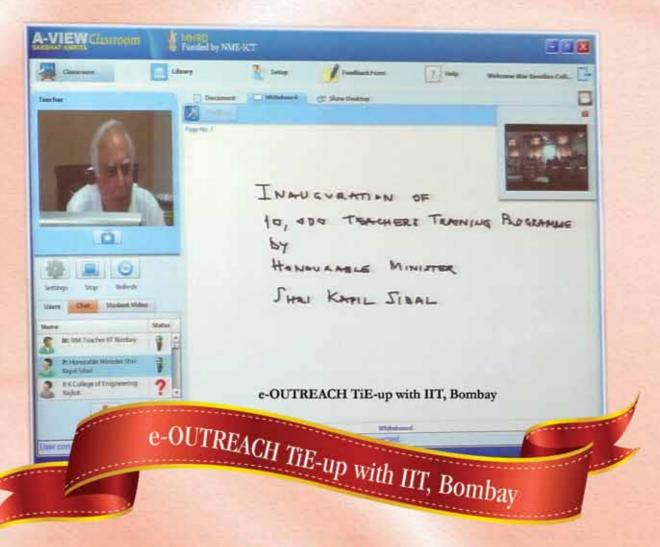


# In Altum...

## The MACET Mens Leller

Mar Baselios College of Engineering and Technology
Mar Ivanios Vidyanagar, Nalanchira, Thiruvananthapuram – 695 015.





#### Mr. KAPIL SIBAL

Hon'ble Union Minister for Science &
Technology and Earth Sciences
inaugurates through Video Conference,
the 10,000 Teachers' Training Programme.
MBCET has been selected as a Remote Centre for the
e-Outreach Programme.

## Message from the Bursar



The Decennial Celebrations of MBCET remind us of the greater responsibility vested on us. As a Professional Higher Education Institution, in the tenth year of its existence, MBCET has to be aware of the challenge faced by the society, namely, technological, economical and relational challenges, which have acquired a global dimension. Rather than gathering information and data from various fields of technology and knowledge, we must learn to apply them for the welfare of the Society. Our Institution must distinguish itself as a centre of learning, a Centre of Excellence, where a humanist vision forms the motivating force. The educational pursuits here should enable the new generations to use the technological insights to unify political and socio-economical fields. It should help to solve relational problems not through domination and assertion, but through encounter, service and cooperation, in the context of a global village. We have to be aware of the justified outcry about the deterioration in the quality of education. Hence every constituent of the Institution should be alert and aware of its own responsibility. Invigorate our sense of commitment and renew the pledge to leave the place, wherever we are, a better one. Every thing else will follow.

Fr. Wilson Thattaruthundil

### Principal's Desk



Between you and every purpose that you wish to accomplish, there is a chain of obstacles. The bigger the purpose, the bigger the obstacles will be.

The three powerful forces that will help you attain your goal are visualization, determination and resilience. Visualization means the ability to cast the result of the goal into images of final reality. The visual picture becomes the light that guides you to the end of the road to the goal. Determination starts with the decision to go for the goal, and is also the continuous driving force to overcome the obstacles on the way to the destination. Resilience is essential to dismantle or to get around the barriers in the road to goal attainment. Sometimes your greatest asset is simply your ability to stay with it longer than anyone else.

The combination of visualization, determination and resilience is a powerful coalition to attain results. Together they ensure the attainment of worthwhile goals in our personal lives, in an institution, in a country and in the world as whole.

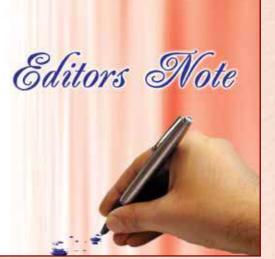
Always remember, the road to success is always under construction.

Dr. T. M. George

iggs Boson is a reality – "God particle" or Truth in particle form or sub-atomic form. "Curiosity" has wheeled down on the dusty Martian surface. After the Moon expedition another leap has been made by humanity at 21240 km/hr, in pursuit of life. It has evidently added a new chapter in the history of Robotics. The repetition of the Upanishadic maxim quoted in this column earlier is pardonable, since it contains the whole saga: Aniyoraniyan Mahito Mahiyan .... (The subtlest among the subtle, the great one, the biggest among the big - Svetasvatara Upanishad).

The mysterious probe of mankind for life has led to the evolution of knowledge industry. Consequently, the pursuit of order should be at the core of every effort, if 'life' is to be realized as 'Life'. The knowledge-centric society should become wisdom-centric, preserving man from being ego-centric. Only then can these pursuits find remedy for the endless human maladies, offering hope for the posterity.

Dr. George Zachariah



## **Department of Computer Science**and Engineering

#### **Workshops / Conferences Attended:**

**Mr. Shibu V. S.** attended a one day workshop on 'Cloud Computing' conducted by the CSI Student Branch Association and Computer Science Branch Association of this Institution in association with SQUAMIS Technologies, Technopark, Trivandrum.

