

The Amritapuri Campus Newsletter

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Live the Ideal, Love the Change

अमृतपुरी



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All the five elements have been created by the Will of the Supreme. They have to be used with reverential care and vigilant discrimination. Reckless use of any of them will only rebound on you with tremendous harm. External nature has to be handled with caution and awe.

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Awarded prizes to 23 women who have excelled since AMMACHI Labs' training

## 'Amrita WEP', A Role Model for the Entire World' – UN

Essentially a project launched by the Mata Amritanandamayi Math, the Woman Empowerment Project, a brainchild of our Chancellor Amma, found tremendous participation from a large number of staff and students of Amritapuri inspired by it. After the first day at our Campus the Product Exhibition of the Project and the Photo Exhibit were shifted to the HQ of MA Math to meet the greater demand and audience there. It was a great occasion with participation of several VIPs, stage events and talks/observations given by chief guests followed by an awards ceremony recognizing the high performers.

Dr. P. Venkat Rangan, Vice Chancellor of Amrita University,

welcomed the chief guests of the celebration. The esteemed panel included global leaders and some of India's foremost public figures: Her Excellency the Governor of Kerala, Smt Sheila Dikshit, The Head of the United Nations in India, Lise Grande, renowned film actors like Kunchacko Boban and also our Chancellor, Sri Mata Amritanandamayi Devi.

Ms. Grande praised the AMMACHI Labs' Women Empowerment project, saying "[The United Nations] scours the world looking for the best projects, the most innovative projects, the projects which with the highest social impact. The one we have chosen for India is this project, and we chose it because AMMACHI Labs has come out with

the most creative way of empowering women. Of all of the projects which the UN funds around the world, this is the one dearest to our heart. It's the one we are most proud of. And it is the one that we intend to take to the rest of the world so that they can learn from what your marvelous achievement."

The Director of AMMACHI Labs, Professor Bhavani explained that for Amma 'empowerment' goes far beyond mere economic success and material progress. The goal is to equip women with an enhanced ability to participate in the democratic process and with increased capacity to make decisions at the individual, family and community levels." Economic and so-

cio-economic empowerment of women addressed by us through AMMACHI Labs' cVET and LEE programmes is already making the expected dent visibly, having been tailored to the participant's specific needs."

Governor Smt Dikshit praised Amma as both a humanitarian and a spiritual leader. "Amma, in the spirit with which she works—with love and compassion and an ever-smiling face—gives us all the courage to stand up and live by the ideals that she has taught us. My congratulations and grateful thanks to her for having given confidence and equality to our women."

Award winning actor Kunchacko Boban offered his support of the project and said, "Women Empowerment ... is something the Mata Amritanandamayi Math understands, not just in words, but in deeds. According to me, women are more powerful than men."

In the awards ceremony which followed, Change Makers were recognized for their ability to make changes in their own lives, families, and communities. Winners of the previous day's Product Competition were recognized and two special awards were given to business groups started by graduates who had secured bulk international orders. It was greatly gratifying to the entire audience that these business groups had together made nearly seven lakh rupees in their endeavour.

The program concluded with a final few words from Amma. "Today is a day of joy and satisfaction," Amma said. Women who face many difficulties and challenges in daily life are a good number and it is our duty to help and inspire them to become achievers. The difficulties that the common woman faces in her family and social life cannot be discounted on any account.

There are economic problems, family problems, safety problems and the like. For women in such circumstances to be able to find a profession and thereby stand on their own two feet is undoubtedly a great source of relief. That said, one must also admit that problems persist—problems at home, problems with their children, problems at work and so on. When these combine, it can be a tremendous weight on one person to bear. When such women are provided with self-confidence, training and wise-counseling, their lives develop a new meaning. In reality, the key to woman's liberty lies in her own hands. In order to realize this, women need determination, forbearance and constant effort. On our part, we need to provide them with a little encouragement and guidance. Amma concluded with the encouraging words that if provided with the right opportunities any woman can become a role-model for society.

**Both UN Representative Grade and Governor Dikshit, together with Amma**

**Ms. Grande with graduates of the WE Project**



# Celebration of Empowerment



Early this May over a thousand and five hundred women from various parts of India travelled to Amritapuri for a two-day event, “Celebration of Empowerment”. This was the capstone event of AMMACHI Labs’ ‘Women Empowerment Project’ co-funded by the United Nations Democracy Fund (UNDEF) and Amrita University. The participants all, happily smiling, shared one thing in common: they are graduates of AMMACHI Labs’ unique computerized vocational education and life enrichment education courses.



Over a span of 18 months, 3,136 women had been trained via twenty eight of Ammachi Labs’ Women Empowerment Centers, both permanent and mobile, across Kerala and Tamil Nadu. The fruit of their endeavour had been the setting up of thirty ‘Self Help Groups’, who, with their seven ‘Small Businesses’ had collectively earned an income of more than one million rupees [Rs. 10 lakhs] within 3 months of completing the course. The



Various workshops and knowledge sharing sessions were conducted



Celebration begins with enthusiastic inaugural ceremony



courses they had gone through included plumbing, fabric painting and jewelry making and the like. Moreover, these graduates had also successfully led over seventy community awareness and action campaigns creating awareness against alcoholism and on need for environmental protection.

