

# IN ALTUM... The MBCET Mens Letter

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





## University Youth Festival





## M. Tech. Rank Holders



Ms. Anjana Krishnan CE – 1st Rank



Sarika E. P. EEE – 1st Rank



**Sujith S.** ME – 1st Rank



Deepak B.S. ME – 2nd Rank



Ms. Jijina N. EC – 1st Rank



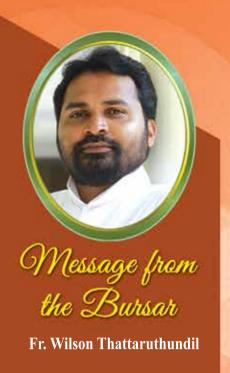
Ms. Lani Rachel Mathew EC – 2nd Rank



Rinju Mariam Rolly EC -2nd Rank



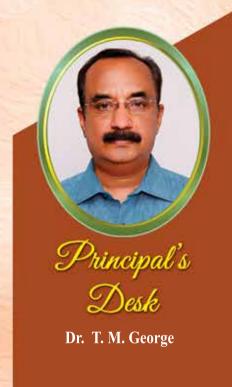
Jithu Vimal EC – 3rd Rank



Yet another Lenten period – a time of introspection and self-evaluation to refresh and revitalize the mind and spirit. We are reminded of the need for self-restraint, tolerance and endurance, the lack of which leads to disastrous effects in both private and public lives. Unfortunately impulsive behaviour has become a global phenomenon. Reports have appeared about child-soldiers and school children shooting down school mates and even teachers.

Life today seems to be a means for instant gratification of desire – the desire for wealth, power and pleasure. Tragically enough it is a life of extremities. Creating panic fear and terror in the name of God, ego, impulse and ignorance rule. It is in this context that the value and power of the Lenten introspection should be realized. Education should equip the individual for a fruitful introspection capable of mental and spiritual transformation. Otherwise it will be imperfect. As the MBCET undergoes the Institutional Self-Assessment process, the campus community imbibes the spirit of introspection and self-evaluation. It is essential in this period of transition as the new Technological University is evolving. Transformation through introspection – let it be our watchword. I wish all the students especially the 10th batch of MBCETians who are bidding farewell to their Alma Mater, all success in examination and in their lives too.

Educational activities have taken a quantum leap with the Internet, breaking classroom barriers and introducing students to a new world of learning experience the world over. Smart classes facilitate teachers to a more effective way of teaching and to instantly assess and evaluate the learning achieved by their students. In fact, the role of a teacher has changed to that of a mentor from that of being a deliverer of the content, as the content is created and available on the Internet on an anywhere anytime mode. The flipped classroom concept inverts traditional teaching methods, delivering instructions on-line outside the class room and moving homework into the class room. Virtual classrooms take the sphere of education to the next level as far as learning, knowledge and skills are concerned. It also facilitates students to take courses for upgrading themselves, which are also more affordable and accessible. The right blend of digital platforms, digital content as well as instructional design has the potential for transforming the education system, where the expansion and quality can be immensely enhanced. It is high time that we must follow at a breakneck velocity to establish and capitalize on the enabling capabilities of information and communication technology.





**Vision**: To be an Institution moulding globally competent professionals as

epitomes of Noble Values

**Mission:** To transform the Youth as technically competent, ethically sound and socially committed Professionals by providing a vibrant learning ambience.

The dual nature of expansion and contraction are inherent in Universe. Human beings also share this phenomenon. It cannot be otherwise since the microcosm is a miniature macrocosm or the reflection of it. As the evolutionary process of life continues, there is imbalance in the rhythm of life. Human life is reduced to a pursuit of pleasure and luxury based on new formulae. Mutations happen as a byproduct of the consumerist culture. New epidemics posing greater threats burst out.

The horizon of knowledge expands, but the mind of man contracts, shrinks. Egoism and arrogance breed intolerance and impulsiveness. Life is mistakenly defined as a celebration of the senses, instincts. Inspite of technological advancement alarmingly enough, man in the evolutionary process seems to degrade himself as an impulsive creature who knows only to speak with weapons. And machines acquire cognitive power too. Only the fittest survive and the number of the marginalized increases alarmingly in the context of globalization and the market oriented economic policy. Man faces the threat of being displaced by machine. In this precarious situation redeem humanity by placing the Gospel of Love at the centre, preserving human dignity to overcome the "use and throw-away" culture.

Dr. George Zachariah

#### **Young Masterminds of MBCET**

i. The project titled "UPASANA, A Diagnostic Tool Kit for ASHA workers" by Joji John Varghese (S6 EC2), Vivek Suresh Kumar (S8 EC) and Arun Krishna (CS) won the 2015 Malayala Manorama Yuva Mastermind



Prof. Sathish John Memorial Award held at JDT Islam Convention Centre Calicut. Mr Joji John Varghese has been selected to visit the National University of Singapore (NUS).

ii. Jeffin Alex George, Ajmal S4 ME, R. Sreehari and Darrel Daniel of S4 EC2 received first prize in Robotic Arm, a competition held at IIT Mumbai, March 29, 2015. R Sreehari has been selected for Robo Games 2016 to be held at USA.





## **International Conference on Advances** in Green Energy 2014 (ICAGE'14)

The 2014 IEEE International Conference on Advances in Green Energy was organized by Mar Baselios College of Engineering & Technology, Trivandrum in association with the Swinburne University of Technology, Melbourne, Australia.



The two day event was sponsored by the IEEE, IEEE Kerala Section, SERB (Dept. of Science and Technology), and Kerala State Council for Science, Technology and Environment (KSCSTE), Cochin Shipyard Ltd, Indian Space Research Organization (ISRO), Hindustan Latex Ltd (HLL), Energy Management Cell (EMC), Agency for Non-conventional Energy and Rural Technology (ANERT), Kerala State Electricity Board (KSEB) and MBCET Alumni Association (MBCETAA).

The Conference was inaugurated by Mr. Aryadan Mohammed, Hon'ble Minister for Power, Govt. of Kerala held on 16 December, 2014 at 11.30 am at the Visvesvaraya Hall, Mar Baselios College of Engineering and Technology, Trivandrum. His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos, Major Archbishop, Malankara Catholic Church and Patron, MBCET presided over the function. Dr. T. M. George, Principal and Conference General Chair welcomed the gathering. Ms. Divya N. A., Programme Convener, presented an overview of the Conference. Mr. M. Srinivasan, IAS, Secretary, Ministry of Power, delivered the keynote address. Felicitations were given by, Mr. R. Srinivasan, Chair, IEEE Kerala Section, Dr. Ajith Prabhu V., Joint Director, KSCSTE, Govt. of Kerala, and Prof. S. Viswanath Rao, Vice Principal, Ms. Elizabeth Varghese, Head of EEE Dept. & Publication Chair proposed the vote of thanks.



Prof. Ajay Kapoor, Pro Vice Chancellor, Swinburne University of Technology, Ms. Rashmi Kapoor, Dr. Chacko C. Neroth and Dr. Gladston Philip, President, DIDASK, Bio-Energy Ltd., Gujarat, were the Resource Persons in the Conference. Around 200 delegates from India and Abroad participated. The Technical Sessions were concluded with a panel discussion Chaired by Prof. V. K.

Damodaran, alongwith the panel members Er. Dhareshan Unnithan, Director, EMC, Dr. Chacko C. Neroth and Prof. Ajay Kapoor.





The Valedictory Ceremony was presided over by His Excellency Most Rev. Dr. Samuel Mar Irenios, Auxillary Bishop, Major Archdiocese of Trivandrum. Fr Wilson Thattaruthundil, Bursar & Finance Chair welcomed the gathering. Prof. Ajay Kapoor, Pro-Vice Chancellor, International Research, Swinburne University of Technology delivered the valedictory address. Ms. Elizabeth Varghese, Head of EEE Dept. & Publication Chair spoke in the occasion. Ms. Divya N. A., Programme Convener, proposed the vote of thanks.



#### **MoU with HLL**

MBCET signed an MoU with HLL Lifecare Limited to boost industry-academia collaboration and initiate joint





research programmes. It was signed by **Dr. T. M. George**, the Principal and **Dr. M. Ayyappan**, Chairman and Managing Director, HLL in the presence of **Dr. Sakuntala S. Pillai**, Dean Research and Development, MBCET; **Dr. K. R. S Krishnan**, HLL Director (Technical and Operations), **Mr. Satheesh Kumar**, HLL Senior Vice President and **Ms. Nidhi M. B.**, Assistant HOD, Mechanical Dept., MBCET.

## DEPARTMENT OF CIVIL ENGINEERING

#### **New Faculty Members**

The following Teachers have joined the Department:

Ms. Jaya S. Pillai, M.Tech. Environmental Engineering, College of Engineering (CET), Trivandrum, Ms. Parvathy R, M.Tech., Hydraulics Engineering, CET, Trivandrum and Ms. Ros Ann Joseph, M.Tech., Geotechnical Engineering from IIT (Indian Institute of Technology), Madras.

#### **Achievements and Awards of Faculty Members**

- 1. Ms. Anjana Krishnan secured First Rank in M.Tech. Civil Engineering from University of Kerala.
- 2. Mr. Akhil Raj S. R. was awarded:
- a. The 'ICI-Ultra Tech Endowment Award, Kerala 2014' for 'Outstanding M.Tech. Thesis in the Field of Concrete', on the topic 'Strength and Behaviour of Concrete Containing Admixed Recycled Aggregate', during the Concrete Day Celebrations by 'Indian Concrete Institute', Kochi Centre.
- b. The Best Paper Award in Concrete Technology for the work on "Fresh and Hardened Properties of Concrete

- Containing Admixed Recycled Aggregate", at the National Conference on Furthering Aspirations in Civil Engineering Techniques (FACET'14)', organized by Government College of Engineering, Kannur 2014.
- c. The Best Paper Award for his work on "Strength and Durability of Concrete Containing Admixed Recycled Aggregate", at the National Conference on Green Technologies (NET'14)', organized by Government College of Engineering Calicut 2014.