Prof. K. O. Koshy, Ms. Sunitha Krishnan K. S., Mr. Shibu V. S., Ms. Anne Dickson, Ms. Merin Kuriakose, Mr. Bharath Narayanan, Ms. Sini Antony, Ms. Neenu George and Mr. Robin Joseph attended a two-day workshop on 'Android OS and Mobile Application Development' at MBCET on 1 and 2 June 2012 conducted in association with the Squamis Technologies Pvt Ltd.

**Ms. Sunitha Krishnan K. S.** participated in the 'Faculty Enablement Programme' from 25 to 29 June 2012 conducted by Infosys Ltd, Trivandrum Development Center in connection with Campus Connect Programme.

**Mr. Robin Joseph** attended an International Conference (ICCT) organized by Thiruvalluvar College of Engineering, Vandavasi, Tamil Nadu in January 2012.

#### **Papers Presented:**

**Ms. Anne Dickson** presented a technical paper on 'Artificial Neural Network' at an International Conference on 'Emerging Trends in Communication' organized by the Maria College of Engineering, Attoor in March 2012.

**Ms. Neenu George** presented a technical paper on 'Sensor Networks' at a National Level Conference (GNEESIC) organized by St. Xaviers Catholic College of Engineering, Nagercoil in March 2012.

#### **Department of Civil Engineering**

**Prof. P. N. Mohan** took charge as the Head of the Department, Civil Engineering, in June 2012.

#### **Papers Published and Conferences Attended:**

A journal paper by **Mr. Arun V. M**., Asst. Prof. - on "Biosorption of Cu and Zn ions from aqueous solution by Water Hyacinth" was accepted for publication in International Journal of Environment & Waste Management.

**Prof. P. N. Mohan** attended the workshop on "National Vocational Educational Framework" sponsored by AICTE at the College of Engineering, Trivandrum in April 2012.

**Ms. Manju Dominic** attended a one day workshop on "Corrosion of Marine Structures" held at CUSAT during March 2012.

**Ms. Sibi Joy,** Ms. Ann George and Ms. Deepthi. B. Krishnan participated in the one day workshop on "Research

Methodology and Recent Softwares in Civil Engineering" held at Marian Engineering College, Trivandrum on July 6, 2012.

**Mr. Arun V. M.** and Ms. Muthulakshmi, Asst. Professors attended the workshop on "Integrated Water Resources Management" organized by College of Engineering, Trivandrum held on Feb 24, 2012. They also participated in the workshop on "Water and Food Security" organized by Sree Chitra Thirunal Institute for Medical Sciences & Technology, Trivandrum in March, 2012.

#### **TRAINING PROGRAMME**

**Prof. P. N. Mohan and Mr. Rakesh** organized a short term training program on AutoCad-2D for the students of VI Semester Civil Engg. during Feb./Mar. 2012 in association with Centre for Continuing Education and IntedCad / Autodesk, Trivandrum.

A 2 day workshop on STAAD PRO and STAAD Foundation was held at MBCET on 23rd and 24th of July 2012, organized by BENTLEY / INTER CAD Systems Ltd, Trivandrum. Civil Engineering Faculty from MBCET and other Engineering colleges attended the program.

#### **CONSULTANCY & PROJECTS**

The Department of Civil Engineering continues to take up consultancy works and projects as it has done in the past. **Mr. H. Ratheesh Kumar**, Asst. Prof., coordinated the River Bank Mapping Survey of Karamana River and completed the first phase of the work. The final report was submitted to the Revenue Dept., Kerala State on 29 June, 2012.

Tech Top National Innovation Contest for Engineering Colleges was held at Technopark, Trivandrum on 18 and 20 July 2012. **Mr. Ajimon Thomas & Ms. Anila. S.** evaluated the properties of the new cement material brought for the contest.

#### **OUTREACH PROGRAMMES**

**THANAL** – The Societal Bureau of the Civil Engineering Department keeps on rendering generous services to the under-privileged members of the Society. The Trivandrum Institute of Palliative Sciences (TIPS), which has been declared as a Collaborating Centre of the World Health Organization (WHO), was inaugurated on July 4, 2012.

The members of THANAL were specially invited to the function in recognition to their valuable services to Pallium India. **Shri. A. K. Antony**, the Hon'ble Minister for Defence, Govt. of India, inaugurated the function that was presided over by Shri. V. S. Sivakumar, Hon'ble Health Minister for Health at the Co-Bank Auditorium, Trivandrum.

Mr. Arun V. M. & Mr. Ajimon Thomas, Asst. Professors, together with a batch of students from the Civil Engineering Department represented the College in the inaugural function. Dr. Rajagopal, Chairman, Pallium India extended his sincere thanks to the students of Mar Baselios College



for their services to Pallium India. Shri. V. S. Sivakumar, Minister for Health, Smt. Chandrika, the Mayor, and

**Shri. Sampath, M.P.**, also attended the function.

**Thanal,** the Social Service Forum of Civil Engineering Department, donated medicines worth Rs.35,000/towards the tribal medical camp at Attapady, Palakkad. They also distributed food kit to 15 families at



Kazhakkoottam as a part of Onam Celebrations.