Professor Bhavani, Director of Ammachi Labs, welcomed chief guest Mr. Balasubramanian Iyer (Vice President of Reliance Jio) who formally inaugurated the “Celebration of Empowerment” event along with Swamini Krishnamrita Prana of the MA Math and Dr. Balakrishnan Shankar, Associate Dean of the School of Engineering, Amrita University. Ms. Lise Grande, the Head of the United Nations in India, was also a guest on the occasion. She later met the senior faculty at Amrita University to discuss other on-going projects and research initiatives

During the inaugural event, Mr. Iyer also launched the ‘WE Product Expo’ and ‘Heartfelt Arts website’ ([www.heartfeltarts.com](http://www.heartfeltarts.com)), showcasing these products of our graduates. The ‘Expo’ featured a designated booth for each of the Women Empowerment Centers and a photo exhibition of the project’s deployment. As expected, there was great demand for the products exhibited and the ‘empowered women’ were immensely happy to sell their products to the large group of international and local guests eager to buy them.

A whole day of knowledge sharing sessions led by experts in community development, advanced skill workshops and an “Ideas and Innovation” discussion to promote business skills by the graduates and participants was an enlightening event according to many. The Workshops included paper and jewelry making, entrepreneurship, origami product creation, plumbing and home repairs, legal counseling and waste management.

A large product competition designed to encourage quality in handicraft products was also conducted. After a rigorous process, a group of forty finalists was selected to participate in the final round. Product creation, presentation and judging by a panel of experts followed. Her Excellency the Governor of Kerala, Smt. Sheila Dikshit also gave away the prizes to the winners of the competitions.



# Small Satellite & Sensor Technology for Disaster Management

Faculty members from AmritaWNA including the Head of the Centre Dr. Maneesha V. Ramesh were invited to be part of the international workshop on Small Satellite & Sensor Technology for Disaster Management (SSTDM) organized by IISc, Bengaluru from March 31-April 2, 2014. The workshop focused on the exchange of scientific knowledge in identifying

the challenges and needs in the area of space based sensors, early warning of disasters, etc. The objective of the workshop was to encourage the next generation to take up collaborative projects in the area of forest fires, earthquakes, floods, landslides, etc. Dr. Maneesha V. Ramesh chaired the session “Sensors and Instruments Technologies” on the second day. She also delivered

a talk on “Wireless Sensor Networks for Disaster Management”. Rekha P, Research Associate presented a concept paper titled “Participatory Wireless Sensor Network System for Effective Disaster Management”. Gosh UG, Research Associate presented a poster on “Amrita Landslide Warning System.”





# Amrita AWNA at Berlin

*The short trip was a memorable one in terms of professional and site seeing aspects according to Dr.Kalyan.*

Dr. Kalyan Sasidhar, an Assistant Professor in the Centre for Amrita Wireless Networks and Applications, attended the International conference on **'Information Processing in Sensor Networks (IPSN) conducted in Berlin, Germany**, to present his M Tech Student's work titled 'A Location Aware Personalized Smart Control System' which was accepted as a poster. It is indeed a privilege to have an in-progress work accepted at a top tier conference. Dr.Kalyan had the op-

portunity to present the work to a varied audience belonging to top universities such as CMU, UC Berkeley, UIUC, Uppsalla, TU Berlin, TU Munich to name a few. The work was appreciated and valuable suggestions were also given. It was also a perfect platform to represent Amrita WNA and Amrita University to the distinguished audience, at the outset. The only other Indian university at the conference was IISc, Bangalore.



## Invited Talk

# on Nanotechnology in Disease Diagnostics and Therapy

In 2006, the Amrita Centre for Nanosciences and Molecular Medicine started as a blank slate – just a group of focused and passionate researchers led by Dr. Shantikumar Nair who had come to Amrita just the previous year with a fair number of accomplishments – a background in metallurgic engineering at IIT Bombay, postdoctoral work at Columbia University, almost twenty years at University of Massachusetts at Amherst, and a collection of distinguished awards to his name including the Presidential Young Investigator Award presented to him by the President of the United

States. Today, as Professor, the Dean of Research, and Director of ACNS, Dr. Nair has not only glorified the name of Amrita, but raised the national standard of nanotechnology to new heights. Considered as one of the leading thirty researchers in the country, his ongoing work has made him the recipient of the prestigious National Research Award from the Ministry of Science and Technology.

Understandably, having as celebrated a professional as Dr. Nair speak at ASBT this week as part of the Seminar Series was a real treat for both students and faculty alike. Dr. Nair centered his talk on nanotechnology in medicine, specifically, nanomedicines for tissue engineering and as regenerative medicine, as are being researched in the context of treatment related of cancers such as chronic myeloid leukemia, explaining how at ACNS the nanomedicines are synthesized to improve drug delivery in the body. The concept is that cancer cells often over-express certain



surface molecules – for example CD33 in acute myeloid leukemia and transferrin receptors in chronic myeloid leukemia. By targeting these surface molecules, Dr. Nair and his team have synthesized nanomedicines that combine both therapeutics and diagnostics to specifically recognize, identify and treat cancer cells without affecting the healthy cells in the patient's system. To test the effectiveness of drug delivery, gold nanoparticle clusters associated with protein nanoparticles that are stable, non-toxic, and fluoresce a red color are used. These red indicators are useful from the diagnostic perspective – they make it easy to detect the presence of cancerous cells in a patient as the nanoparticles are engulfed by the cells making the cell appear to be red. A specific example of this meth-

od of drug delivery is seen in Tf-nAlb-Soraf, a nanomedicine engineered at ACNS and used in the treatment of CML. Using other transferrin receptors as targets for drug delivery may often lead to further suffering and require harsher treatments. The effectiveness of the drug shows distinct advantages, like positive reception, high retention within the cells and low release in the blood since the drug consists of transferrin, an anticancer drug (sorafenib) and plasma protein (albumin). This method is particularly advantageous from another angle as patient friendly because the reaction is only with the infected cells in the body, thus helping also alleviate pain in cancer patients.