#### **Paper Presentations and Publications**

- 1. **Ms.** Neethu Roy, A. Veeraragavan and J. Murali Krishnan, published a paper "Influence of Confinement Pressure and Air Voids on the Repeated Creep and Recovery of Asphalt Concrete Mixtures", International Journal of Pavement Engineering, July 2014.
- 2 Ms. Neethu Roy, Nithin Krishna M, Anjana Varman, Niya Merin Zachariah and Susan K. Santy, published a paper "Planning of a Monorail Station at Kesavadasapuram, Trivandrum", MBCET Journal of Research, Vol. 3, November 2014.
- 3. **Ms. Jayasree .S** and Mr. Akhil Raj S.R. published a paper "Strength and Durability of Concrete Containing Admixed Recycled Aggregate", Proceedings of the Second National Conference on Emerging Trends in Engineering NET 2014, published by Bonfring International, ISBN 978-93-83459-67-4, August 2014, pp. 343-348.
- 4. Ms. Jayasree .S and Mr. Akhil Raj S.R. published a paper "Strength and Behaviour of Concrete Containing Admixed Recycled Aggregate", Proceedings of National Conference on Recent Advances in Civil Engineering, Published by International Journal of Engineering Research and Technology (IJERT) ISSN: 2278-0181, August 2014, pp. 154-161.
- 5. **Ms. Bindu Biju** and Smrithi Cheriyath published a paper "Study on Effect of Tuned Mass Damper in High Rise Buildings", National Conference on Technological Trends, 22 23 August, 2014.
- 6. **Ms. Ann George,** Ashlin Maria Joseph, Navya A.S, Reshma Mariam Alias, Swapna Rachel Mathew, Vinitha Mary Jovar and Neethu Elizabeth John, published a paper, "Identification of Accident Spots and their Control Measures", MBCET Journal of Research, Vol. 3, November 2014, pp.23.

- 7. **Ms. P. Muthulakshmi**, A. Ancy, K. A. Asish, R. Beena, J. S. Lekshmi, R. N. Resma and J. Shibin published a paper, "Treatment of Dairy Waste Water by Advanced Oxidation Process", MBCET Journal of Research, Vol. 3, November 2014, pp.12.
- 8. **Ms. Deepthi B. Krishnan**, K.Gokul, Immanuel Henry, M. J. Margrette, N. Shifa and M. R. Sumitha published a paper, "Design of Prestressed Box Girder at Panchikkattukadavu", MBCET Journal of Research, Vol. 3, November 2014, pp.17.
- Ms. Neema Therese, Shyaghan P. S, Bitty Susan Samuel, Divya Mary Thomas, Elizabeth Cherian and Jemily Susan James published a paper, "Widening of Pettah Rail Overbridge, Trivandrum", MBCET Journal of Research, Vol. 3, November 2014, pp.32.

#### **Student Achievements**

- Aiswarya Raju Antony, S8 CE, presented a memento prepared by her (portrait made using coffee powder), to Her Excellency Mrs. Sheila Dikshit, Honourable Governor of Kerala, and His Beatitude Moran Mor Baselios Cardinal Cleemis Catholicos, Major Archbishop of Malankara Syrian Catholic Church and the Patron of MBCET, during the 13th Annual ISTE Kerala Convention, Querencia 2014. Aiswarya Raju Antony, won the following prizes:
- First prize in Collage at the South Zone Inter University Festival held at Tumkur University, Karnataka
- Second prize for collage at the National Inter University Youth Festival held at Devi Ahilya University, Indore, Madhya Pradesh
- iii. Second prize for Installation at the National Inter University Youth Festival held at Devi Ahilya University, Indore, Madhya Pradesh
- Lekshmi Subash, S6 CE2, won the second prize in Kerala University South Zone Shuttle Badminton held on October 2014.
- 3. Amal Britto, S1S2 CE1, won the following awards:
- i. Winner of the All Kerala State Ranking Tournament for Badminton held at Kozhikode in July 2014:
- ii. First Runner-up in All Kerala Junior Ranking Tournament for Badminton held at Ernakulam in July 2014
- iii. First Runner-up in All Kerala State Ranking Tournament for Badminton held at Trivandrum in July 2014

- iv. First Runner-up in Championship State Tournament (both doubles and mixed doubles) held at Trivandrum in Sept/Oct 2014
- v. Second Runner-up in Intercollegiate University tournament in October 2014
- vi. Second Runner-up in Inter-Zone University Tournament in October 2014
- 4. Ancy K. G. and Betsy Benny of S12 CE1 secured first prize in Kerala University Net Ball tournament held on 25th January 2015 at Mar Baselios College of Engineering and Technology.
- 5. Mohammed Kaamil Fahem, S1S2 CE2, participated in the Kerala University Doubles Tennis Tournament and won the first prize for the same.

#### **Seminars & Technical Fests**

Utbhav 2014-'15, a National Level Technical Fest, was held on 9th January 2015. The Technical Fest was based on the theme 'Anutham Srishti-Towards finest creations'. Mrs. B. G. Sreedevi, Director of NATPAC was the chief guest. The main events were as follows:

Sthithi Prabandhana (Situation Management), Civil Gioco (Quiz), Articulo (Paper Presentation), Evento Da Escola (School event for students' skills in model making and planning), Bob the Builder (Model Making), Hunts Party (Treasure Hunt) and Conquering Cad (Drawing of monuments in CAD)

#### NASE 2014-'15

The second 'National Seminar on Advances in Structural Engineering, was held during 13th and 14th January 2015. Eminent speakers from CIT, NIT, SERC and LPSC enriched the programme. Technical talks were based on the recent advances in Structural Engineering. Mr. Biju Prabhakar, IAS, District Collector, Trivandrum was the chief guest. Mr. Ajith Prabhu of KCSTE released the proceedings of NASE.

#### **Thanal**

i. First year students who are members of Thanal along with staff Mr. Akhil Raj and Mr. Akhil Muraleedharan









provided entertainment in the form of music and dance for the residents of Pallium India on 20th December 2014.

ii. First year students who are members of Thanal along with staff **Mr. Arun V. M.** entertained the patients of Pallium India at World Palliative Care Day held at Shanghumugam on 15th January 2015.



iii. The members of Thanal along with the staff, Mr. Arun V.
 M., Ms. Chandini Basu and Mr. Tom George distributed
 Onam kit to patients of Palliative care at Poovar.



iv. Staff members of Civil Department visited orphanage at Killi and interacted with the inmates of orphanage on 30th November 2014.

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### **Paper Presentations and Publications**

- Ms. Jisha Jose published "An Access Control Model for Shared Data in Online Social Networks" ISSN: 2278 – 7798, International Journal of Science, Engineering and Technology Research (IJSETR), Volume 3, Issue 12, December 2014.
- 2. **Ms. Tessy Mathew** published "NSE Stock Index Prediction using NARX and SVM Techniques" Elsevier Proceeding, June 2014.
- 3. **Ms. Anjali C.** presented "A Personalized Mobile Travel Recommender System using Hybrid Algorithm" at the International Conference on Computational Systems and Communication organised by LBS Institute of Technology for Women, Poojappura on 17 and 18 December, 2014.
- 4. **Ms. Anitha Sandeep** published "Accident Information System", MBCET Journal of Research, November 2014.

- 5. **Ms.** Krishna Girish published "Color Image Enhancement with a Human Visual System Based Adaptive Filter", MBCET Journal of Research, November 2014.
- 6. **Mr. Shibu V S** published "Neural Based Self-Learning System", MBCET Journal of Research, November 2014.
- 7. **Ms.** Sunitha Krishnan K.S. published "Detecting Overcrowded Spots in City Transportation", MBCET Journal of Research, November 2014.
- 8. **Ms. Gayathri K. S.** published "PEL ELIXIR" in MBCET Journal of Research, November 2014.

## Workshops and Conferences Attended by Faculty Members

- 1. **Ms. Tessy Mathew** attended a Workshop on "Data Mining and Machine Learning with Weka" at VIT University on 21 February, 2015.
- 2. Ms. Anjali C., Ms. Sunitha Krishnan K.S. and Ms. Krishna Girish attended a Workshop on "IPR" at MBCET on 9 January, 2015.
- 3. **Ms. Tessy Mathew** and **Mr. Shibu V. S. attended** a Short Term Training Programme on Machine Learning at CET from 5 to 9 January, 2015.
- 4. **Ms. Anjali C.** attended a Workshop on Research Methodology at Noorul Islam University from 15 to 20 December, 2014.
- 5. **Ms. Sunitha Krishnan K.S.** attended a Workshop on "Embedded System Development" from 1 to 5 September, 2014.
- 6. **Ms.** Anupriya Vysala and Ms. Krishna Girish attended a Short Term Training Program under TEQIP-II on "Software Testing" from 27 to 31 October, 2014, organized by Government Engineering College, Barton Hill, Trivandrum.
- 7. **Prof. Raju K. Gopal, Ms. Jisha Jose,** and **Ms. Merin Kuriakose** attended a Certification Programme on Big Data Analytics with Mongo DB held at MBCET.
- 8. **Ms.** Merin Kuriakose, Ms. Jisha Jose and Ms. Gayathri K. S. attended a Two-Week ISTE Short Term Training Programme (STTP) on Pedagogy for Effective Use of ICT in Engineering Education, held at MBCET.

#### **Student Achievements and Awards**

1. Rijas T. M. of S4 CS1 won the bronze medal in Net Ball in 35th National Games of India 2015.

- 2. Arjun G. K. of S6 CS participated in Basket Ball in the 35th National Games of India 2015.
- 3. Kavya Suresh of S5 CS won the second place in TechTop2014, a National Innovation Competition for Engineering Students held at Mar Baselios College of Engineering and Technology, Trivandrum on 25th and 26th July 2014.
- 4. Arun Krishna of S4 CS2 won the "Prof. Satish John Memorial Special Prize" of Rs 60,000, in February 2015, which was shared with two students of the EC (Electronics and Communication) department for the development of a Diagnostic Tool Kit for Asha Workers in Yuva Mastermind organized by Malayala Manorama in technical partnership with Amal Jyothi College of Engineering.
- 5. Arunima S. Kumar of senior M. Tech. class received the Indira Gandhi NSS National Award at the First National Youth Awardees' Summit 2014 held at KIIT University, Bhubaneswar from 27th to 28th December 2014. This was jointly organized by the Ministry of Youth Affairs & Sports, Government of India and the KIIT University. It was intended to bring together National Youth Awardees and Indira Gandhi NSS National Awardees from across the country. The theme of the summit was "Youth's Own India". She was also the Master of Ceremonies of the inaugural session of the Summit.



6. Arunima S. Kumar of senior M. Tech. class was also invited by the Ministry of Youth Affairs, Government of Odisha for a special address in the State Level National Integration Camp. The Summit also instituted the National Youth Awardees' Forum of India (NYAFI), a group of National Youth Awardees and Indira Gandhi NSS National Awardees across the country working

together to address the burning issues of the society. She was also selected as the all India Secretary of the Forum.