**UTBHAV**, the Technical Fest organized by Civil Engg. Dept. students will be conducted on September 20th. The website for the same (www.utbhav.in) was launched on 10th August.

#### **STAFF TOUR**

The Staff of Civil Engineering Department went on a leisure trip to Thenmala Dam in March 2012. They visited the Hydraulic Power Station, the Dam's Gallery and other associated structures and also the Thenmala Eco Park.



#### STUDENT ACHIEVEMENTS

Ms. Parvathy Pavanan, Ms. Reshma Rajendran Nair and Ms. Lekshmi J. S. of Fifth Semester, Civil Engineering participated in the Science Slam Competition as a part of the Youth University held from 25 to 29 of June 2012 at the Indo-German Urban Mela held at Bangalore.

Jyothis Jose Oommen of S7 Civil won the First place for Music composition at INCEPTION' 12 held at Mar Ivanios College, Trivandrum

Tech Top National Innovation Contest for Engineering Colleges was held at Technopark, Trivandrum on 18 and 20 July 2012. Mr. Ajimon Thomas & Ms. Anila S. evaluated the properties of the new cement material brought for the contest.

#### Faculty inclusion in Civil Engg. Dept.:

a. Ms. Bindu Biju – M.Tech., TKM Engineering College, Kollam. b. Mr. Ajimon Thomas – M.Tech., National Institute

of Technology, Calicut. c. Ms. Neema Therese – M.Tech., National Institute of Technology, Suratkal. d. Ms. Preethi Rachel Suresh – M.Tech., College of Engineering, Trivandrum. e. Ms. Greeshma – M.Tech., National Institute of Technology, Suratkal. f. Ms. Vandhana – M.Tech., College of Engineering, Trivandrum. g. Ms. Anoja B. V. – M.Tech., College of Engineering, Trivandrum.

## Dept of Electronics & Communication Engineering

Research Activities of the Teachers

**Dr Sakuntala S. Pillai,** Dean R&D, has been guiding a number of students in their research work in the area of Communication as below:

Susan R. J. ("Coded Spread Spectrum Receiver for Multipath Channels"), Sreelatha P. ("Studies on the application of Spread Spectrum Technique in the area of Satellite Communication") and Deepa Vijayaraghavan ("Study of Fading Channels in Mobile Communication using Spread Spectrum Technique"): Doctoral research work is in progress.

Research Papers as detailed below have been published/ presented by Faculty Members:

**Remya Elizabeth Mathew** and Jagadeesh Kumar P, "An Embedded Cardiac Ascultator using PCG Classification", IEEE International Conference on Electronics Computer Technology (ICECT-2012), Kanyakumari, 8 April 2012.

Sreelatha P. and **Sakuntala S. Pillai**: "Simulation and Analysis of Spread Spectrum Modulated Coherent Quadrature Signals using LabVIEW", International Journal of Computational Science and Engineering. Volume 2, Number 1 (2012), pp. 1-11

Nithin Nair C., Shiras S. N., Tony Joseph Fernandez, Gayathri Krishnan J. and Naveen S., "Multiple Audio Marking Using Discrete Wavelets Transform and Singular Value Decomposition", First National Conference on Emerging Technologies (NCET-2012), Govt. Engineering College, Barton Hill, Trivandrum, 20 to 21 July 2012.

Nandan S. and Deepthi P. P.: "Performance Improvement of Turbo Codes using Soft Input Decryption", First National Conference on Emerging Technologies (NCET-2012), Govt. Engineering College, Barton Hill, Trivandrum, 20 to 21 July 2012.

Aravind V. S., Raja R I, Nithya Mathai, Roopa Esther Philip and Deepa P. L., "Automatic Offside Detection in Football", International Journal of Graphics & Image Processing (IJGIP), Volume 2, Issue 2, May 2012, pp. 105-108.

Seminar/Conferences attended by the faculty:

"Short Term Training Program on Digital Communication Systems", 4 to 8 June 2012.

Staff attended: Ms. Luxy Mathews, Ms. Ancy S. Anselam & Ms. Anu Anna John

"Faculty Development Programme in Soft Computing", NIT Calicut, 21 to 25 May 2012.

Staff attended: Mr. Arun P. S.

"Minicolloquium on Microelectronics circuits and systems", NI Centre for Higher Education, 24th February 2012.

Staff attended: Ms. Ann Mary Alex

"National Conference on Applied Linear Algebra & Transform Techniques", MBCET, 10 to 11 July 2012.

**Staff attended:** Ms. Luxy Mathews, Ms. Ancy S. Anselam, Ms. Swapna P. S., Ms. Remya Elizabeth Mathew, Ms. Lani Rachel Mathew, Ms. Deepa P. L., Mr. Anoop K. Johnson, Ms. Jisu Elsa Jacob & Ms. Yamuna K. Moorthy.