Although focusing mainly on the research on nanomedicines at

ACNS, Dr. Nair spent a few minutes discussing the Centre's work on tissue engineering and regenerative medicine. He mentioned that the most important point to remember when dealing with these topics is the requirement of developing a suitable extracellular matrix for the regeneration of tissues. His labs are working on the production of cartilage, bone, cardiac, vascular, and liver tissue with the most success so far in bone regeneration using a nanostructure made of fibrin and alginate that closely resembles the structure of naturally occurring bone extracellular matrix.

Dr. Nair's had only touched upon the tip of the iceberg. There are several other ground-breaking projects that are being led by Dr. Nair and his team which were beyond the scope of this seminar. ■

# Visit to Mully Tribal Village

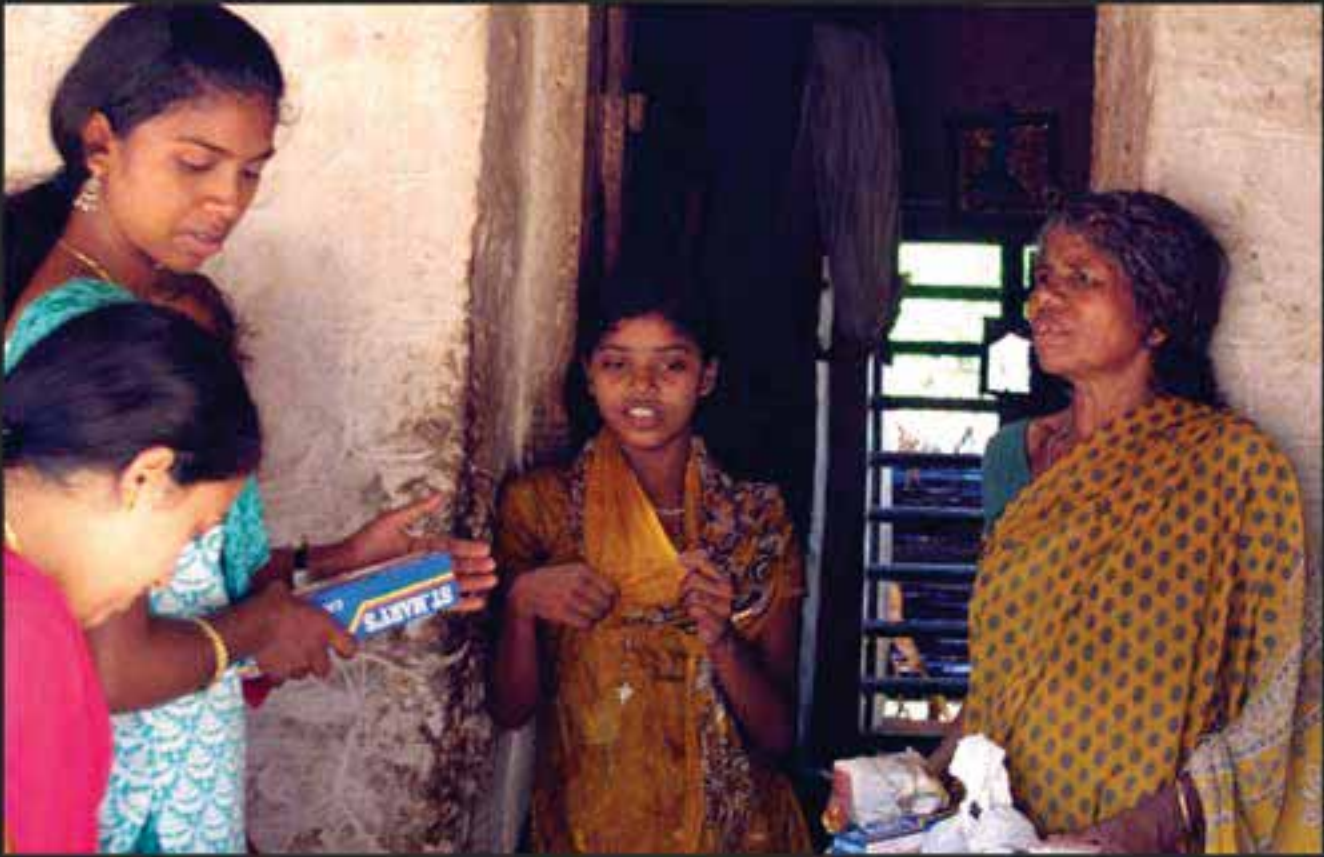
Nothing like an on-the-spot live-in study can help gain an immersive experience and to learn about the rich traditions, culture and strength of the villages. For this unique understanding and to know the actual challenges faced by these folk, the Department of Cyber Security Systems and Networks organized a three day field trip to a tribal village at Mully in Attappadi in May [17-19]. The team was a set of nearly 20 students from second year MTech accompanied by two faculty members.

Attappadi is one among the 101 adopted villages under Amrita-SeRVe programme. The team

conducted a survey with the families and had a first-hand experience of the socio-economic background of the people. Mully village is divided into lower Mully, middle Mully and upper Mully where the upper Mully was found to be the most backward region lying below poverty line.