7. The following students received annual awards from the college:

Kevin Mathew, S1S2 – Young Wizard Of Science Award 2015; Rahul P., S8 - All Round Performance Award (2011-15); Pranav Vikramkumar, S8- Arun Memorial Award 2015; Jijo Jose, S4 – Proficiency Award (2013-14); Binju Baby, S6 - Proficiency award (2013-14); Pranav Vikramkumar, S8 - Proficiency award (2013-14); Arunima S Kumar, M3-Proficiency award (2013-14); Bismi N., S1S2 – Perfect attendance award (2014-15); Manjari L., S1S2 - Perfect attendance award (2014-15); Shifana S Hameed, S4 - Perfect attendance award (2014-15); Dhananjay J., S4 - Perfect attendance award (2014-15)

#### **Events in the Department**

 The CSE Department, in association with Flytxt, Technopark, Trivandrum, organized a One Day Workshop on Big Data Analytics on 18th December 2014. The resource persons were Mr. Shyju Thomas, Mr. Ranjith Uthaman and Mr. Amit Meher, all from Flytxt. The workshop was attended by 50 staff members and students of CSE, IT and EC departments. The workshop focused on Big Data analytics frameworks and offered hands on training.



2. An invited talk on the topic "Cyborg World" (Cybernetic Organism against Robotic Rebellion) by **Prof. Andrews Samraj**, Principal Scientist and Director of Advanced Science and Technology Research Centre International,

- Chennai was arranged for the benefit of the members of the faculty and PG students on 20 June, 2014. The talk was coordinated by Ms. Tessy Mathew.
- 3. An invited talk on "Project Selection for Computer Science Students" was arranged on 23 July, 2014 for the benefit of students of final year B. Tech and M. Tech. The Speaker was Mr. Rajesh M. Nair, Chairman, Degree Controls, USA and founder of Tech Top. The talk and interaction were coordinated by Prof. R. Vikraman Nair.
- 4. An invited talk on "Bigdata Analytics an Introduction" was delivered by Mr. Rajesh Ramaswamy, Associate Director, BI-Analytics at EY Innovation Centre, EY Global Shared Services Kerala, on 29 August, 2014. This was followed by an interaction with students moderated by **Prof. Raju K. Gopal**.



- 5. **Ms. Remya Kartha**, an M. Tech. alumnus of the college conducted a workshop on Weka Implementation with hands on exercises for the benefit of PG students in November 2014, which was coordinated by Ms. Tessy Mathew.
- 6. An invited talk by **Mr. Vijayakumar M.** (CEO, Webyfy, Trivandrum) was arranged on 10 November, 2014 for the benefit of PG students on the topic "Research Areas for Computer Science Students" by **Prof. Raju K. Gopal**.
- 7. The CSE Association activities, which are coordinated by Mr. Shibu V. S., were inaugurated on 22 August, 2014. Dr. K. C. Chandrasekharan Nair, former MD, TBI, Technopark delivered a talk on "Entrepreneurship as a Habit" on this occasion.
- 8. **Mr. Kannan**, RTTC, BSNL delivered a talk on "Introduction to 2G, 2.5G, 3G & 4G" on 6 January, 2015.



#### **Short-Term Courses conducted by Faculty Members:**

i. **Praveen G L** handled a session in STTP on "Data Structures and Algorithm Design Techniques" organized by the Department of Computer Science and Engineering at LBS Institute of Technology for Women, Trivandrum from 30th December 2014to 3rd January 2015, under the sponsorship of TEQUIP-II.

#### **CSI Student Chapter**

- i. A workshop on Website Design Fundamentals (HTML, CSS, HTMS, CSS3) was conducted on 12th July 2014.
- ii. A workshop on Java Script Fundamentals was conducted on 9th August 2014.

#### **Industrial Visits**

- 1. S7 students participated in the Industrial tour organized in December 2014.
- 2. M. Tech. (Junior and Senior batches) attended a training session on the evolution of wide area networks at the BSNL training school, Kaimanam on 25th September 2014. The visit was coordinated by Prof. Raju K. Gopal.



3. S8 students attended a session on the current mobile communication technologies at the BSNL training school which was coordinated by Ms. Asha S.

## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### Research

Ms. Deepa P. L. & Mr. Anoop K. Johnson registered for Ph.D. under the guidance of Dr. Jiji C.V, Professor, College of Engineering, Trivandrum

#### **Paper Presentations and Publications**

 Aswini S. H., Ardra Lekshmi B. N., Suma Sekhar and Dr. Sakuntala S. Pillai, "MIMO OFDM Frequency

- Offset Estimation", Proceedings of the 2014 IEEE International Conference on Computational Systems and Communications (ICCSC), December 17-18, 2014.
- Aswini S. H., Ardra Lekshmi B. N., Suma Sekhar and Dr. Sakuntala S. Pillai, "Timing Synchronization for MIMO OFDM using Orthogonal Sequences in Rayleigh Fading Channel", Proceedings of the 2014 IEEE International Conference on Computational Systems and Communications (ICCSC), December 17-18, 2014.
- 3. Mr. S. Viswanatha Rao and Dr. Sakuntala S. Pillai, "Adaptation of MAC for Energy Harvesting Wireless Sensor Networks", International Journal of Applied Engineering Research, ISSN 0973-4562 pp. 9107-9116 Volume 9, November 21, 2014.
- 4. Dhanya Devarajan, **Dr. Sakuntala S. Pilllai** and Sreelatha P., "Optimal Lasercom Satellite Transmitter Based on Performance Prediction and Design Adaptation", Proceedings of the 2014 Fourth IEEE International Conference on Advances in Computing and Communications (ICACC), 2014 pp. 33 37, August 27-29, 2014.
- 5. Bhakthapriya P. K., Rini Issac, Saarika B. S., Tanya Philips and **Mr. Anoop K. Johnson** "Smart e-Passport using EVCS", International Conference on Speech and Signal Processing (ICSSP), pp 221-225, August 2014
- 6. Jithu Vimal, **Ann Mary Alex**, "Audio Steganography Using Modified LSB Method", International Journal of Research in Advent Technology (IJRAT), Vol.2, No.5, May 2014.
- 7. Lani Rachel Mathew, Ancy S. Anselam and Dr. Sakuntala S. Pillai, "A Study of Low Bit-Rate Linear Prediction based Speech Coders for Indian Dialects", Proceedings of the IEEE International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT-2014), Noorul Islam University, Tamil Nadu, pp. 432-436, July 10-11, 2014.
- 8. Jobin Varghese, **S. Viswanatha Rao**, "Performance Analysis of SMAC and TDMA Protocols under Varying Traffic Density over Wireless Sensor Networks", International Conference on Communication and Computing (ICCC-2014), 21-23 August, 2014.
- 9. Jobin Varghese, S. Viswanatha Rao, "Energy Efficient Exponential Decision MAC for Energy Harvesting-

- Wireless Sensor Networks 2014", International Conference on Advances in Green Energy (ICAGE), 17-18 December 2014.
- 10. Arathy S. Lal and **Remya Annie Eapen**, "A Study on Topology Control in Wireless Sensor Network", International Journal of Research in Advent Technology, E-ISSN: 2321-9637.Vol.2, No.8, August 2014, pp. 36-38.
- 11. Arathy S. Lal and **Remya Annie Eapen**, "A review of mobile agents in wireless sensor network", International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering, vol. 3, issue 7, pp. 10842–10845, July 2014.
- 12. **M. J. Jayashree** and Prof. (Dr.) A. Sukesh Kumar, "Comparison of ECG Signal Compression Using Particle Swarm and Genetic Algorithm Optimized Neural Networks", International Journal of Applied Engineering Research (IJAER), ISSN 0973-4562 Volume 9, pp. 10529-10539, November 21, 2014.
- 13. Charutha S. and M. J. Jayashree "An Efficient Brain Tumor Detection By Integrating Modified Texture Based Region Growing And Cellular Automata Edge Detection", International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), held at Noorul Islam University, Kumaracoil, Tamil Nadu, July 10-11, 2014.
- 14. Charutha S., Ms. M. J. Jayashree, "Brain Tumor Detection By Integrating Multi-Constrain Based Region Growing and Sobel Edge Detection", International Conference on Current Techniques in Medical Image Analysis (CUTECMIA), Adishankara Institute of Engineering and Technology, Kalady, August 9, 2014
- 15. Charutha S. and Ms. M. J. Jayashree, "An Effective Brain Tumor Detection By Integrating Multi Constrain Based Region Growing And Cellular Automata Edge Detection", International Conference on Signal and Speech Processing (ICSSP), TKM College of Engineering, Kollam, 21 August, 2014.
- 16. Roshny G. Kumar and K. Padmakumar, "A VLSI Implementation of Floating Point CORDIC Coprocessor", International Journal of Engineering Research & Technology (IJERT), ISSN: 2278-0181, Vol. 3 Issue 9, September- 2014.
- 17. **M. J. Jayashree, Aju Sam Sunny**, Anu John, Ashley Anna Sunny and Shruthi Susan "Smart Hospital

- Technology", Health Informatics An International Journal (HIIJ), ISSN:2319-3190,Vol.3, No.3, August 2014.
- 18. Lani Rachel Mathew, Ancy S. Anselam and Dr. Sakuntala S. Pillai, "Quality Evaluation of CELP, LD-CELP and MELP Vocoders", Elsevier Science and Technology, Proceedings of International Conference on Signal and Speech Processing, (ICSSP-2014), pp. 236-240, August 21 23, 2014.
- 19. Cleona Cleetus Fernandes, Princy P. Jayan, Sajin Mathew Zachariah and **Ancy S. Anselam** "Skin Tone Based Secret Data Hiding In Images", International Journal of Electrical and Electronics Engineering Research (IJEEER), ISSN(P): 2250-155X:ISSN(E):2278-943X, Volume 4, Issue-4, pp 179-190, August-2014.
- Nikhila G. Thomas and Niyas K. Haneefa, "Network Coded Coperative Relaying for Cellular Communication System: A Comparative Study", International Conference on Computing Communication & Energy Systems, August 2014.
- 21. Jijina N. and Dr. Sakuntala S. Pillai, "Power Efficient Design of Mobile Terminals Using Wave Shaping Matrix Precoding", Proceedings of the IEEE International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT-2014), July 10-11 2014.
- 22. Neeraja C. J. and Nandan S., "Turbo Coded Double Differential Phase Shift Keying in Aeronautical Channels", IEEE International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), 10-11 July 2014.
- 23. Renjitha Mariam Rajan and **Teena Rajan**, "PAPR Reduction in BICM-SFBC OFDM Based on Amplification and Clipping", 2nd International conference on Current Trends in Engineering and Technology (ICCTET-2014), 8th July 2014.
- 24. Lincy Rachel Mathews and Ms. Arathy C. Haran V., "Histogram Shifting Based Reversible Data Hiding Using Block Division and Pixel Differences", 2014 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), held at Noorul Islam University, 10-11 July 2014.
- 25. Shiras S. N. and **Swapna P. S.**, "Downlink Resource Allocation for Turbo Coded OFDMA Network with

- Relays", Elsevier Science and Technology, Proceedings of International Conference on Signal and Speech Processing, (ICSSP-2014), page 206-213, August 21 23 2014.
- 26. Shiras S. N. and **Swapna P. S.**, "Downlink Resource Allocation for OFDMA Network with Relays", 2014 International Conference on Control, Instrumentation, Communication and Computational Technologies (ICCICCT), held at Noorul Islam University, 10-11 July 2014.
- 27. Nikita George, Sneha J. W., Smrithika Sindhu Prem, Susan Jacob and Ms. Swapna P. S., "Resource Allocation in OFDMA Systems A comparative Study", International Journal of Innovative Research and Studies, ISSN 2319-9725, page 43-59, June 2014.

