

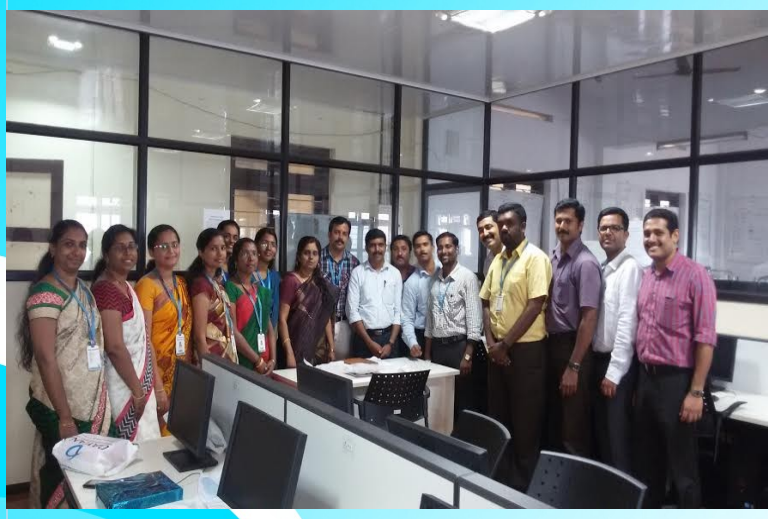
2015



Reflections

ECE NEWSLETTER

From HOD's Desk



"Wishing all of you happy Christmas and a prosperous forthcoming new year . May the god give each and everyone of the department , their family and entire world a peaceful and happy 2015..."

From Editor's Desk

This edition is a symbol of excellence and is a jewel in the crown of the Department of ECE. We proudly publish the tenth edition of the department Newsletter "Reflections". For the last thirty months we have tried to show the reflections of what is happening inside the magical world of the Department of ECE. If you look at our Newsletter you can see the reflection of vary many things which have been coming into existence in the world now and in future.

One such thing is our change from "paper to E-Paper". As a part of the effort to make earth greener.As we all know the previous edition of reflections which were in the paper form, now have undergone a change , it is now available as a digital album.Each features are now with you a click distance. Similarly wave of change can be seen in our Reflections which can be a nanosize of the large world. Even though everything cannot be shown in this little big book ,but we have tried to show the best as we can. We are trying and striving our best to improve the reflections to its best and in future we will give a lot more on the current and future electronics and communication world. In the coming editions we wish to bring a lot more things to our dear readers. We would like to extent our sincere gratitude to all especially HOD of ECE Department Asha Panicker who encouraged us at every moment of publishing each editions. And regards to all those who had supported and helped us to make each editions ...or each pages the best and beautiful like our blue earth . Wait for the amazing reflections to come....All the best "Reflections".

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ISRO EXHIBITION



ISRO-Indian Space research Organization started its odyssey of space exploration, dreams of a billion minds of Indian people during 1970s by launching its first satellite "Arybhata"- a name in memory of great Indian astrologer-Then onwards ISRO pioneered a lot of successful space missions to held the glory of Indian Science. We all know the popular and world famous missions carried out by Indian Space research during these days -the Chandrayan, Mangalyan, MIP, Space recovery modules etc., as these are some of the turning points. Such a prestigious institution now conducts exhibitions of their successful milestone to make the common people aware of space, rockets, satellites, space travels etc. because may be by these efforts the ISRO will be able to inspire the coming generations and there can be a day when they make their own extra terrestrial area in the outer space. The Mangalam group done a commendable effort in bringing ISRO'S exhibition to our ground and made it available to public and students of various schools. On 4th and 5th of December 2014 we conducted this exhibition in our college for higher secondary and school students and also to the common public. In this event ISRO exhibited their history, their different rockets, satellites, instruments used in space exploration. This informative event was inaugurated by the Vice Chancellor of MG University **Dr. Babu Sebastian** one of the eminent academician .It was presided by the Chairman of Mangalam Educational Society **Er.Biju Varghese**. On this occasion Dr.Abraham Chettissery, Legal Advisor, Prof.Manoj George, Principal, Prof.Chikku Abraham, Coordinator of ISRO exhibition and all the HODs, Faculty members were present.