Mostly men are the bread winners in the families here. Agriculture and livestock remain the major sources of income. Men also go for daily wages in construction activity which earns them Rs. 200 to 300 per day. The key issues faced by the villagers are scarcity of water and threat of wild animals, both destroying





[by Center for Cyber Security Systems and Networks team]

their crops while the latter is also a danger to their lives. The team came up with a few suggestions such as educating the residents on rain water harvesting and the need and importance of greater sanitation. 'The villagers were extremely friendly with us and made a VIP of us,' was the unanimous observation of every member of the team.

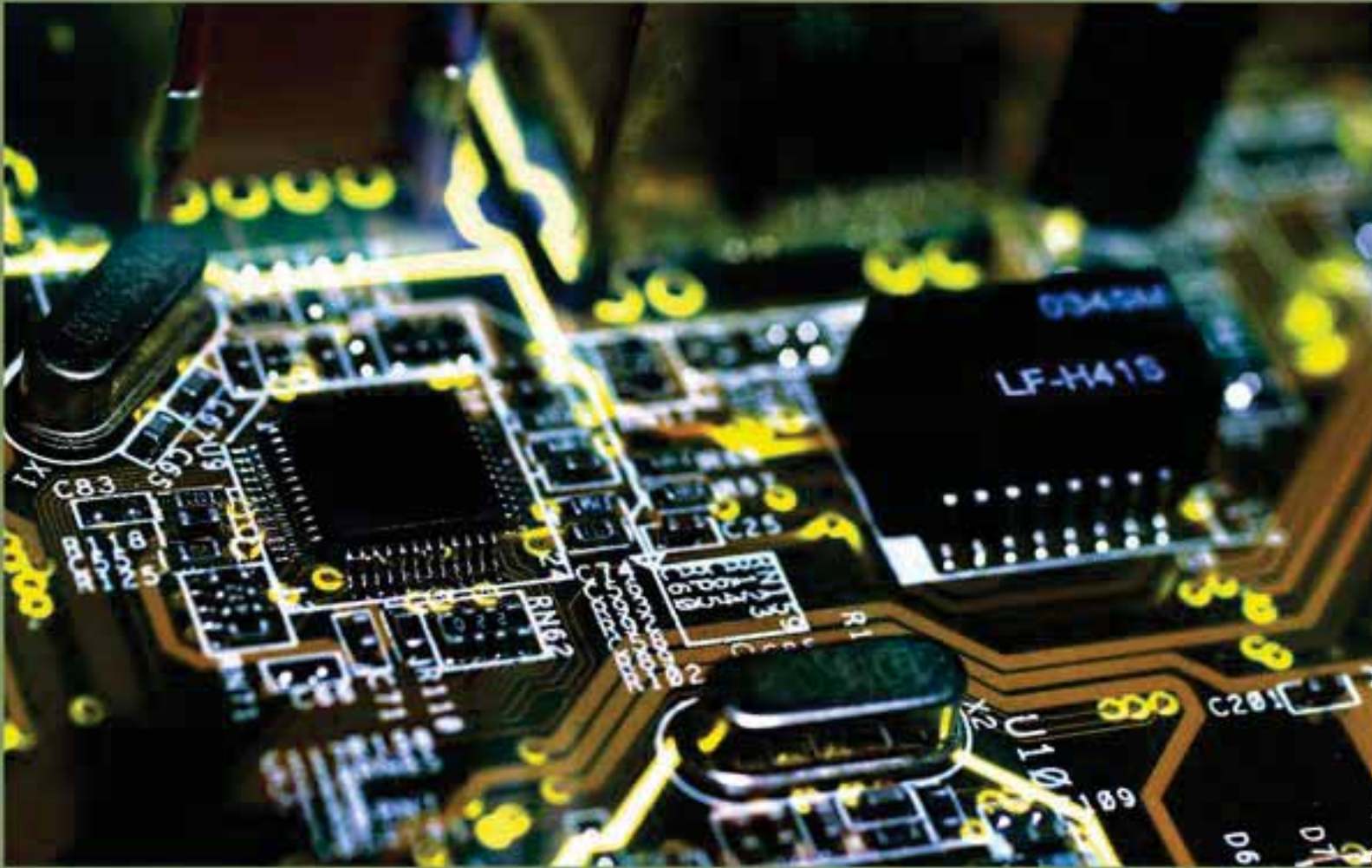
The team continued their journey accompanied by 32 children

from Melemulli to middle Mulli where a tuition center was run by Amrita. Session with fun activities, assessment of their reading, writing and mathematical skills was conducted using Amrita RITE program. Many children showed interest in drawing and came up with nice drawings. The team enlightened the villagers of the ill effects of alcoholism and smoking with the help of some videos. Together they all pledged

to give up alcoholism completely and to quit smoking. The children and their teachers sang tribal songs. The team was happy to supply stationary, clothes and bananas to them. ■



# Indo-Japanese Collaborative Engagement by Amrita WNA



Amrita Center for Wireless Networks and Applications (AmritaWNA) embarked on a 24-month international cooperative science program in collaboration with the VLSI Design and Education Center (VDEC) at the University of Tokyo. It is to be

funded by the Department of Science and Technology (DST) of the Government of India and the Japan Society for the Promotion of Science (JSPS) in order to develop a next generation VLSI/SoC hardware for wireless networks and security, which will

facilitate on-site collaboration and face-to-face communication between scientists from Amrita University and the University of Tokyo.

The principal investigators of the project are Dr. Maneesha V.