## Workshops and Conferences Attended by Faculty Members

- 1. **Ms. Lani Rachel Mathew** attended a "Short Term Training Programme on Fractional Calculus", organized by Department of Electronics & Communication, College of Engineering, Trivandrum, from 17 to 22 November, 2014.
- 2. **Ms. Yamuna K. Moorthy** attended a Workshop of Applicable Mathematics and Statistics, held at Mohandas Engineering College, from 14 to 18 October, 2014.
- 3. Mr. Jinu Baby, Ms. Ann Mary Alex, Ms. Poorna R. Prabhu, Ms. Aathira V., Ms. Arathy C. Haran and Ms. Remya Annie Eapen attended a "Two weeks Workshop on Control Systems", National Mission on Education through ICT (MHRD, Govt. of India), organized by IIT Kharagpur at MBCET, 2 to 12 December, 2014.
- 4. **Ms.** Hema P. P. and Ms. Jofina Jose attended a "Workshop on Microteaching" organized by TEQIP in association with ISTE at Government Engineering College, Barton Hill from 20-21 October, 2014.
- 5. **Ms. Yamuna K. Moorthy** attended a "Five Day Faculty Development Programme on Intelligent Systems for Telecommunications and Internet", organized by Department of Electronics and Communication Engineering, College of Engineering, Trivandrum, 12 to 15 January, 2015.
- 6. **Mr. Anoop K. Johnson** and **Ms. Yamuna K. Moorthy** participated in a "Two Week ISTE Short Term Training Programme (STTP) on Pedagogy for Effective use of ICT

- in Engineering Education", organized by IIT Kharagpur at MBCET from 7 to 21 December, 2014.
- 7. **Prof S. Viswanatha Rao** attended a "National Workshop on Wireless Sensor Networks and Robotics in Agriculture and Rural Development", 17-18 March, 2015, organized by Kerala State Planning Board.
- Prof S. Viswanatha Rao attended a "Workshop on Simulation of Wireless Networks using NS-2", 21-22 March, 2015, Organized by Department of Electronics & Communication Engineering T.K.M. College of Engineering, Kollam

## Seminar/Conferences organized by the Department

1. "Two days National Workshop on VHDL Programming and Practices (WVPP2015)", organized by Department of Electronics & Communication Engineering, MBCET, held on 30th and 31st January, 2015.

Organized by: Ms. Ancy S. Anselam, Ms. Lani Rachel Mathews

Staff attended: Ms Luxy Mathews, Ms. Ancy S. Anselam, Ms. Swapna P.S, Ms. Deepa P.L., Mr. Niyas K Haneefa, Ms. Ann Mary Alex, Ms. Yamuna K Moorthy, Ms. Remya Annie Eapen, Ms. Roshny G. Kumar, Ms. Lani Rachel Mathew and Ms. Lakshmy S.



2. "National Seminar on Emerging Wireless Communication Technologies (NSEWCT15)", organized by Department of Electronics & Communication Engineering, MBCET, held on 12th and 13th March, 2015.

Organized by: Ms. Yamuna K. Moorthy, Ms. Jofina Jose, Mr. Jinu Baby

Staff attended: Ms. Luxy Mathews, Ms. Ancy S. Anselam, Ms. Swapna P. S., Ms. Anu Anna John, Ms. Yamuna K. Moorthy, Mr. Nandan S. and Mr. Arun P. S.



#### **Student Achievements and Awards**

#### 1. Rank Holders:

- a. **Ms. Jijina N.** secured 1st rank for M. Tech. in Telecommunication Engineering from the University of Kerala.
- b. Ms. Lani Rachael Mathew and Rinju Mariam Rolly secured 2nd ranks for M. Tech. in Telecommunication Engineering from the University of Kerala.
- c. **Mr. Jithu Vimal** secured 3rd rank for M. Tech. in Telecommunication Engineering from the University of Kerala.

#### 2. Project Competitions:

- A. The project titled "EEG Based Driver Alert System" by Vineeth G. K. (S6 EC1), Athul Prasad C. V. (S6 EC1) and Joji S. Pramod (S6 EC1) was selected for Manorama Yuva Mastermind 2015 project competition.
- B. Texas Instruments Innovation Challenge India Design Contest 2015:
- The project titled "UPASANA, A Diagnostic Tool Kit for ASHA workers" by Joji John Varghese (S6 EC2), Vivek Suresh Kumar (S8 EC) and Arun Krishna (CS) was selected for Texas Instruments Innovation Challange India Design Contest 2015 and qualified for the Quarter Finals.
- ii. The project titled "VISTHAARA, A Scalable Home Automation System" by Nibin Peter (CS), Sathyajith S L (CS), Kiran Mathew Mohan (CS), Alex Mathew (CS) and Sachin S. Daniel (S4 EC2) was selected for Texas Instruments Innovation Challenge India Design Contest 2015 and qualified for the Quarter finals.
- iii. The project titled "LIOT, Internet of Things with Light Fidelity" by Joshua K Mathew (S8 EC), Vivek Joy (CE), Kavya Suresh (CS), Reshmy Prasad (EE) and Akhil R.

- (CS) was selected for Texas Instruments Innovation Challenge India Design Contest 2015 and qualified for the Quarter finals.
- C. Vivek Suresh Kumar, Sheba Elizabeth, Smilu Sunny and Stephy James of S8 EC received the best project award for their project titled "Vein Finder".
- 3. Saira Maria Eapen, Raveena Grace Thomas and Alkka Elisa Roy of S8 EC were part of the winning team for the University Netball competition held at Mar Baselios College, 25 January, 2015.
- 4. Shruthi Geetha and Gopika M. S. of S8 EC and Reshma S. S. of S6 EC1 won the third prize for Folk Orchestra in the South Zone Competition, held on 7 to 13 December, 2014.
- 5. Gopika M. S. of S8 EC won the second prize for Debate and third prize for Elocution in the South Zone Competition, held on 7 to 13 December, 2014.
- 6. Geojo Jacob of S8 EC won the first prize for Group Song and third prize for Drama in the South Zone Competition, held on 7 to 13 December, 2014.
- 7. Joji John Varghese of S6 EC2 won 1st prize in 'Design in DABA', 1st prize in 'Circuitrauma', 2nd prize in 'Electro Maze' and 2nd prize in 'Incep-T- Rap' in the Annual Techno Managerial Fest Tezoro, Thangal Kunju Musaliar College of Engineering, 21 to 23 February 2014. He also won 2nd prize in Electromania, organized by Indian Institute of Space Science and Technology, Trivandrum, held from 28 February to 3 March 2014.
- 8. Harikrishnan R. of S6 EC1 and Joji John Varghese of S6 EC2 won the 1st prize in Circuit Debugging in Tathva 2014 held at NIT Calicut
- 9. Akshay B. S. and Joji John Varghese of S6 EC2 won the 1st prize in E-Racer, Tathva 2014 held at NIT Calicut.
- 10. Reshma S. S. and Mariya Roniya of S6 EC1 won the 2nd prize for Keralanadanam in the Kerala University Youth Festival.
- 11. Mariya Roniya, Athira Krishnan R., Swati Chandran and Aiswarya Krishnan of S6 EC1 won the 2nd prize for Thiruvathira and 3rd prize for Group Dance in the Kerala University Youth Festival.
- 12. Abhinand S., Naveen S. and Amritha Vijayan of S4 EC1 received the 1st prize in 'Hack-A- Duino', an Arduino project competition organized by IEEE MBCET

- and CATALYST Innovation and Entrepreneurship Development Cell of MBCET on 12 August, 2014.
- 13. Gaurav Krishna, Anuraj S, Akhil Adithya H. and Sidharth S. of S4 EC1 received the third prize in 'Hack-A-Duino', an Arduino project competition organized by IEEE MBCET and CATALYST Innovation and Entrepreneurship Development Cell of MBCET on 12 August, 2014.

#### **Events**:

#### 1. EC Association:

- i. Published the newsletter for EC Association, ENIX, in December 2014.
- ii. Conducted a Logo and Tagline Design Contest in December 2014.
- iii. Conducted a quiz competition, the finals of which were held on 17 March, 2015.
- iv. Organized a talk on "System on a programmable chip" on 17 March, 2015.

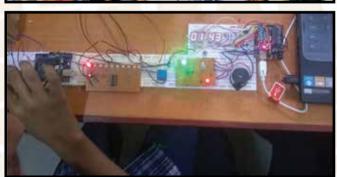
#### 2. IEEE Activities:

- IEEE MBCET and CATALYST, the Innovation and Entrepreneurship Development Cell of MBCET jointly organized Hack-a-duino, an Arduino project competition on 12 August, 2014.
- ii. IEEE MBCET organized three events on 29 and 30 August, 2014 during the All Kerala ISTE Technical Fest, Querencia 2k14.
- iii. Conducted WebAddict on 29 August, 2014 wherein students were asked to make a website based on the given resources.
- iv. Conducted Electrobricks on 30 August, 2014. The competition tested the debugging, wiring and coding skills of participants.
- v. Conducted Electrician of the Year competition on 30 August, 2014. The participants were expected to make an electrical device according to the specifications given.



vi. Organized a workshop "Electrodynamics" for the first year students on 24 January, 2015. The workshop dealt with the fundamentals and underlying principles of electronic devices and computing.





# DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

#### **DEPARTMENT ASSOCIATION ACTIVITIES:**

ILLUMINA – (Technical Association of Electrical Engineering Students):

#### • AutoCAD Training:

A certificate course in AutoCAD 2014 was conducted for S7 students of EEE. The sessions were handled by professionals from CADCENTER, Trivandrum. The course was conducted for 30 hours from August to October 2014. 59 students successfully completed the course.