## SEMINARS OR CONFERENCES ORGANIZED BY THE DEPARTMENT

"Short Term Training Program on Digital Communication Systems", 4 to 8 June 2012.

Coordinators: Ms. Jija Rajmohan & Ms. Lani Rachel Mathew

Invited talk on "Lego Mindstorms" by Mr. Sreekanth Madhavan in an event Robofest, as a part of Crossroads 2012 on 18th February 2012.



Aravind V S, Raja R I, Nithya Mathai, Roopa Esther Philip and Deepa P. L., "Automatic Offside Detection in Football", International Journal of Graphics & Image Processing (IJGIP), Volume 2, Issue 2, May 2012, pp. 105-108.

#### **Achievements of Faculty**

**Ms. Minu P. Nair** secured second rank in the M.Tech. Degree Examination in Electronics and Communication Engineering with specialization in Communication Engineering from VIT University.



#### Project exhibition(s)

A project demo session was arranged by the final year B.Tech students of the ECE dept. on 19 March 2012. Another project demo session was arranged by the fifth semester B.Tech students of the ECE department on 29 March 2012.





#### **IEEE** activities

 KITES – 2012 (Kerala IEEE Technical Symposium), a 2 day Technical Symposium was conducted on 23 & 24 June, 2012 as a joint venture of all the IEEE Student Chapters in Kerala Section. Mr. Satish Babu, IEEE Chair, Kerala Section, inaugurated the symposium formally. Prof. S Viswanatha Rao presided over the function and Dr.Sakuntala S Pillai and Ms. Mini Ullanat (IEEE Student Activity Chair, Kerala Section) offered the felicitation. The following workshops were conducted during this event:

"Embedded Systems and Robotics" by SSTS Corporation.
"MATLAB & Simulink" by Grey technologies.
"Enterprise & Cyber Security" by Mr. Manu Zacharia.
"Python Workshop" by Mr. Kenneth Gonsalves.



More than 300 students from various colleges all over Kerala have attended the event. The event on the day was concluded with a cultural night by the students of MBCET followed by dinner.

## Department of Electrical & Electronics Engineering

Courses Attended / Organized by Faculty Members

**Mr. R. S. Praveen Raj** attended a 2-day workshop on "A Workshop for Training Engineering College Teachers" on April 19 and 20, 2012 at IIT Kharagpur, sponsored by the NPTEL workshops.

**Ms. Sheenu P.** and **Ms. Manju Sreekumar** attended a 2-day workshop on "Low Power Embedded Systems using MSPU30 Microcontroller", at the College of Engineering, Trivandrum on 12 and 13 June 2012, organized by the IET Student Chapter.

A. V. Soumya, Sandhya P., Manju Sreekumar, Sheenu P., Aneesh Kumar K.T., C. Sojy Rajan and Praveen S. Babu were on the organizing committee of the National Conference on Applied Linear Algebra & Transformation Techniques held at the college on 10-11 July 2012.

Ms. Jomole Joseph P. is the Remote Centre Coordinator at MBCET, for the IIT Bombay - Ekalvya-eOUTREACH Project for conducting two-week ISTE workshops through Distance Mode, through EDUSAT network of ISRO and the AVIEW software using internet for live transmission at various remote centre's across the country during Summer and Winter vacation. The Workshop on "Introduction to Research

Methodologies" conducted from 25 June to 4 July, 2012, also was coordinated by her.

Faculty inclusion : The following members joined the Department:

#### Teaching Faculty:

Ms. Manju Ann Mathews: M.Tech. in Industrial Drives & Control, Rajiv Gandhi Institute of Technology, Kottayam Ms. Surasmi N. L., M.Tech. in Power Electronics, Amrita School of Engineering, Coimbatore.

#### Technical Faculty:

Mr. Hareendran K. K., formerly Sr. Technical Officer, CDAC, Trivandrum, has 37 yrs of service and experience in the field of Power Electronics.

Mr. Senthil Kumar E., previously worked in English Indian Clays Ltd. (EICL), Kollam as Electrical Supervisor.

#### **IET Activities**

An inspiring talk on 'EMBEDDED SYSTEM' was presented to the students of S7 SEE, (2009-2013 BATCH) on the 30 July 2012 by **Prof. Indulal Sreedharan,** Vice Chairman, IET YPS, Chennai Network and also a faculty from Dept. of Electrical Engineering, College of Engineering, Trivandrum. Mr. Indulal is currently doing his research in FUZZY LOGIC. He enlightened the students about the scope and opportunities of EMBEDDED SYSTEM and 8051. He was assisted by **Mr. E. T. Ebin** PROGRAMME CO-ORDINATOR, IET YPS CHENNAI (KERALA), McUniversity Trainer, Silicon Labs, Austin, Texas, USA.

They explained the simulation and emulation process, the working of the ES software and even demonstrated the working of the ES kit. The students were able to collect many ideas of using ES for their projects. The session was organized by the IET-Faculty Advisors Ms. Jomole Joseph P. and Ms. Divya N. A. and Faculty in charge for Embedded Systems (S7-Elective) Ms. Manju Sreekumar.