Ramesh, Director, Amrita WNA, and Dr. Masahiro Fujita, Professor, VLSI Design and Education Center (VDEC), University of Tokyo. Dr. Bibhudatta Sahoo, Associate Professor, Electronics and Communication Engineering, Amrita School of Engineering; Dr. Anand Ramachandran, Associate Professor, Amrita WNA; Dr. Sundar Gopalan, Associate Professor and Chairperson, Electronics and Communication Engineering, Amrita School of Engineering; Dr. Krishnashree Achuthan, Director, Amrita Center for Cybersecurity; Prof. Balaji Hariharan, Associate Professor, AmritaWNA and Dr. Shyam Diwakar, Assistant Professor, Amrita School of Biotechnology of Amrita University are also involved in this Indo-Japanese Mobility Project.

Initiated by the Chancellor of Amrita University, Sri. Mata Amritanandamayi Devi, the new project will leverage the University's expertise in analog, digital, and embedded system designs and the University of Tokyo's expertise in algorithms and techniques in order to build programmable hardware. With this collaboration, AmritaWNA will have the opportunity to fabricate its semiconductor design via the facilities available at the University of Tokyo.

In order to evaluate the design environment, AmritaWNA researchers will apply the new VLSI/SoC designs to wireless communication systems utilized for the early detection of land-

slides. The Center has already been recognized world-wide for its innovation and has already received funding from governmental agencies such as the Ministry of Earth Sciences (MoES), the Department of Science and Technology (DST) and the Department of Electronics and Information Technology (DeitY).

In this project, AmritaWNA researchers, in conjunction with researchers from VDEC, expect to develop an enhanced, energy efficient and highly accurate VLSI/SoC sensor network system that can be used for the early detection of landslides. Furthermore, AmritaWNA and University of Tokyo researchers will develop customized, high performance, computing systems where specific applications can be accelerated in comparison to multi-microprocessor based computation servers. The target of such acceleration would be based on biological modeling such as neural models. The biological research group at Amrita has already acquired a significant amount of research on new neural modeling which requires intensive computations. Such computations can be sped up with partial hardware implementations.

The current collaborative project focuses on building robust, safety-critical, and real-time embedded systems. Two distinct design schemes are prevalent in these embedded systems: event-triggered and time-triggered. Though event-triggered systems

are prevalent due to their high responsiveness to events, safety-critical real-time systems are often built as time-triggered systems. The key advantage of the time-triggered design is its deterministic execution and simplicity. The research work will combine the time and event concepts and increase the overall robustness of the system at work.





## Ammachi Labs Organizes Workshop on Basic Counseling







Amrita Multi Modal Applications and Human Computer Interaction (Ammachi Labs) organized a four-day workshop on Basic Counseling during May 27-31 at our Campus for Ammachi Labs deployment team, facilitators and student leaders of the Women Empowerment Project. The workshop was an extension of the successfully concluded Women Empowerment (WE) Project co-funded by UNDEF.

Shri Ashok Menon, Honorable Principal District and Sessions Judge inaugurated the workshop. Smt Santha Kumari, Hon'ble Family Court Judge and Chairman District Legal Services Authority delivered the felicitation

address. The program was presided over by Smt Rajani Menon, Director, Jan Shikshan Sansthan (JSS), Idukki.

Nearly 3000 women from Kerala and Tamil Nadu would benefit from this employment oriented vocational training program for rural women. The participants of the workshop were those who had undergone training in various vocational skills, such as jewelry making, plumbing, fabric painting, etc. The workshop expected to equip the participants to act as counselors for women of their respective localities, provide them adequate knowledge of their rights and duties and enable them to be a part of the de-

cision making process at various levels.

The workshop empowered over 60 women from Kerala and Tamil Nadu who participated, equipping them with necessary social and legal know-how that to provide counseling for the interested public in their localities on related issues.

The Karunagappally Munsif and Chief First Class Magistrate, Sri Bijukumar, and District Protection Officer, Tahira Biwi, graced the valedictory function on May 31.



## Stanford University : “Amma, a World Renowned Humanitarian Leader”



On June 23rd Stanford University hosted a rare event in which, world renowned humanitarian leader and our Chancellor, Sri Mata Amritanandamayi Devi (Amma), in a dialogue with leading neurosurgeon Dr. James