#### • PLC – SCADA Training:

Five days Industrial Automation workshop was conducted for S8 students of EEE from 24 to 28 November 2014. The topics covered include training on PLC's of Mitsubishi and SCADA Software with basic fundamentals of Robot. 60 students took part in the training organized by Automation and Control Systems, Pune.



#### Workshop on Electrical System Design :

The Global Institute for Design Engineering along with Illumina organized an Industrial Electrical designing workshop for two days in MBCET on behalf of work skill development initiation for



S8 students of EEE. The workshop was conducted on 15 and 16 January 2015.

#### Photography Contest:

A photography contest was held for Electrical Engg. students under the theme "EMOTIONS". Only black and white photographs were permitted and a caption was to be given for each snap. The last date of receipt of the photo entries was on 25th January 2015. Cash awards of Rs. 1000/-, Rs.750/- and Rs. 500/- were distributed respectively to first, second and third position winners. The contest was judged by **Mr. Sandeep S. R.** (Asst. Prof. Dept. of CS). Poornima H. R.



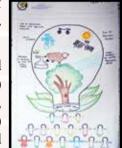
(S1S2, EEE), Jongee Chandy (S1S2, EEE) and Greeshma Susan John (S1S2, EEE) secured the first, second and third prizes respectively. Student coordinators: Aswin R. Nair (S8, EEE) and Gokul Sarath (S8, EEE).

#### Poster Design Contest :

A Poster design contest was held on 4 Feb. 2015. on the theme "Electrical Engineering". Two teams from each class S8, S6, S4 and S1S2 can participate and each team consists of two members only. The contest was judged by **Ms. Manju** 

Ann Mathews (Asst. Prof., Dept of EEE) and Mr. Aneesh Kumar K. T. (Asst. Prof., Dept of EEE).

Gayathri Gopal V. (S1S2, EEE) and Anjali Sasilekha Kumar (S1S2, EEE) banged the first prize. Vishnu V. (S8, EEE) and Vinayak Nair H. (S8, EEE) were the second prize winners and the third prize winners were Ganga



M. S. (S4, EEE) and Akshara M. A. (S4, EEE). Student coordinators: Mathews K. Chacko (S8, EEE) and Anju Johnson (S8, EEE).



#### • Social Service Activities :

50 students from EEE Department visited an Old Age Home at Manavila on 15 March 2015. The old age home "SANTHWANAM" has around 30 members. The faculty and students interacted with them and had lunch together.



 "Vibgyor - the Spectrum of Illumina", the Department Newsletter was released on 20 March 2015, by Mr.
 Jerin Chacko, Director of Fitwell Construction Pvt Ltd (Alummi MBCET) at Visvesvaraya Hall.

• To inspire the young minds, ILLUMINA arranges motivational video presentations for the students on all Fridays from 1pm to 2 pm at the Faraday Hall.

#### **MOTIVATION PROGRAMME:**

 A talk on "Positive Thinking" by Mr. Venkataramana Reddy (Manager of Database and Consultancy) was held on 12th and 13th January 2015 for S4 students of EEE Department. 54 students were present for the session.

#### **CONSULTANCY WORK:**

- Consultation Service for Design, Drawing and Supervision of Electrification of buildings of MBCET during 2010-2014 headed by Prof. M. K. Giridharan.
- Consultation Services for the Electrical Installation of the proposed Ladies Hostel building of LBSITW, Poojapura.
- Consultation Service for the Residential and Commercial Complex of Providence Plaza at Keston Road.

Supporting Team: Prof. M. K. Giridharan, Ms. Jomole Joseph and Mr. F. R. Rejish Babu.

## ACCOLADES WON BY STUDENTS (CURRICULAR ACTIVITES):

The following students received awards on college day 14 February, 2015:

- Sneha Susan Sunny (S1S2, EEE): Young Wizard of Science 2015.
- Philip Jithin Paul (S8, EEE): All round Performance Award.
- Sreejith R. (S4, EEE), Pooja Jose Kumar (S6, EEE), James Godfrin (S8, EEE), Jisha Shaji (M.Tech Control Systems) and Midhun G. (M.Tech Power Control and Drives): Proficiency Award.
- Arya S. L. (S1S2, EEE), Gopika G. S. (S1S2, EEE), Poornima H. R.(S1S2, EEE), Siddarth Srikanth (S1S2, EEE), Pooja Jose Kumar (S6, EEE) and Priya Philip (S6, EEE): Perfect Attendance Award.
- James Godfrin (S8, EEE): "Memorial Award", Constituted by the staff members of Department of Electrical & Electronics Engineering in Fond Memory of Prof. R. V. Chitra of their department for final Year

- Electrical & Electronics Student who scores highest marks in Electrical machines subjects (Electrical Machines I, II & III).
- Sarika E. P. secured first rank in Kerala University in M.Tech (Power Control and Drives).
- Midhun Gopakumar (M. Tech, Power Control and Drives) secured university first rank for the first semester.
- Jisha Shaji (M.Tech, Control Systems) secured university third rank for the first semester.
- Rakhi J. S (S4, EEE) secured university third rank for third semester in the year 2014 – 2015.



- Anush V. (S6, EEE), Ashok Kumar R. P. (S6, EEE), Neby A. Salim (S6, EEE) and Sreekutty O. U. (S6, EEE) banned the first prize of an amount of Rs.2500/for "CATALYST", a technical event organized by the Computer Science Department of MBCET.
- Pavin Shaji (S6, EEE) and Karthik S. (S4, EEE) secured third prize in the "Chess Competition" conducted by Kerala University.

#### **EXTRACURRICULAR ACTIVITIES:**

- Priya Philip (S6, EEE) completed her implant training on "Study of power output systems and station auxiliary power supply of Kudankulam Nuclear Power Plant" from 6 to 12 September, 2014.
- Begum Yasmine N (S1S2, EEE) was being selected for the event "Lawn Tennis" in 35th National Games of India, which was held from 31 January to 14 February, 2015 across seven Districts in Kerala.
- 10 students of S6, EEE participated in "ROBOTICS" course conducted by "Li2 Innovations" held at Barton Hill College of Engineering.
- A group of S8, EEE students including Ananthakrishnan, James Godfrin, Govind N., Noel John, Ashwin Sebastian, Vignesh P. and Vishnu R. did implant training at "Century Plyboards" in Chennai for aduration of six days. Their training was on the topic "Study of Various Electrical Systems and Automation in an Industry".
- Hena Mary Joy (S8, EEE) completed her implant training on the topic "Study of Electrical Systems in Nuclear Power Plant" for a duration of five days.

• 12 students of S8, EEE completed their implant training at "TELK" for aduration of three days.

#### **R&D** Activities:

• S6, EEE students submitted two funded project proposals at Centre for Disability Studies (Govt. of Kerala).

Projects are entitled as "Intelligent Currency Counter for Blind" and "Hold on Glove". Each project team includes 5 students.

#### SHORT TERM COURSES / WORKSHOPS:

- Two week ISTE main workshop on "Control Systems" was conducted by IIT Kharagpur under the National Mission on Education through ICT (MHRD, Govt. of India) from 2 to 12 December 2014. There are 242 remote centers participating in the workshop. 21 candidates (3 external & 9 internal) of EEE Department successfully completed the course. Remote center coordinator: Mr. F. R. Rejish Babu (Asst. Prof, Dept of EEE), Workshop Coordinator: Mr. Arun S. Mathew (Asst. Prof, Dept of EEE).
- Two week ISTE short term training program was conducted on "Pedagogy for effective use of ICT in Engineering Education". Workshop was conducted in two phases. First phase from 5 to 7 January, 2015 and second phase from 19 to 21 January, 2015. Also an online phase was conducted from 8 to 18 January, 2015. Remote center coordinator: Mr. F. R. Rejish Babu (Asst. Prof, Dept of EEE). 5 candidates of EEE, Department successfully completed the course.

#### COURSES/ WORKSHOPS ATTENDED BY FACULTY:

- Ms. Elizabeth Varghese attended an STTP conducted on "Fractional Calculus" organized by Department of Electronics and Communication at College of Engineering, Trivandrum and sponsored by Directorate of Technical Education Govt. of Kerala from 17 to 22 November, 2014.
- Two week's ISTE main workshop on "Control Systems" conducted by IIT, Kharagpur under the National Mission on Education through ICT (MHRD, Govt. of India) from 2 to 12 December, 2014.

Staff attended: Ms. Elizabeth Varghese, Ms. Sandhya P., Ms. Nisha G. K., Mr. Aswin R. B., Ms. Manju G., Ms. Sheenu P., Ms. Shalu K. George, Ms. Anu Gopinath and Ms. Shyju Susan Mathew.

- Ms. Shyju Susan Mathew attended the five days Industrial Automation workshop on "PLC and SCADA Training" which was conducted during 24 to 28 November, 2014.
- Two weeks ISTE short term training program conducted on "Pedagogy for effective use of ICT in Engineering Education" from 5 to 21 January, 2015.

Staff attended: Ms. Sheenu P., Ms. Sojy Rajan, Ms. Manju Sreekumar, Ms. Manju Ann Mathews and Mr. Arun S. Mathew.

 Two day workshop on "Industrial Electrical System Design" organized by Department of Electrical and Electronics Engineering was conducted at Mar Baselios College of Engineering, Trivandrum on 16 and 17 January, 2015.

Staff attended: **Ms. Jomole Joseph** (Asst. Prof), Mr. Ratheesh Kumar V. S. (Lab Assistant Gr. I) and Mr. Rajeevmon S. (Lab Assistant Gr. I).

 Course on "Safety Requirements for Engineering Institutions" was conducted on 21 to 23 January, 2015 under TEQIP Phase –II organized by School of Engineering, Cochin University of Science and Technology.

This course introduced and discussed the safety requirements, issues, hazards and their control in the engineering institutions. It also discusses life saving techniques like CPR and first aid and provides the participants hands on training on fire fighting.

Staff attended: **Mr. Aswin R. B.** (Asst. Prof) and Mr. Rajeevmon S. (Lab Assistant Gr. I).

- Mr. Vishnu Chandran C. L. (Lab Assistant) and Ms. Smiji R. S. (Lab Assistant Gr. I) attended a one day workshop on "Systems and Control Experiments" organized by Department of Electrical and Electronics Engineering at Bishop Jerome Institute, Kollam on 24 January, 2015.
- EEE Department organized a training programme on "FIRE FIGHTING" for the Technical Staff on 25 March, 2015 at Faraday Hall. The training was arranged in two sessions for various departments. All the Technical Staffs





attended the session. Mr. Rajeevmon S. (Lab Assistant Gr. I) demonstrated the safety requirements, issues, hazards and their control in the Engineering Institutions.