The IET-MBCET Chapter will soon be arranging a 'Lecture on Research Paper Publication in Journals' for the benefit of the faculty and PG students.









#### **ILLUMINA Activities**

The dept. will be shortly starting a preparatory course for the final and pre-final year students to equip them for the GATE examination.

#### **Consultancy Services**

**Prof. M. K. Giridharan** was awarded the Consultancy Project for the design of Electrical Installations for the proposed Ladies Hostel for LBS Institute of Technology for Women, Poojappura, by the Director, LBS Centre for Science & Technology, Thiruvananthapuram.

## Department of Information Technology

#### **Short Term Courses and Training**

- Mr. Biju B. Varghese gave one day training on 'Open Source Softwares (Linux & Libre office)' as part of Faculty Development Program at the St. Thomas Schools, Trivandrum on 22 May, 2012 and at the Sarvodaya Schools, Trivandrum on 23 May 2012.
- Ms. Asha S. attended a Faculty Development Program -'Campus Connect' organized by Infosys from 26 to 30 June, 2012

#### **Publications**

Mr. Vishnukumar S. published a paper entitled 'Adaptive Local Image Registration: Analysis on Filter Size' in the International Journal on Computer Science and Engineering (IJCSE) pp.1220-1225, Vol.4, No.06, June 2012.

#### Workshop

A two day workshop on 'Android OS & Mobile Application Development' was organized by the CSI Student Branch in association with Department of Information Technology on 1 and 2 June 2012. Dr. A. S. Shaja, Senior Software Scientist at CASDE, IIT-Bombay, was the resource person.



- ➤ S8 IT students, Karthika Unny, Reshma U. S., Salna Salim and Vijitha Raj J. S. (guided by Ms. Jisha John) participated and presented a paper entitled "Restoration of Antique Documents from Yellowing and Foxing" in the National Conference on Recent Advances in Signal and Image Processing NCRASIP-2012 organized by the School of Information Science & Technology from 24 to 26 May, 2012.
- S8 IT students, Ann Mary Jacob, Mekha Prasannan, Priyanka Suja Pradeep, Sruthi Ignatious (guided by Ms. Jisha John) published paper entitled "Removal of High Density Impulse Noise from Digital Images" in

the International Journal of Scientific and Engineering Research (IJSER) Volume 3, Issue 7, July 2012.

### Department of Mechanical Engineering

#### **NEI - NASTRAN TRAINING PROGRAMME**

The Department of Mechanical Engineering in Collaboration with DSI technologies, an affiliate company of Digital Solutions Inc. Japan, is conducting a one year NEi- NASTRAN software training programme for students and graduates.

NEi Software Inc. aims at developing Softwares that enables product development companies to meet the challenges of global competition.

#### **CATIA COURSE**

The second stage of the Training Programme in CATIA in collaboration with the EDS Technologies, Bangalore conducted for students and Graduates was completed in March 2012.

#### **Publications/ Presentation of Research papers**

**Sreekanth K. J.**, S. Jayaraj and N. Sudarsan, "A Meta Model for Domestic Energy Consumption", International Journal of Energy Economics and Policy, Vol. 1, No. 3, 2011, pp: 69-77.

Sreekanth. K. J., N. Sudarsan and S. Jayaraj, "Clean Development Mechanism (CDM) as a Solution to the Present World Energy Problems and a New World Order: A Review", International Journal for Sustainable Energy, 2012, iFirst, pp: 1-27.

The same team published another paper titled: "Achieving Certified Emission Reduction in Rural Domestic Energy Sector through Alternative Fuel Replacement", International Journal of Renewable Energy Research, Vol. 2, No. 1, 2012, pp: 38-43.

S. Jayaraj, Sreekanth. K. J. and N. Sudarsan, presented "CDM as a Solution for the Present World Energy Problems (an Overview with respect to the Building and Construction Sector)" at International Conference on Enhanced Building Operations (ICEBO), Kuwait, October, 2010.

#### Nidhi M. B. wins the Best Paper Award

**Nidhi M. B.** presented and published a Research Paper as detailed below. She won the Best Paper Award for the same.

Nidhi M. B. and B Anil, M Learning: Dealing with Myths, Reluctance and Realities, "Growth of Engineering Education: Issues and Concerns, 22nd Annual Convention, Vidya Academy of Science and Technology, Thrissur, 19 November 2011.

They presented another paper: "Green Supply Chain Management: A conceptual framework", NATCON, CET Jan 2011. "Trash to Treasure: Experiences with Post-Consumer

PET Bottles, 23rd Kerala Science Congress, Book of Abstractspp 125

Nidhi M. B. and V. Madhusudanan Pillai, (2011) Development of Green Supply Chain Transformation Matrix from Environment Management System, pp. 68–73, Proceedings of the National Conference on Emerging Trends in Industrial Engineering and Management (ETRIM 2011), July11-12, 2011, Department of Mechanical Engineering, NIT Calicut, Kerala, India.