Technical Talk



Mangalam college of Engineering always tries to expand its educational reaches and technological achievements in engineering field beyond the horizon. We always try to keep international relationships with world class universities to exchange the vast sea of knowledge. This also helps the students to find their tastes in engineering disciplines. One of such events is the one day seminar conducted by the department of ECE in association with the Toyo University of Japan in 'Nanoelectronics'. It was conducted on 12th August 2014. On this occasion Dr. Toru Maekawa a pioneer researcher , well known scientist in the field of nano-technology delivered a talk on bio nano technology. This was very informative to both students and faculty members of ECE department.

Paper Presentations:-

Mr.Bibin Binu Simon of ECE Department Published a paper on **An FPGA based image denoising architecture with histogram equalization for enhancement** in IJRAE Journal, August 2014 .

Mr.Rakesh S of ECE Department published a paper "**Design and Analysis of New Modified Feed through Logic (MFTL) Circuits Using Carbon Nanotube Field Effect Transistor (CNTFET)**" in International Journal of Engineering Research And Applications (IJERA), Volume 4, Issue 8 (Version 3), August 2014, pp 36-41, ISSN 2248-9622.

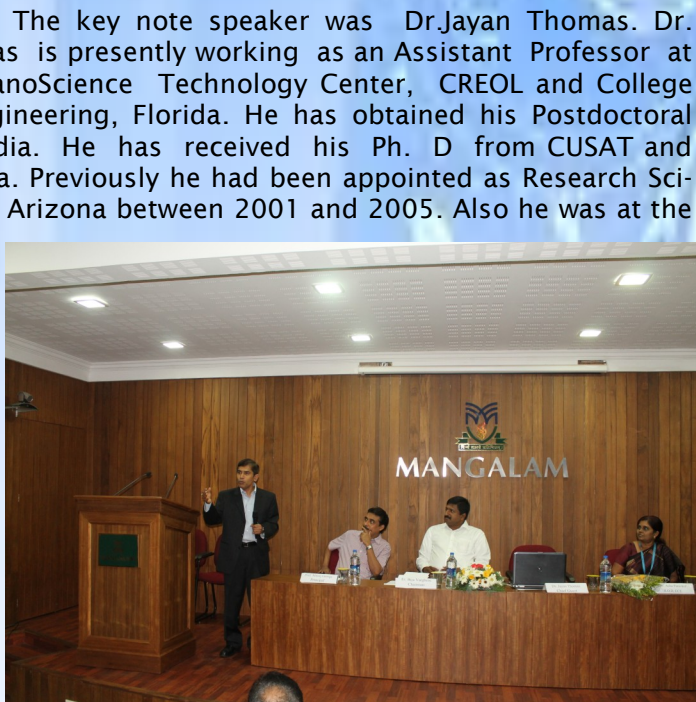
Electrovaganza 2014



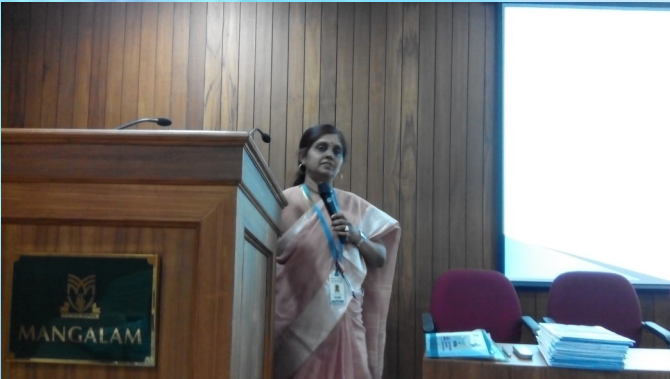
Department of ECE organized a Technical Event 'Electrovaganza 2014 - Project Exhibition and Technical Talk Session', which was conducted on 4th & 5th July, 2014 was a grand success. The main attraction of the event was the Technical Talk by Dr. Jayan Thomas, University of Central Florida, USA on Nano-electronics on 5th July. Project Exhibition of final year students was also conducted on both days.