#### **RESEARCH PAPERS/PUBLICATIONS:**

- Shahida L. R. and Dr. T. M. George, published a paper entitled "Implementation of Sliding Mode Control for a Buck Converter in a Photovoltaic System" in the International Conference on Advances in Green Energy (ICAGE 2014), December 2014, IEEE Transactions 2014, Page No.245 250.
- Mr. Aneesh Kumar K. T., Ms. B. Prasanna Kumari, Ms. Elizabeth Varghese, published a paper entitled "Space Vector PWM and Fractional Controller based Wind Energy Conversion Systems" in the International Conference on Advances in Green Energy (ICAGE 2014), December 2014, IEEE Transactions 2014, Page No.74-81.
- Anila Prabha, Ms. A. V. Soumya, published a paper entitled "Improving the performance of a variable speed wind pump with Z source inverter and PWM controller" in the International Conference on Advances in Green Energy(ICAGE 2014), December 2014,IEEE Transactions 2014,Page No 174 178.
- Vinay P, Ms. Manju Ann Mathews, published a paper entitled "Modelling and Analysis of Artificial Intelligence Based MPPT Techniques for PV Applications" in the International Conference on Advances in Green Energy(ICAGE 2014), December 2014,IEEE Transactions 2014,Page No 56 65.
- Sarika E. P., Mr. R. S. Praveen Raj published a paper entitled "Performance Comparison Of Direct Torque Control Of Two Level And Three Level Neutral Point Clamped Inverter Fed Three Phase Induction Motor" in the International Conference on Advances in Green Energy(ICAGE 2014), December 2014,IEEE Transactions 2014, Page No 179 183.
- Renu V., Ms. Surasmi N. L. published a paper entitled "Optimal Control of Selective Harmonic Elimination in a Grid Connected Single-Phase PV Inverter" in the

- International Conference on Advances in Green Energy (ICAGE 2014), December 2014, IEEE Transactions 2014, Page No 265 271.
- Sreelekshmi T and Ms. Shalu George K. published a paper entitled "Common Mode Voltage Reduction with Harmonics Study using different PWM Techniques for a Three Phase & Five Phase BLDC motor" in the International Conference on Advances in Green Energy (ICAGE 2014), December 2014,IEEE Transactions 2014,Page No 216 225.

## DEPARTMENT OF INFORMATION TECHNOLOGY

#### Paper Presentations and Publications

- 1. **Ms. Jisha John, Madhu S. Nair,** K. G. Gopchandran, and M. Wilscy have published a paper titled "Uniformity Analysis in Nanocrystalline Silver Thin Films using Fuzzy Inference System." Surface and Interface Analysis 47, no. 1 (2015): 161-165.
- 2. **Ms. Jisha John**, Madhu S. Nair, and M. Wilscy. "Cell Image Segmentation and Color Coding Based on Nucleus to Cell Ratio." In Electronics and Communication Systems (ICECS) 2014 International Conference on, pp. 1-5. IEEE 2014.
- 3. **Ms. Jisha John,** Madhu S. Nair, K. G. Gopchandran and M. Wilscy, "Analyzing Surface Morphology of Thin Film Nanostructures using Feature Similarity Index Measure", International Conference on Advances in Computing, Communications and Information Science ACCIS 2014 (India), Elsevier, pp.104-112, June 2014.
- 4. **Ms. Poorna B R,** Subith K published a paper entitled "Medical Diagnostic System using Fuzzy Logic" in International Journal of the Latest Trends in Engineering and Technology, Volume 5, Issue 1, January 2015.

## Workshops and Conferences Attended by Faculty Members

- 1. Ms. Devi Priya V. S, Mr. Sandeep S. R, Mr. Vishnu Kumar S, Mr. Shon J. Das and Ms. Ashwini B. attended one week TEQIP sponsored Short Term Training Programme on "Software Testing", from October 27 to October 31 2014, organized by Dept. of IT, Government Engineering College, Barton Hill, Trivandrum.
- 2. Ms. Asha S., Ms. Elizabeth B. Varghese, Ms. Devi Priya V. S., Ms. Divya R. S., Ms. Poorna B. R., Mr.

**Vishnu Kumar S., Ms. Jisha John** and **Ms. Ashwini B.** attended one day workshop on Big Data Analytics organised by MBCET in association with Flytxt, Technopark on 18 December 2014.

3. Mr. Biju B. Varghese, Mr. Vishnu Kumar S, Ms. Jisha John and Ms. Ashwini B. attended a Two Week ISTE Short Term Training Programme on "Pedagogy for Effective use of ICT in Engineering Education" conducted by IIT Bombay from 5 to 7 January 2015 and 19 to 21 January 2015.

#### **Student Achievements and Awards**

1. Aneesh J. L. (S8), Arunkumar J. (S6), Gokul G. (S6) and Syam V. Gopal (S6) became winners in Netball championship held at Kerala University on 1 February 2015.

#### Seminars/Talk Organised by Faculty Members

- 1. **Mr. Biju B. Varghese**, Head of the Department, delivered a motivational talk about the "Relevance of Computer Science in future" for first year Computer Science & Engineering MBCET Students.
- 2. **Ms. Asha S.** organized a talk on "Introduction to 2G, 2.5G, 3G, 4G" by Mr. B. Kannan, JTO, BSNL on 6 January 2015.
- 3. **Ms. Asha S.** organized an Industrial Visit to BSNL, Kaimanam for S8 CS st udents on 22 January 2015.
- 4. **Mr. Sandeep S. R.** (Staff Coordinator- FRAMES) organized a One day workshop on 'Professional Photography' by Mr. Mahesh Harilal (official photographer of Sportstar Magazine) on 24 January 2015.
- 5. Mr. Vishnu Kumar S. delivered a talk on "Relevance of Professional Bodies in Engineering Colleges" at the College of Engineering, Perumon, on 9 January 2015. He gave another lecture on "Computer Networks" at the Department of Computer Science, University of Kerala, on 30 August 2014.

## DEPARTMENT OF MECHANICAL ENGINEERING

**Mr. Pradeep M.** has taken charge as Head of Mechanical Engineering Department.





**Ms. Nidhi M. B.**, Assistant HoD, of Mechanical Engineering Department, has been elected to the National Executive Council of ISTE, New Delhi from ISTE Kerala Section.

#### Mr. Remil George Thomas,

Assoc. Prof. of ME Dept. served as the Venue Co-ordinator – Felicitation for Aquatic Events held at Pirappancode, Trivandrum, for the National Games.



#### **New Faculty Members**

Mr. Raveesh G, M.Tech. - Energy Systems Analysis and Design, Government Engineering College Kozhikode; Mr. Deepak B. S., M.Tech. - Machine Design, MBCET; Mr. Ranjith H., M.Tech. - Machine Design, MBCET; Mr. Jibin Jacob, M. Tech. - Machine Design, MBCET.

#### **Achievements and Awards of Faculty Members**

**Mr. Sujith S**, secured the First Rank in Kerala University in M. Tech. – Machine Desig n 2014.

Talks, Paper Presentations and Publications

- 1. Ramsankar V., Rinu Thomas, Manjunath, "A novel analytical approach to find the length of the parabolic trough collector for any generic application", International conference Polygeneration, Anna University, Chennai.
- 2. **Jibin Jacob, Pradeep M.** "Kinematic Analysis of Universal Joint and Proposition for Compliant Universal Joint", NCFT, MBCET.
- 3. Raveesh G., "Simulation of Single phase fluid flow using nanofluids in micro channel" Proceedings of National Conference on 'Latest Trends in Mechanical Engineering NCLTME-2014 in Association with ISTE at N.S.S. College of Engineering, Palakkad, Kerala.
- 4. **Deepak B. S., Hari Venkit, Vinod V.,** "A Case Study on Synchronization in Coupled Nonlinear Frequency Detuned Systems", NCFT, MBCET.
- 5. **Shyam Sundar V.**, "Optimum Design and Analysis of Single Toggle Jaw Crusher", NCFT, MBCET.
- 6. Ranjith H., Remil George Thomas, "Deformation Control of Work piece Fixture system by Optimization of Clamping Forces and Locator configuration", NCFT, MBCET.

#### **Invited Lectures**

 'Feast' Software Demonstration by Mr. Deepak and Mr. Raj Tilak, VSSC at MBCET.

- 2. A talk on 'Accounting' by **Mr. Renjith**, Manager, South Indian Bank, Nalanchira.
- 3. **Ms. Nidhi M. B.** delivered the keynote address on the occasion of Chapter Inauguration at Trinity College of Engineering, Trivandrum on 10 January 2015.
- 4. **Ms. Nidhi. M. B.** gave the felicitation on the occasion Vidya Academy of Science and Technology, Trivandrum, Chapter inauguration on 7 January 2015.
- 5. Mr. Remil George Thomas and Mr. Unnikrishnan G. delivered talk at the workshop on "Outcome based Education" at Sree Buddha College of Engineering, Pattoor on 15 January 2015.

## Workshops and Conferences Attended by Faculty Members

- 1. **Mr. Roshan George Koshy** attended 5 day STTP on "Robotics and Industrial Automation" at CET.
- 2. Mr. Sreejith N. K. attended three day workshop on Advanced Materials and Modern Manufacturing Techniques, at Saintgits College of Engineering, Kottayam, September 2014.
- 3. Mr. Rajesh T. N., Mr. Vinod V. & Mr. Unnikrishnan G. attended one week STTP on CFD at CET, in December 2014.
- 4. **Mr. Ranjith H.** attended 2 day workshop on Microteaching August at GEC Barton Hill.
- 5. **Mr. Roshan George Koshy** attended 5 day STTP on "Introduction to Microfluidics and Nanofluidics" at CET.
- 6. **Mr. Pradeep M.** and **Mr. Sujith S.** attended three day workshop on design testing and realization of composites materials, November 2014, SCT Trivandrum.
- 7. Mr. Pradeep M., Mr. Sreejith S. and Ms. Ruby Maria Syriac attended the one day workshop on FEAST at VSSC on 29th December 2014.
- 8. **Mr. Sreejith S.** attended Entrepreneurship, 2 weeks STTP at PSG Tech, Coimbatore.