Mr. Deepak B. presented the following papers:

"Decomposition Analysis on CO2 Emission from Indian Cement Industries" at the International Conference on Recent Innovations in Technology at RIT, Kottayam.

"Application of Magnesium Alloys in Automobiles" at the second International Conference on Materials for the Future at the Government Engineering College, Trichur.

Deepak G. Dilip and Jose Mathew, published a paper on "Experimental Investigation and Optimization of Process Parameters in Vibration Assisted Micro EDM", proceedings of seventh International Conference on Precision, Micro and Nano Engineering. (COPEN 7), pp 174-178, 2011.

## FACULTY DEVELOPMENT PROGRAMME ATTENDED BY FACULTY MEMBERS

Mr. Anoop M. R., Mr. Ayswer A. S., Mr. Rajesh Kumar S and Mr. Rupesh S. attended a Faculty development programme on ADVANCES IN MANUFACTURING ENGINEERING at National Institute of Technology, Calicut from May 21 to 25, 2011.

NEW FACULTY MEMBERS: The following teachers joined the Department

Arun T. - M.Tech., NIT, Calicut in Manufacturing Technology. Deepak B. - M.Tech. in IC Engines and Turbo Machinery, Government Engineering College, Trichur. Deepak G. Dilip - M.Tech., NIT, Calicut in Manufacturing Technology. Unnikrishnan G. - M.Tech., NIT, Calicut in Thermal Science. Roshan George Koshy - M.Tech. in IC Engines and Turbo Machinery, College of Engineering, Trichur. Rakesh N - M.Tech., NIT Calicut in Environmental Engineering. Ajesh M. V. -M.Tech., IIT, Chennai in Ocean Engineering.

#### **ACHEIVEMENTS**

**Saranya S.** (Assistant Professor) won the First Rank in the M.Tech. Degree Examination in Propulsion Engineering, from the College of Engineering, Trivandrum.

## THE LATEST UNIVERSITY SEMESTER EXAMINATION RESULTS

- ➤ S7 Mechanical Engineering secured SECOND position in Kerala University with an overall pass percentage of 75%
- ➤ S5 Mechanical Engineering became University toppers with an over all pass percentage of 90%.
- > S3 Mechanical Engineering achieved 3rd position in University level with an over all pass percentage of 78.3%.

## Department of Science & Humanities

#### **Research Activities:**

**Ms. Tiji Thomas, Ms. Dhanya Ramachandran and Ms. Neeradha C. K.** have registered for the part time Ph.D Degree Programme under the guidance of Dr. Madhukar Mallayya, University of Kerala.

**Workshop Attended:** Ms. Rajalekshmi and Ms. Neeradha C. K. participated in the 2-week ISTE Workshop on "Introduction to Research Methodologies" under the National Mission on Education through ICT (MHRD, Govt. of India) during 25th June - 4th July 2012 conducted by IIT Bombay.

#### **National Conference on Mathematics:**

As part of the Decennial Celebrations of the College, the Department conducted a 2-day National Conference on 'Applied Linear Algebra & Transform Techniques' with the Academic Assistance of Kerala Mathematical Association and with the financial assistance of DST, NBHM, KSCSTE on 10 & 11 July, 2012. The Conference was inaugurated by Dr. Ramachandra Kaimal, Chairman, Computer Science & Engineering, Amrita School of Engineering, Amritapuri. Dr. Kaimal delivered a semi-technical talk on 'Applied Linear Algebra' during the inaugural session. The different technical sessions were led by 1) Dr. E. Krishnan (Former Head of Dept. of Mathematics, University College, Trivandrum) on Linear Algebra - A Historical Overview. 2) Dr. Baiju M.R. (Dept. of Electronics & Communication, College of Engineering, Trivandrum) on Foundations of Linear Algebra 3) Dr. Ashok Rao (Former Head, Network Project, CEDT, IISc, Bangalore) on An Overview of Modern Linear Algebra: From Pedagogy to Linear Algebra machines and Applications of Modern Linear Algebra: From Orthogonality to Making of a DVD 4) Dr. Sujatha C. (Dept. of Mechanical Engineering, IIT, Chennai) on An Overview of Application of Integral Transforms 5) Dr. Sumitra S. Nair(Dept. of Mathematics, IIST, Trivandrum) on Reproducing Kernel Hilbert Spaces in Machine Learning. 35 delegates participated in the Conference among which 7 presented their Research Papers.







### **Library News**

MBCET library conducted an IEE Exlpore Digital Library Training Session for the faculty members on 11 July 2012. The resource person was Mr. Dhanu Pattanashetti, (IEEE Client Services / University Partnership Program Manager, Bangalore).