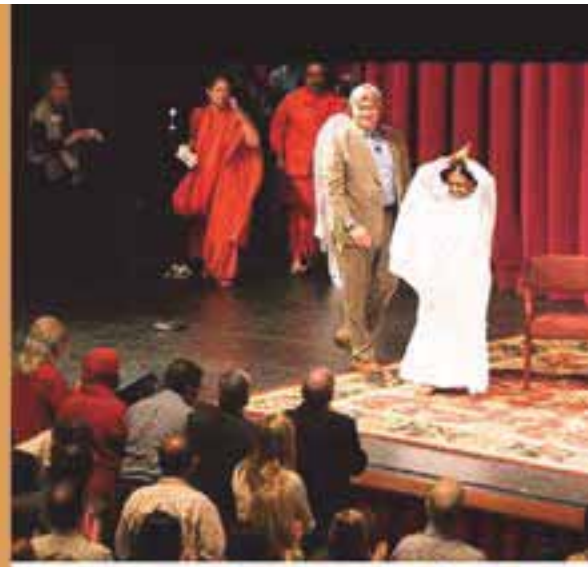
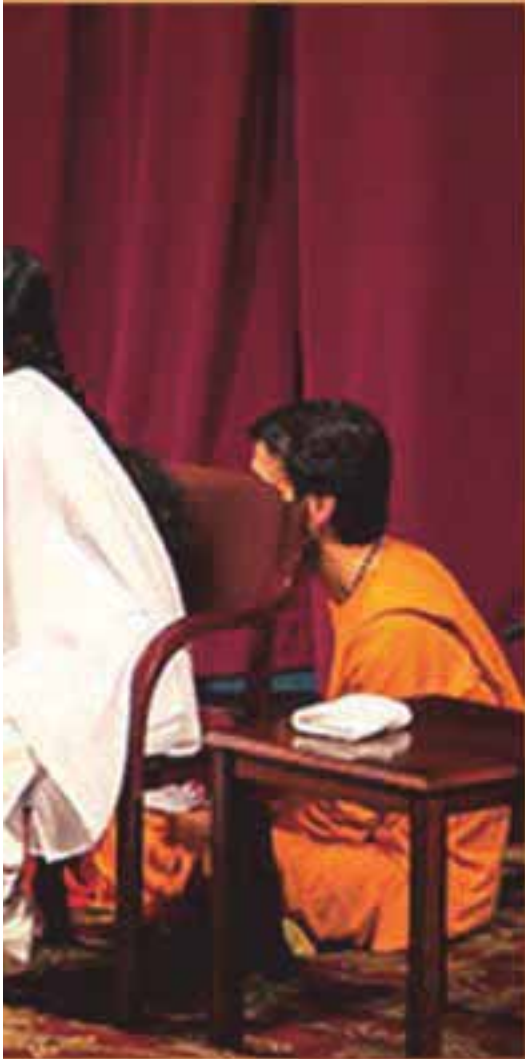
Doty in the packed Memorial Auditorium, shared deep insight into the immense power of compassion, whether it is in science, technology, business, or in fact, in any sphere of human activity.

Amma explained that compassion is the most important factor in our lives. It is the first step we all need to take courageously without fear whatsoever. That alone will add a special beauty spontaneity and power to all of

our decisions and subsequent actions and their results. 'Humna calculations might be wrong any number of times, but actions born of true compassion would always be right. This is because compassion is the law of nature, the power of God and the heart of creation,' she added.

At the conclusion of this one-hour dialogue, Dr. Doty exclaimed that Amma had, indeed, answered lucidly all of the research questions that he had set out to investigate.

AMMA's program at Stanford University gives an opportunity for all of us to revel for a few moments in the ambience of world's greatest embodiment of spirituality and compassion coming together with one of world's foremost centers of scientific and technology innovation. The video of this dialogue is posted on 'Youtube' for all to view ■



# Google Summer of Code 2014 (GSoC 14) Award

Six students of ASE Amritapuri, Arvind S. Raj and Zubin Mitra (both of MTech Cyber Security Systems & Networks), Abhishek Kumar Singh and Savita Seetaraman (both of BTech CSE, final year) and Tony Thomas and Anirudh Anand (both of BTech CSE, II year) are selected to receive stipends of \$5,500 each in the 10th edition of Google Summer of Code (GSoC), a global program that offers students stipends to write code for open source projects.

“This year, a total of 1307 students all over the world are selected for GSoC 14. All selected students of Amrita are active members of Free & Open Source Software (FOSS) Club. With this, the tally of GSoC winners from Amritapuri Campus since 2010

has gone up to 12,” shared Vipin Pavithran, Assistant Professor, Amrita Center for Cybersecurity Systems & Networks.

Google Summer of Code (GSoC) is an initiative by Google Inc. to promote and encourage student participation in open source development. Students get to participate in a three month development programme with experienced programmers around the world, collaborating using version control systems, mailing lists and ticket trackers. The participants in the GSoC program are students and their mentors. Mentors typically represent an organization, an open source project that has been selected for GSoC. Each organization puts forward an ideas list, a list of prioritized

work that they would like to see completed in their project. Interested students pick an idea and write a proposal for an idea that they like and submit it to the organization. Students may submit more than one proposal and may also submit a proposal for an original idea that they had instead of picking one from the ideas list. A proposal generally has details about the prior open source/programming experience of the candidate along with information on how the student plans to proceed with the project, approximate deadlines, and any roadblocks that they might encounter. Most students choose to submit patches to the organization that they are applying for prior to submitting their application



# Amrita Darshanam - International Center for Spiritual Studies

This year marks the completion of first decade of Amrita University. Under Chancellor Amma's guidance, 'Amrita' has been on a steep trajectory towards making significant contributions towards societal and humanitarian relief. One of the most important dimensions of all round human and societal development is spirituality. Amma, by her all-embracing love, compassion, service and universal motherhood, has given a whole new life, vibrancy, and practical meaning to Indian spirituality.

In order to make this understanding of spirituality more first-hand, tangible, effective and reachable for the younger generation by giving them an opportunity to study, learn, imbibe, practice, and spread the essence of the wisdom of our scriptures, rishis and God-realized Masters, the University has launched a new International Centre for Spiritual Studies called Amrita Darshanam. June 2014 finds the academic activity of The Centre inaugurated with a master's course [MA] and a research course [PhD], both in Philosophy. ■



## NEWS in BRIEF

**Amrita School of Biotechnology** was selected from a competitive pool of 108 institutions across the country, for the prestigious Bill and Melinda GATES Foundation-Dept. of Biotechnology, GOI/BIRAC Grand Challenge Award. The main architects of the innovative proposal were senior Faculty members of the School of Biotechnology--Dr. Sanjay Pal and Ajith Madhavan.