The key note speaker was Dr. Jayan Thomas. Dr. Thomas is presently working as an Assistant Professor at the NanoScience Technology Center, CREOL and College of Engineering, Florida. He has obtained his Postdoctoral fellowship from the International School of Photonics, India. He has received his Ph. D from CUSAT and M.S/B.S degrees from Mahatma Gandhi University, India. Previously he had been appointed as Research Scientist at College of Optical Sciences at The University of Arizona between 2001 and 2005. Also he was at the post of Assistant/ Associate Research Professor at the same university till 2011. In the first part of his talk, he briefly discussed the basic principles, history and applications of nanoscience and nanotechnology. Later he focused on recent research directions in his lab. Dr. Thomas and team's research labs are focused on developing nanoarchitected energy conversion and storage devices. Recently, they have developed a nanoarchitecturing technique using which polymer nanostructures can be printed efficiently at low cost. This technique is utilized to develop nanostructured polymer solar cells, nanoarchitected electrodes for Li-ion batteries and supercapacitors, and printed biomolecule based photonic devices. Their nanoimprinting technique offers a simple route to fabricate large area sensitivity. Photorefractive composites derived from conducting polymers offer the advantage of dynamically recorded holograms without the need of processing of any kind. They are also studying the optical limiting nanostructures in a very short time. Another line of work in which they are involved is the development of photorefractive polymers with improved properties of core-shell plasmonic nanostructures. Dr. Thomas has been awarded the NSF CAREER award, Excellence in Research Award (University of Florida) in the year 2014 and also the VEECO award for the best nanotechnology innovations in 2010.

The Technical Talk by Dr. Jayan Thomas on "Nano-technology: A fascinating World of tiny, teeny but mighty objects" was really informative and our students and Teachers were enlightened by the session. A new arena of research was opened to them. The Exhibition was witnessed by 805 school students, 55 school teachers from 13 schools in and around Ettumanoor and Kottayam. The feedback of the school students showed that they were really impressed by the exhibits and that they have developed a liking towards Engineering and Technology.



Sambodhya:



Mangalam group of education was established as a commitment to the society by the great visionary M.C.Varghese. Even after his time we the group continues to fulfill his commitment to the society. The ECE Department done a very good job through one of its missions called “**Sambodhya**”. The department established this as part of its social responsibilities to make the public especially school students to

aware about the developments happening in the field of Engineering especially in the electronics and telecommunication. The faculty members of the ECE Department visited various higher secondary school and take classes related to electronics and communication and its relation to the basic physics which they are studying in their curriculum. This makes students to get attached more to their subjects and they will get an inspiring touch to the new horizons of engineering.



These are some of snapshots of the most valuable events occurred during the days of “Sambodhya”. HOD, Ajit Sir and other faculty members participated in taking the classes. They all take part in conducting the labs most efficiently

We conducted live workshops and classes in the respected schools. Those who shown a lot of interest we conducted a live workshop and classes in our college itself. We got a positive feedback from the public and schools on this workshop series. The faculty in ECE Department did an absolutely perfect work to make this mission a grand success.

News and Events

Send Offs

Mr.Sanju Sebastian and Ms. Anjaly V, Asst.Professor ,well experienced and inspiring teachers in the field of Digital Signal Processing and VLSI Design respectively were relieved from this institution in the month of July this year. We wish both of them a very bright career in their whole life.

Ms.Reshmi Hariharan, Ms.Jeslin Edison, Ms. Jisha Mathew even though they served the department very less they too have done a very good service for the students and to the college. These people too relieved from the duty this semester. We thank them for their service and wishing them a good future in life as well as in career.

New members of the Mangalam ece family:-

Dr.Rajesh Cherian Roy:

A man of vast experience in the engineering academic field as well as in the industrial field. He pursued a Ph.D in the field of Signal Processing from the Cochin University. About ten plus international and national papers are there under his name. Previously he was at Adisankara college of engineering. As an academican he is a valuable asset for our department.



Mr.Nidhish Antony:-

After completing M.Tech in solid state devices from the IIT Chennai Nidhish Sir re-joined Mangalam to continue his career in teaching profession. He served the department for about five years from 2008 onwards.

Lakshmy S Nair :

She completed her B-Tech in ECE from Sree Buddha College Of Engineering, Pator and M-Tech in wireless Technology from Toch Institute of science and technology , Arakkunnam

Ankitha Chandran

She completed her B-Tech in ECE from Younus College Of Engineering Kollam M-Tech in Signal Processing from SCT Trivandrum

Bency Abraham

She completed the B-Tech in ECE from University College Of Engineering Thodupuzha and M-Tech in Signal Processing from Rajagiri School of engineering and technology Ernakulam

Jibu Thomas

He completed her B-Tech in ECE from Amal Jyothi College Of Engineering Koovapally and M-Tech in wireless Technology from Toch Institute of science and technology, Arakkunnam

Farewell Ceremony-14

“Farewell” - a word which has the strength to give a blend of a number of emotions in the life of a student. It can give the excitement of a new world which he will step into. At the same time it can make them sad as they depart from their friends and an unforgettable college life. It gives the thoughts of new challenges which they have to face, expectations of a new life.