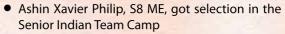
A one day IEEE Explore Digital Library Awareness Programme

was held for the Library Professionals and Research Scholars of the Trivandrum and Kollam Districts at YMCA Library & E-learning Centre, Trivandrum on 12 July, 2012. The above Programmes were co-ordinated by **Mr. Binu K. John**, Asst. Librarian.



He conducted a seminar on "Effective Utilization of E-Resources of the MBCET" for all branches of S7 B.Tech students at the C S Dept. Seminar Hall from 20 to 29 June 2012.

#### **Sports & Games**





 Adheena K. Latheef (S5 IT) won third prize in both Women's Singles & Youth Girl's Singles in the All Kerala Open Prize Money Table Tennis Tournament



 Jithin Suresh (S1S2 ME) won third prize in the All Kerala Senior State Shuttle Badminton Tournament.



 Amit Sebastian (S7 IT) & Nithin George N. F. (S5IT) got selection in Senior State Kerala Basket Ball Team.



 Abhijith Vijayan (S1S2 ME), Arjun G. K. (S1S2 CS) got selection in Junior Indian Basketball Camp.



 Our College basketball team entered in the semifinals of the Mahindra NBA Challenge All Kerala Basketball Tournament and lost the match to the Kerala Police Team.



#### **General News**

#### Workshop on Stress-Free Teaching

The programme was organized by Dr. Sakuntala S. Pillai (Dean R & D) and Mr. Pradeep M. (Asst. Prof.), Dept. of Mechanical Engineering.

#### **YOGATHON!**

On 7 April, 2012 Mar Baselios College of Engineering and Technology organized "Yogathon Challenge", a nation wide event initiated by the Art of Living Foundation towards building a "Healthier India for Today and Tomorrow". It was a challenge to the Youth of the country to participate in a competition of Surya Namaskar. Altogether 33 persons including staff and students and the people from the public participated in the event and 13 persons who completed 108 round of Surya Namaskar were declared as winner and they were given "Gold Certifiate". The programme was organized by Pradeep M., Savitha M. T., Viswanatha Rao and Dr. Sakuntala S. Nair.

## EKALAVYA-eOUTREACH-Institute Partnership with IIT-Bombay

Mar Baselios College of Engineering and Technology takes pride on being selected by the IIT Mumbai, as its 'e-OUTREACH Programme Remote Centre'.

Under the scheme, IIT Mumbai conducts two-week ISTE workshops under the distance mode, through EDUSAT network of ISRO and

the AVIEW software using internet for live transmission at various remote centres across the country during summer and winter vacation. The programme is part of the 'National Mission on Education through Information and Communication Technology' (ICT), supported by the Ministry of Human Resource and Development, Government of India. In the backdrop of this initiative a 2-week ISTE Mega Workshop on Introduction to Research Methodologies was held from 25 June - 4July, 2012 at about 200 Remote Centres across the country. Mar Baselios College of Engineering and Technology was one of the two remote centres in the capital city. The '10000 Teachers Training Programme' was inaugurated by Shri Kapil Sibal, Honourable Union Minister for Science & Technology and Earth Sciences

This course provided an Introduction to Research for the faculty. Topics mainly covered in the course were Productive Thinking Skills, Scientific Method and Experimentation Skills, Communication Skills – Written and Oral, Management of Research – Time Management, Stress Management, Professional Ethics, etc.

The Course Coordinators of the programme were **Prof.**D. B. Phatak, Prof. Uday Gaitonde and Prof. Kannan Moudgalya, IIT Bombay and the Course Faculty were mainly Prof. Shreepad Karmalkar, IIT Madras, Prof. Sahana Murthy and Prof. Santosh Noronha from IIT Bombay.

The Remote Centre Coordinator **Ms. Jomole Joseph** of EEE Dept. Co-ordinated this workshop at MBCET. Around 25 participants from different Colleges in Kerala attended the workshop. The in-house faculty members who participated in the workshop were Ms. Rajalekshmi I. S. and Ms. Neeradha C. K. (Basic Sciences), Ms. Nidhi M. B. (ME) and Mr. R. S. Praveen Raj (EE). Other faculty who assisted the RC Coordinator includes Mr. Arun T. (ME), Mr. Aneesh Kumar K. T. (EE), Mr. Praveen B. C. (ITMS) and Mr. K. Ramachandran Nair (EC).







#### **Staff Club Activities**

The staff club 2011- 2012 started functioning from October 2012 with **Ms. M. J. Jayashree** as the President, **Mr. Biju Andrews** as the Secretary and Ms. Luxy Mathews as Treasurer. Following are the highlights of the Staff Club Activities:

#### **Christmas Celebrations**

Christmas day celebrations (22 December, 2011) included a Skit, Carols, Christmas Songs and Lunch. The gift for each Christmas friend was handed over between December 20 and 22 December, 2011.



#### Staff Saving Scheme (SSS)

A Staff Saving Scheme was started in February 2012. There are six schemes under SSS. Under each scheme there are 10 members. Half of the amount collected from the first installment was given for charity as a part of the decennial celebrations of MBCET. The remaining half will be utilized for the welfare of the members of SSS.