#### **Student Achievements and Awards**

 Salman Nizarudin and Gokul J. of third year Mechanical Engineering, attended National Seminar on WASTE MANAGEMENT - CHALLENGES & SOLUTIONS at St. Thomas Institute for Science and Technology, Trivandrum conducted on 9 and 10, January 2015. 2. Arjun K. S., of second year ME 2 won First prize in INDIAN CLASSICAL DANCE for his splendid performance at the National level inter -University youth festival.



- 3. Salman Nizarudin, Rohit Choodan, Aaron Haris Peireira, Gokul G. and Anwin Mathai of S6 ME2 were the toppers at CETEX National Innovative Expo.
- 4. Bharath A. of second year ME 1, secured Second prize in Battle of Bands at Yagna-Druva 2014, held at LBS.
- 5. Anandu Mohan of third year ME, secured Silver Medal in Taekwondo, Inter-collegiate Kerala University Competition.
- 6. Mohammed Rayeez and Ronald Thankachan, of Second year ME, were there in the college team and won the second prize for choreo video, at Cult A Way, conducted by SCT. They also won the second prize for Synchrodance at Yagna-Druva 2014, held at LBS.
- 7. Aqeel Faheem of second year ME2 and Kaamil Faheem of first year were winners of Kerala University Tennis doubles.
- 8. Mr. Jishnu G. Nair, of second year ME2 has participated in South zone inter- university basketball and in junior nationals- Kerala team.
- 9. A project on "Ryle Tube Feeder" submitted by students of S8, ME Shaun Sam Mathews, Ani Sam Varghese, Nithin Varghese, Akhil P. Johnson, Ajay Dev R. G. under the guidance of Ms. Nidhi M. B., Asst. Prof. of Mechanical Dept. received research project funding from CeDS, a Govt. of Kerala undertaking.

#### **Important Events**

#### Workshop on Intellectual Property Rights (IPR)

A one day workshop on Intellectual Property Rights and Patenting Procedure was conducted on 9 January, 2015. The workshop was jointly organized by Mar Baselios College



of Engineering, Trivandrum & PIC-Kerala / KSCSTE. Ms. Nidhi M. B., AHoD, Dept. of Mechanical Engg, MBCET welcomed the gathering. Presidential address was given by Dr. T. M. George, Principal, MBCET. Dr. D. A. Damodaran, former director of National Institute of Interdisciplinary Science and Technology (NIIST) was the Chief Guest of the day.



Mr. V. P. Balagangadharan, former Dr. Bhramaprakash, Scientist, VSSC, Mr. Afsar S, Patent Attorney and partner, Krishna and Saurastri Associates, Bangalore, were the Resource Persons. The concluding session was handled by Mr. Safikh S., Technical officer (IPR), KSCSTE, Trivandrum in which he elaborated the support provided by PIC- Kerala for IPR protection.

#### **CONFLUENCE – Continuance of Togetherness**

Reunion of mechanical alumni's named "Confluence" was conducted on 6th September 2014. Around 60 people including our present/old staff and alumni took part in the event. **Dr. T. M. George**, Principal inaugurated the programme. It was followed by an open house where most of our alumni shared their experiences. The event was followed by Onasadhya.



#### Introduction to the world of pipelines

A talk on "An Introduction to the World of Pipelines" was given by **Mr. Bechu Jacob Philip**, an alumnus of our college on 20 February, 2015.



The talk was on the importance of Piping Engineering in Industry, especially the Petroleum Sector. He also gave light on the hardships faced by the Engineers in Offshore Piping Design. The talk was attended by many Faculty Members and second year ME students.



#### Conference

The Department of Mechanical Engineering, MBCET, Trivandrum organized a two day National Conference on "Futuristic Trends in Mechanical Engineering" on 22-08-14 & 23-08-14.

60 papers received were reviewed and 46 papers were accepted. 40 papers were presented in the Conference. **Dr. K. Sivan**, Director, LPSE inaugurated the Conference. **Dr. Y. V. K. S. Rao** presided over the function. Dr. C. P. Reghunathan Nair, Fr. Wilson Thattaruthundil, Bursar, **Dr. T. M. George**, Principal, Prof. K. M. Raju & Prof. K. Gisuthan spoke on the occasion. **Dr. S. Biju**, Jt. Director, LPSE, **Dr. Anil Lal**, and **Dr. K. S. Sajikumar**, CET, **Dr. S. H. Anil Kumar**, SCT, etc., were Resource Persons.

#### **Professional Society Activities**

ISTE MBCET Chapter organized the 13th Annual State Student Convention 2014. Seven Student Conveners from the department coordinated the various events. Best student award from Kerala section was bagged by Mr. Suhail E. M. of S6-ME1, Chairman ISTE Student Chapter.

## DEPARTMENT OF SCIENCE AND HUMANITIES

Paper Presentations and Publications

1. **Ms. Binimol Mary Mathew** did a Poster Presentation on "Solid State Synthesis and Spectral Characterization of Mixed Ligend Complexes" and won the First Prize for Poster Presentation in the National Seminar on 'Green Practices in Chemistry' held at Mar Ivanios College, Trivandrum during 9th to 10th October 2014.

- 2. Ms. Archana P. Das presented a paper entitled as "In Silico Screening and Molecular Docking Studies of Embelin and Its Derivatives as Potent Anticancer Agents A Green Chemistry Approach" at the National Conference on Applications of Engineering for Green Technology held at the Heera College of Engineering & Technology, Trivandrum.
- Ms. Savitha M. T. has published a paper titled "Application of Fuzzy Theory in Optimization Problems

   A Review" in the proceedings of the National Conference on Recent Trends in Pure and Applied Mathematics (IVANO NCPAM 2014) during 21 to 23 August 2014.

## Workshops and Conferences Attended by Faculty Members

- 1. **Ms. Binimol Mary Mathew** participated in the one day National Seminar on "Green Chemistry" held at NSS College, Kottiyam on 31December 2014.
- 2. Ms. Archana P. Das participated in the following events:
- (1) National Seminar on 'New Materials and Nano Technology held at Heera College of Engineering & Technology, Trivandrum on 16 and 17 January 2015.
- (2) National Seminar on "Green Practices in Chemistry" held at Mar Ivanios College, Trivandrum on 9th and 10th October 2014.
- Ms. Lakshmi J.S. and Ms. Neeradha C. K. participated in a Two Weeks ISTE Short Term Training Programme on Pedagogy for Effective Use of ICT in Engineering Education organized by IIT Mumbai, held at Mar Baselios College of Engineering & Technology from 5 to 21 January 2015.
- 4. **Ms. Rajalekshmi I. S.** participated in the Workshop On Computer Aided Mathematics Teaching, sponsored by Director of Collegiate Education held at Government College for Women, Trivandrum on 12 and 13 February 2015.

#### Young Wizard of Science

This year the College instituted an award for best all round performance of the first year students, under the title, Young Wizard of Science. The selection is based on the performance in the Proficiency Tests conducted by the Department, the marks in Series Tests and performance in extracurricular achievements. Kevin Mathew (CS2) and Sneha Susan Sunny

(EEE) have been selected as the Young Wizards of this year.

#### **MBCET Library News**

'The Engineering, Science & Technology Resources Portal' of national importance - mbcet.wordpress.com developed and maintained by **Binu K. John** has crossed One Lakh hits this year. All the department libraries of the MBCET are computerized by an Open Source Integrated Library Management System (ILMS) - KOHA.

The library renewed access to E-Journal packages, viz, IEL Online (IEEE), Elsevier's Science Direct, American Society of Mechanical Engineers (ASME) & American Society of Civil Engineers (ASCE).

**Binu K. John,** Asst. Librarian, has conducted a Seminar on "Effective utilization of the Library & E-Resources of the MBCET - A user empowerment initiative" for all branches of M.Tech students from 18 October 14 to 6 November 14. He served as a resource person for the two days' Workshop in 'Wordpress', an open source content management system organized by the Centre for Professional Development of the Kerala Library Association at Trivandrum on 10, 11 May & 14, 15 February 2015.

#### Quizz

ISTE MBCET Chapter organized a GK Quiz on 13/03/2015 for 45 minutes by the new office bearers. There were 8 teams from Civil, Mechanical and Electrical Dept.

Ann Mary Toms (S4 EEE) & Amal R. S. (S4 EEE) emerged as winners. It was organised under the leadership of Amareesh, Secretary, ISTE MBCET Chapter (S4 EE) and Anandu, Chairman, ISTE MBCET Students Chapter (S4 ME1).

#### **Energy Audit**

ISTE MBCET student chapter in association with Energy audit cell organized a session on Energy Audit. S6 students of EEE and ME attended the session. Around 110 students participated in the session on 10/03/2015. The resource person was **Dr. Hari Kumar**, Head, Training Division, Energy Technologies and,, Energy Management Centre, Kerala. The session was co-ordinated by **Ms. Jomole Joseph** of EEE Dept. and **Ms. Nidhi M. B.** of Mechanical Engg Dept.

#### **Work Towards NBA & NAAC Accreditation**

The self Assessment Report (SAR) for NBA Accreditation has been submitted under the co-ordination of **Prof. S.** 

Viswanatha Rao, Vice-Principal. The process of NAAC Accreditation has been initiated, which is co-ordinated by Dr. George Zachariah and Prof. S. Viswanatha Rao.

#### **Training and Placement Unit**

A total of 102 students got placed in 2015.

Infosys – 62, UST Global – 15, Qburst -7, MuSigma – 6, IBS – 6, Envestment – 5 and Experion Global – 1.

#### **MBCET Civil Service Orientation Programme**

Civil Service Aptitude test was conducted for First year students to identify students with potential. Eleven students have been shortlisted and include in the orientation programme. Civil Service Institute, Pala, conducted a session on January 23, 2015

#### Infosys - Business English Programme

Nine batches of 2nd year students have successfully completed the Infosys Campus Connect Business English Certificate Course.

#### **GREAT DEBATE**

The GREAT DEBATE is an annual National Level debate competition conducted by the British High Commission, New Delhi. The preliminary regional level competitions are conducted in 8 cities across India. Our College Team comprising of Gopika M. S. (S8 ECE) and Titto C. Paul (S6 ME) won the first prize in the Kerala regionals that was conducted by the British Deputy High Commission, Chennai in association with the University of Kerala. The winners from the 8 regions were flown to Delhi for the National Finals that took place on 27 November, 2014. The three day trip also gave the participants a chance to interact with the British High Commissioner at his residence, the Duke of York and Union Minister Smt. Smrithi Irani. The MBCET team emerged as the runners up in the Competition.