The word Farewell is a mix of these feelings. In this sense the farewell turned to be a moment of joy & happiness & it has to be celebrated colorfully.

Mangalam Campus is going to miss one of its best batches of ECE this year. The farewell to this batch celebrated colorfully. The 2011-15 batch gave their seniors a beautiful send off event on 5th May which can be remembered in everyone's mind

The ceremony was blessed with the presence of , Respected HOD of ECE , Prof. Asha Panicker, the class in charges of S7 and faculty members and students. The inaugural ceremony was followed by various cultural activities by the students .



Campus placements are one of the most inevitable parts in today's professional education. It will be beneficial for the student as it gives a way towards a successful career in his life. For an engineering college it is the part of the excellence of the college. An engineering college with students not properly placed, places itself at the lowest grade in the wide range of educational institutions all over the world. If we look around the world we can understand that pioneer universities like MIT, CIT, Harvard, Cambridge, IITs etc. create high level educational-industrial interfaces. By this way the universities and colleges will become incubation centres for the future technologies through support of the industrial funding. This will be beneficial for the students since these companies can imbibe the students from the very same colleges as part of the very same project. This is a part of the placement. If an institution can express itself as having bright students through placements it will help the coming students for their bright future. If we look in this sense we can see that Mangalam engineering college is a pioneer. It gives more opportunities for students for placements in corporate giants like Infosys, TCS, Bloomberg etc. We are providing students training to achieve placements. Well experienced hands in the field of placement training are taking classes for students to equip them to be successful in placements.

The placement activities of the ECE Department was coordinated by Mr. Ajit Joseph and Anu Philip Mathew FOR ECE Department.

Ph.D scholars



Mr. Rijo Sebastian:- Secured a Ph.D admission at CUSAT this year. For the last 6 years he was a part of the ECE department. He had done a lot of excellent work for the progress of ECE department. Now he got another higher position in his career. On behalf of ECE department we congratulate him.



Ms. Greeshma R:- Selected for Ph.D at NIT Trichy, a glorious institution in the field of Engineering and Technology for the last 50 years. She worked in the ECE department for the last 2 years. Congratulations to Ms. Greeshma.



Ms. Sreelekshmi K:- Joined for Ph.D in CUSAT—Department of Electronics. Congratulations to Ms. Sreelekshmi.

Mr. Vinay Kumar Singh:- joined for Ph.d at NIT Surat. He completed his PG also from the very same institution. On behalf of ECE Department we congratulate him.



Mr. Rakesh S:- Qualified in UGC-NET Assistant Professorship 2014.

Social Service

Students of today are tomorrow's leaders of the society and the country. They need to have a commitment and will to work for the well being of others around. Keeping this in mind universities have included Social Services as part of the Engineering Curriculum. On completion of course students will be awarded credit points for the same. This definitely make them realize about their contribution to the society. The students of 4th and 6th semester visited and served various charitable societies. They conducted various activities for the residents of these societies. They selflessly served the old, needy and sick people. Classes 3A and 3B conducted their social service activities from June 24-27, 2014 at Mother Theresa Special school , Uzhavoor . Classes 5A and 5B conducted their social service activities from June 23-27, 2014 at Hannah Bhavan and Bethany Ashram, Changanacherry, respectively.

Celebrations

Onam Celebrations:-

Onam was celebrated colourfully on september. students and staffs wore the traditional costumes. Various competitions like athappokalam were conducted. A grand feast setup after the celebrations by the management to all the faculty members.

Christmas Celebrations:

The day in which god came on to earth in the form of jesus to remove the sorrows of mankind to keep peace around the globe-Christmas was celebrated colourfully this in year in our campus.

ECE Department celebrated this Christmas on 19th December .We celebrated this Christmas by giving gifts to Christmas friend ,cutting cakes etc. On this occasion Respected HOD wished and gave Christmas message to all. The entire Mangalam college also celebrated this Christmas very much. His Grace Dr.Thomas Mor Thimothios, Metropolitan, Syrian Jacobite Church, Kottayam diocese gave us Christmas message. Our Respected chairman was present on this occasion .The choir groups of the various institutions under Mangalam group presented a lot of songs related to Christmas and the birth of Jesus Christ.