#### **Staff Sports & Athletics**

A sports week for the staff was conducted from 9 - 13 April, 2012. The indoor items included Cricket, Carom Board (Men and Women) and Shuttle Badminton (single, doubles, mixed doubles). The athletics events were held on 12 April, 2012 in the Mar Ivanios Stadium. Competitions were held in the items - Shot put (Men and Women), Javelin Throw (Men and Women), Discuss Throw (Men), Long Jump (Men), Running Race{100m (Men and Women), 400m (Men), 1500m (Men)}



#### **Staff Picnic**

A one day staff tour was organized on 7 July, 12. 40 staff members participated. Tour destinations were Kulathupuzha, Kuttalam, Palaruvi, and Thenmala.



#### **Infrastructure Development**

Yet another floor has been added to the Academic Block, 'Thejus' of the College as an extension work of the existing structure. Mar Aprem Hostel also has been expanded with addition of yet another floor, to accommodate more





students, in the wake of the introduction of Post – Graduate courses and the additional batches to the existing B.Tech. Programmes. Both the wings will be ready for use in September 2012.

#### Post - Graduate Programmes started

The following Post – Graduate Programmes have been introduced at the College, leading to M.Tech. Degree.

Name of the Course	Department
Computer Science	Computer Science Engineering
Structural Engineering	Civil Engineering
Power Control & Drives	Electrical and Electronics Engineering
Telecommunication	Electronics and Communication
Engineering	Engineering
Machine Design	Mechanical Engineering

#### THE SPARK

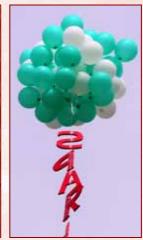
On 31 July at 3:45pm everyone gathered around the ARENA to witness the launch of SPARK-a tech fest initiated by MBCET, with the support of MATHRUBHUMI and ESTRRADO.

This event opens a platform for projects that demonstrate innovative ideas, entrepreneurial spirit, and potential to supplement the betterment of the community, whilst adopting a responsible approach to environment.

Innovative technical projects based on working models, from any discipline of Engineering, preferably focusing on Green Technology, will be eligible for participation in this competition. We expect students from high schools, senior secondary schools, colleges and college pass-outs of 2012 to participate in their respective categories. We are also inviting applications under a general category from non-student applicants with no background in engineering. Applications for project ideas will be accepted via our website www. mbcetspark.com. From the applications that we receive, 25 projects each, from the School Level and College Level and the General Category will be short listed by our panel. The selected teams will be informed and follow-up procedures for the successful implementation of their ideas will be taken up by our technical team. ESTRRADO (our technical partner) and TIC (Technical Incubation Cell) will provide necessary assistance to the teams to help with the realization of their ideas. Top three projects from Schools and Colleges respectively and the best project coming

under the General Category will be awarded cash prizes. A GREEN ACHIEVEMENT AWARD will be instituted for a worthy organization promoting green ideas.





Onam Celebrations



On 24 September, 2012, the campus was in the jubilant mood of Onam Celebrations. The forenoon was exclusively set apart for the various competitions of the students such as Athapookkalam, presenting the Maveli, Onappattu, Tug-of-war and so on. It was followed by 'Onasadya' and the Cultural Programmes under the auspices of the Staff Club.







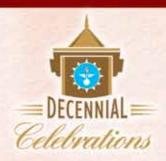






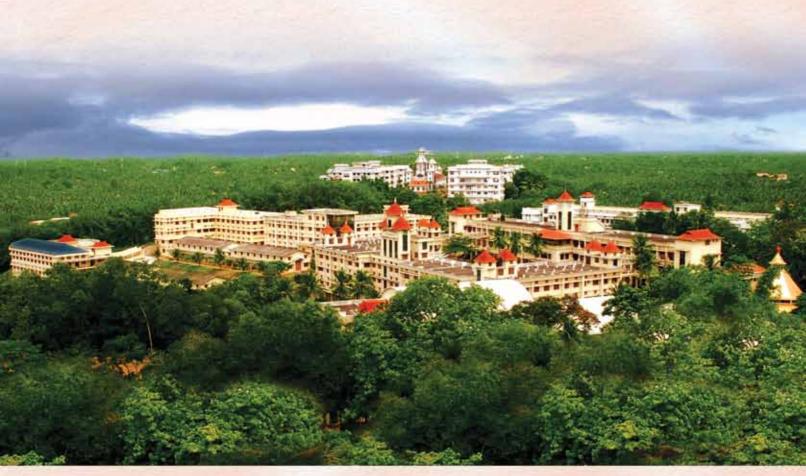
### **B.Tech FINAL RESULTS**

MBCET has improved its status to fourth position in 2010 – 2011 in the results of the University Examination.



# Duc In Altum ..... DECENNIAL To the Heights of Excellence

...through a Decade ... And yet Decades to go ... The Decennial Horizon Beckons you to shape history.



### The founder conceived it. We build it. Posterity sustains it.

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