**Sanskriti** presented the traditional dance "Kuchipudi" by renowned artist Sreelakshmi Govardhan at School of Ayurveda in relation with 'Samavartanam-14' on April 23, 2014 at the Amritheshwari Hall, School of Ayurveda

**Amritapuri Campus Power Lifting Team** Won the Overall Championship [Junior] in the Kollam District Power lifting championship held at Kalari-vathukkal, Kollam on 27-04-2014. Mr.Yadhuraj [S4 BBM] was titled 'Strong Man of the District' in both Senior and Junior categories. Sri Bijish C and Sri Ratheesh PM also won prizes in the competitions.

'**Earth Day**' is observed on April 22 every year to inspire love towards, awareness regarding and appreciation for Mother Nature. This year, the day was celebrated

with a 'Project Exhibition' by students on Environmental Sciences in the lobby area in front of the elevator in the Engineering Building. Sri Matti Rajakylä (Akhilesh) gave a highly informative talk and created awareness on 'how students can make a green impact through on-campus activities'. Sri Akhilesh is a Champion swimmer from Finland who represented his country twice in Olympics, and who, for the past three years has been volunteering at the composting facility at the MA Math Ashram. The talk enlightened the audience on how each of them can play a part in restoring harmony to Mother Nature. Prizes and certificates were distributed to the best three exhibits selected by the participants.

**The Department of Social Work** organized a Seven days Tribal camp for S2 MSW students at Elamblassery, Mamalakandam, Idukki from April 22-28. The 7 day Tribal Camp -"**NIBHODHITHA**"- was greatly appreciated by the students as well as the villagers. Even the day [24th] declared 'harth day' was wisely utilized by the group for 'firewood collection' and 'trekking' in the forest area. The participants appreciated the help extended by officials like Forest Range Officer of Neriyamangalam and Kuttanpuzha Range, President of Kuttanpuzha Panchayat, Tribal Heads, Volunteers, Resource Persons and Heads of associated organizations, as much as they admired the enthusiasm and interest of

the students to learn more about rural Indian pattern of life and how they could figure therein to help make progress.

**The Department of Physical Education** which conducted the annual tournaments as usual, declared the following 'Results': the Annual Athletic all champions of ASAS was BCom with 235 points – Individual Champions of the meet were, Binu Raj [men] BBM and Gopika, [women] MSW – 27 of our students from various disciplines participated in South India/All India Inter-University competitions – the Staff Badminton Tournament winners were Sri Arun [WNA] & team with Sri Pramod P Nair [Maths] & Team as Runners-up – the staff Snooker Winners Sri Prajeesh & team [Maths] – the staff football winners were Br Ashish Mohan [ECE] & team with Amrita Indians, Runners and ICTS [Fighters] – the [First] Handball game for girls was won by S/2 BCom beating S/4 BBM – Siji [S/4 BBM] was chosen as the Best Goalkeeper – the Best Player in the Tournaments was Aiswarya [S/2 BCom]

**AYUDH** Amritapuri organized a two day spiritual and cultural retreat 'Amritamgamaya 2014' in our campus on May 24-25. This flagship event of AYUDH Amritapuri aimed at helping integrate the noble principles of Sanathana Dharma into the daily life by any well-meaning person for building a healthy body, peaceful mind and vibrant spirit. The

highlights of the retreat included meditation session and satsang by Swami Amritageetanda Puri and invited talks by renowned journalist Sri. S. Gurumurthy and well known social activist Smt. Nivedita Bhide. Additionally, presentations, group activities, quiz, video sessions, archana, bhajans and outdoor activities made the camp a series of very joyful and rewarding sessions.

**Launch of “Nakshatra Vanam”** commemorating World Environment Day was done in line with the teachings and advice of Chancellor Amma’s Vision of creating a harmonious environment. This was one wing of the programme of MA Math to plant 60,00,000 [six lakh] trees worldwide. The Mata Amritanandamayi Math had launched a program in September last of planting six lakh trees. In connection to this vision was “Harithamritam” – Individual-based Sustainable Tree-Planting Program and further “Amrita Vanam” – a Social Forestry Project. Particularly in pursuance of this dream and in commemoration of the World Environment Day falling on June 5, 2014, the Mata Amritanandamayi Math, as a joint venture with the Ministry of Environment & Forests, Kerala, set out to plant 1,00,000 trees. As a part of this project, Amrita Vishwa Vidyapeetham through its youth wing – AYUDH launched “Nakshatra Vanam” – a garden representing the 27 stars of the Hindu Zodiac, in the Amrita School of Ayurveda Cam-

pus. The Principal, of ASA, Dr. Vasudevan Nampoothiri welcomed all and Shri C Divakaran, MLA, inaugurated the program by symbolically planting the first sapling. The Hon President of the Panchayat Shri Salim presided over the function. The Campus Director Br Sudeep proposed the vote of thanks

## The Green Campuses Initiative

The Green Campus initiative by Amrita University encourages all Indian educational institutions to pay special attention matters related to waste, energy, water, building technologies & landscaping urging them to make a firm commitment for achieving sustainability in these areas. The mission of this project is to imbibe values of environmental protection and a sustainable development among the students.

Our Green Campuses Team presented an online A-VIEW session conducted by Mr Anand of Nature Conservation Foundation, Valparai on the topic Wildlife in People’s Backyards: Internecine Conflict to Intelligent Coexistence in the E- learning Reception room.