#### **RESEARCH PROJECTS**

#### Dept. of ECE

- ISRO RESPOND Project: "Study and implementation
  of advanced low bit rate audio encoding and decoding
  algorithms" The following staff members are involved:
  Dr. Sakuntala S. Pillai, Prof. S. Viswanatha Rao, Ms.
  Ancy S Anselam, Ms. Anu Mariam John, Ms. Lani
  Rachel Mathew, Ms. Lakshmy S, Ms. Ann Mary Alex
  and Ms. Roshny G. Kumar.
- The project entitled "Visual Interface System for the Disabled (VISD)" has been approved by Centre for Disability Studies (CDS). The following students are involved in the project: Mr. Vineeth G.K, Ms. Geethu S., Mr. Zabin P. and Ms. Nagma Rani. Guided by: Ms. Remya Annie Eapen, Asst. Professor.

#### Dept. of CSE

- Investigator: Ms. Tessy Mathew, Asst. Professor.
- Title: Route Planning and Navigation Aid for the Visually Challenged and Hearing Impaired
- Sponsorship: Centre for Disability Studies, Poojapura, Trivandrum.
- Group members: Sarah Grace Samji, Savio Victor, Sijin Jacob Zacharia, Vysakhan H (S6 CS)

#### Dept. of EEE

- Centre for Disability Studies
- · Title: Hold on Glove
- Principal Investigator: Mr. Aswin R. B., Asst. Professor.
- Student Investigators: Roshan L., Thomaskutty Jogy, Devika Jayakumar, Aby Antony, Malavika A. J.
- Sponsors: Centre for Disability Studies, Govt. of Kerala, Trivandrum.

#### Dept. of ME

- Title: Ryle Tube Feeder
- Principal Investigator: Ms. Nidhi M. B., Asst. Professor.
- Sponsors : Centre for Disability Studies, Govt. of Kerala, Trivandrum.
- Group Members: Mr. Shaun Sam Mathews, Mr. Ani Sam Varghese, Mr. Nithin Varghese S6 ME II

#### Dept. of IT

- Investigator: Mr. Vishnukumar S., Asst. Professor
- Title: Developing Image Super-Resolution Techniques
- Sponsors : Computer Society of India Education Directorate.

#### **SPORTS & ARTS**

Prizes Won at Kerala University Inter Collegiate Tournaments 2014-15

Men's Basketball – 1st, Men's Netball – 1st, Women's Netball – 1st, Men's Table Tennis – 2nd,

Women's Table Tennis Women – 3rd, Men's Lawn Tennis (Team Championship) – 2nd,

Men's Lawn Tennis (Doubles Championship) - 1st, Women's Lawn Tennis (Team Championship) - 2nd,

Women's Lawn Tennis (Doubles Championship) - 2nd, Women's Shuttle Badminton (Team Championship) - 2nd,

Men's Shuttle Badminton (Team Championship) – 3rd, Taekwondo: U 58kg, won by Anandu.R. Mohan, S6 ME – 2nd.





















Prizes Won at the Indian College Basketball League (Icbl), Kerala Region

Men's Section – 1st and Women's Section – 2nd.

#### **National Games 2015**

Arjun G. K. (S6 CS) - Basketball, Mohammed Noufal (S6 CE) & Rijas T. M. (S4 CS) - Netball and Begum Yasmine N. (S1S2 EEE) - Lawn Tennis got selection for the National Games. The following were the winners: Mohammed Noufal and Rijas T. M, representing Kerala: Bronze Medal for Netball.





#### Participants in South Zone Inter University Competitions

Basketball: Robin Roy (S8 ME), Srikanth Sasidharan (S8 ME), Ajith V. K. (S8 IT), Arjun G. K. (S6 CS), Abhijith Vijayan (S6 ME1) and Jishnu G. Nair (S4 ME2); Chess: Archana.S.G (S12 CS); Shuttle Badminton: Jithin Suresh (S6 ME2) and Divya.R (S6 IT); Tennis: Begum Yasmine N. (S12 EEE)

## Prizes Won at the South Zone Inter University Youth Festival

1st Prize in Eastern Group Song: Geojo Jacob(S8 ECE), 3rd Prize in Drama: Geojo Jacob(S8 ECE)

2nd Prize in Debate: Gopika M.S.(S8 ECE), 3rd Prize in Elocution Gopika M.S.(S8 ECE)

3rd Prize in Folk Orchestra: Gopika M.S.(S8 ECE), Shruthi Geetha(S8 ECE) and Reshma S.S.(S6 ECE)

1st Prize in Collage: Aiswarya Raju (S8 CE), 2nd Prize in Classical Dance: Arjun(S4 ME)

3rd Prize in Western Group Song: Joann Jacob (S4 CS) and Samuel Punnoose (S4 CS)

## Prizes Won at the All India Inter University Youth Festival

1st Prize in Classical Dance: Arjun.K.S ( S4 ME), 2nd Prize in Painting: Aiswarya Raju (S8 CE)





#### **UNIVERSITY YOUTH FESTIVAL 2015 WINNERS**

1. Sankar Vaidyanathan S6 ME<sup>2nd</sup>: Wind Instrument (Eastern)<sup>1st</sup>, Hindustani Classical Vocal<sup>3rd</sup>, 2. Harry John George S8 ME: Mappilapattu <sup>3rd</sup>, 3. Ali Saahil S4 CS1: Veen 1st, 4. Sruthi Krishnakumar S6 IT: Stringed Instrument (Western)<sup>1st</sup>, 5. Agnel Geo Francis S6 EEE: Wind Instrument (Western)<sup>1st</sup>, 6. Arjun.K.S S4 ME: Bharathanatyam (Male)<sup>1st</sup>, 7. Vishnu Vijay S8 CE: Kuchipudi - <sup>2</sup>, Folk Dance - <sup>2</sup>, Kathakali - <sup>1</sup>, Ottamthullal-<sup>2nd</sup>, Kerala Nadanam-1st, Kathaprasangam-1st, Monoact -3rd, 8. Parvathy.S.Prakash S1S2 CS2: Folk Dance - 3rd, Monoact -3rd, 9. SyamV. Gopal S6IT: Kathakali - 3, 10. Reshma.S. S S6 EC1: Kathakali - 3rd, 11. Syam Mohan.M.S S4 CE2: Monoact -1st, 12. Aiswarya Raju Antony S8 CE: Rangoli - 3, 13. Vrindavadhyam-First, 14. Ganamela-First, 15. Group Dance - Second, 16. Thiruvathira-First 17. Margamkali-Second, 18. Debate-English (Harikrishnan Menon And Gopika MS): 2nd

































#### Nominated to Kerala University Senate

Ms. Sruti Krishnakumar, S6 IT, has been nominated to the Kerala Utility Senate by the Hon'ble Governor of Kerala, for her achievements in Arts. Congratulations.

#### **Jesus Youth Activities**

At the initiative of Cardinal Cleemis there was Lumen'15, a 3 day retreat conducted by **Fr. Xavier Khan Vattayil** and team. There were around 1500 participants. The Jesus youth

group of Mar Baselios College conducted a night vigil at the College. Grace '15 was the get together for the students who completed the course here. During the Lent, a pilgrimage to Kurisumala was conducted which imparted a blessed experience in contemplating the way of the cross. Fr. Shoji and Fr. Subin as Spiritual leaders gave guidance to the Jesus Youth and Agnel, S6 EEE, Co-ordinated the activities.

#### BASELIAN FEST

Mar Baselios College of Engineering and Technology conducted the "Baselian Fest" on 31January 2015. The Student Senate organized the competitions. It was officially inaugurated by **Dr. T. M. George**, Principal, and message for all the participants was given by **Mr. S. Vishwanath Rao**, Vice-Principal. There were about 25 events including literary and arts. During the closing ceremony the prizes were given away by **Mr. S. Vishwanath Rao**, Vice-Principal and **Ms. M. J. Jayashree**, HoD, EC.



#### Crossroads 2015

Crossroads 2015 was held on 14, 15 & 16 February 2015 with the theme "Light". The fest included 26 cultural events and 14 technical events spread over three days. The Techno-cultural fest ended with the meganite on 16 February 2015 with **Mr. Naresh Iyer** and Masala Coffee performing together live for the first time. The active participation from various Engineering Colleges in Kerala, contributed to the success of the event.











#### Rain-Water Harvesting

The work of the reservoir for Rain-Water Harvest is in progress. It has a storage capacity of 4000000 litres.



#### Exodos 2015 (B.Tech.)

The Course Completion Ceremony of the 10th Batch of B.Tech. Students, Exodos 2015 was held on 28 March 2015. His Excellency Most Rev. Dr. Samuel Mar Irenios, Auxiliary Bishop of the Major Archdiocese of Trivandrum presided over the function. Dr. Alexander Jacob, ADGP, was the Chief Guest. Mr. Jerrin, an Alumnus of the College, felicitated the students. Fr. Wilson Thattaruthundil, Bursar and Dr. T. M. George, Principal, spoke on the occasion.

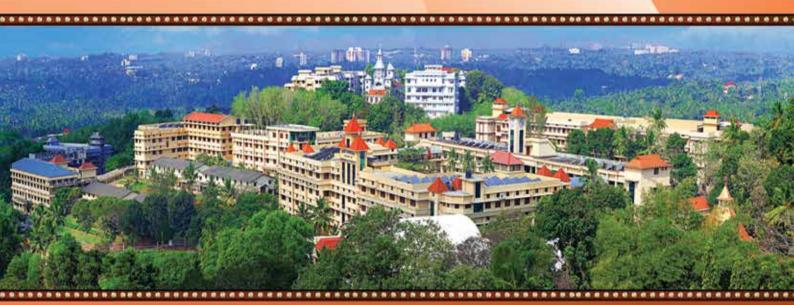




# Duc In Altum..... To the Heights of Excellence



## Decipherers of Techno-dreams Since 2002



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

Managing Editor: Rev. Fr. Wilson Thattaruthundil, Bursar

Editor-in-chief: Dr. T. M. George, Principal

Editor: Dr. George Zachariah

Board of Editors: Mr. Joji Varghese (Dept of Phy. Edn.), Mr. V. K. Kuriakose (Supdt.), Ms. A. N. Archana (Dept. of EEE), Ms. Rajalekshmi I. S. (Dept of Science & Humanities), Mr. Roshan George Koshy (Dept. of ME), Ms. Roshny G. Kumar (Dept. of ECE), Ms. Ann George (Dept. of CE), Ms. Merin Kuriakose (Dept. of CSE) & Ms. Divya R. S. (Dept. of IT).

Tel: 0471-2545866 / 2545868 / 2545872 Fax: 0471-2545869 Email: mbcet@mbcet.org Website: www.mbcet.ac.in