Sri Anand is currently a Research Associate with NCF coordinating field conservation activities in relation to resolving human-elephant conflict and restoration of rainforest in the Anamalai hills, Western Ghats. Prior to this he was an NCF Research Affiliate working on human-elephant conflict and behavior of Asian elephants in this human-dominated landscape of plantations and rainforest fragments. He is a Doctorate in Psychology but his interests included ecology, behavior and distribution of primates and large mammals in

the region. He has also conducted surveys on the slender 'loris' (loris tardigradus, a nocturnal primate) in the states of Tamil Nadu and Andhra Pradesh. He has been working in the Anamalai hills for over a decade with the goal of involving the local communities, government departments, school children, and also the business community in rainforest restoration and wildlife conservation in the region. More details of the initiative to train the young can be had at <http://greencampuses.in/> or by contacting +91 8589023600.

## An "Environment Quiz"

In view of 'Environment Day'

1. Which day is observed as 'Environment Day'?
2. What day is 'World Forest Day'?
3. Which day is called 'Earth Day'?
4. What is UICN?
5. What is 'Mutualism'?
6. What is meant by Environmental Determinism?
7. What are generally included in the term 'Environment'?
8. What does the word 'Ecology' mean?
9. What is meant by 'Ecological Ethics'?
10. "Man is mainly and wholly responsible for air, water and soil pollution on the earth." Right or wrong?

*(Answers on page 28)*

## The 10 Commandments

(that go to make life easier)

1. Never make the mistake of thinking that 'PRAYER' is just a "spare wheel" that one can pull out when in trouble. It is actually the best "steering wheel" to direct life along the right path.
2. Why is a car's WINDSHIELD so large but the REAR VIEW MIRROR so small? The indication is that our 'past' [all that has 'passed'] is not as important as our FUTURE [what is in front of us], but viewing it, we can drive more safely. So, 'drive carefully'.
3. Friendship is like a BOOK. It takes but a few seconds to get

burnt off, but it takes years to get written.

4. All things in life are temporary. Never hesitate to enjoy whatever goes well, for, they will not last long or forever. So with whatever goes wrong, for they too cannot last long or for ever, anyway.
5. If new friends are 'diamond', never forget that old friends are 'gold'! Because the best BASE to hold a Diamond is safely is only gold.
6. Everything that looks menacingly like and 'edge' or an 'end' of things for you, can always be but a 'sledge' or a 'bend'. You can surely RELAX but be cautious!
7. Nothing can be more true than the old saying, 'When GOD solves your problems, you gain faith in HIS abilities; but when GOD doesn't

solve your problems be sure that HE has immense faith in YOUR abilities. Just think and act. All will be well.

8. Nothing can be more enlightening than the reply given by Helen Keller to a blind person who asked her: "Can there be anything worse than losing your eye sight?" She had replied: "Yes, losing your vision!"
9. When you pray for others, God listens to you and blesses them. That is certain. What is equally certain is that, every time you are safe and happy, someone has prayed for you.
10. There is only one thing that WORRYING now can do for you: take away today's PEACE. It can never ever solve tomorrow's TROUBLES. Beat all worries: STOP WORRYING.



# STUDENT ACHIEVEMENTS

**Arvind S Raj and Zubin Mitra** were selected in the Google Summer of Code 2014 (GSoC 14) Award - win Rs. 20 lakhs in prize money.

**Archana B. S., Arvind S., Radhesh Krishnan and Zubin Mithra**, pursuing M. Tech. in Cybersecurity Systems and Networks at Amritapuri campus have been chosen to study at VU University, Amsterdam for the next academic year.

**Seshagiri Prabhu, Arvind S. Raj, Zubin Mithra & Radhesh Krishnan**, of M.Tech win "Hackcon Israel", 2014.

**First semester M.Tech (E-learning) students** have accomplished several mini YouTube projects. Currently they are adding more features by taking concepts from the different subjects they are studying in the second semester.

## **PAPERS published in National/ International JOURNALS**

**Aswath S, Chinmaya Krishna Tilak, Amal Suresh, and Ganesha Udupa**: "Human Gesture Recognition for Real-Time Control of Humanoid Robot" Vol. 1, pp 423-427, ICAET 2014, Singapore.

**Aswath S, Chinmaya Krishna Tilak, Kalyani J, Anila G Nair, Arathi S Nair, Aiswarya**

**Mohan, and Ganesha Udupa**: "Innovative Fish Robot Based on an Asymmetric Flexible Pneumatic Actuator" Authors: ICAET 2014, Vol. 1, pp 428-433, Singapore.

## **Papers published in International / National conferences**

**Balagovind N K Kartha (S8 ME) : 'Design of Efficycle Hybrid tricycle with inbuilt KERS. [8th International Conference on Engineering and Technology Research 24-25 April 2014, Novotel World Trade Centre, Dubai, UAE, ISBN: 978-1-922069-49-8]**

**Vinayak Jayaprakash (S5ME) : Design of Efficycle Hybrid tricycle with inbuilt KERS. 8th International Conference on Engineering and Technology Research 24-25 April 2014, Novotel World Trade Centre, Dubai, UAE, ISBN: 978-1-922069-49-8**

**Sidhu Suresh (S8ME) : Design of Efficycle Hybrid tricycle with inbuilt KERS. 8th International Conference on Engineering and Technology Research 24-25 April 2014, Novotel World Trade Centre, Dubai, UAE, ISBN: 978-1-922069-49-8**

**Hariprasad CM, and R Ajith Kumar: Proceedings of the ASME 2014 12th Biennial Conference on Engineering Systems Design and Analysis, ESDA2014, ESDA2014-20357, Copenhagen, Denmark during 24-27, June 2014**

**Sanesh Kavile Valappil, Vishnu Rethan Dev E V, Sarath S Pillai, Nandbal Narayanan, Naveen**

**Sivaramakrishnan and Rajesh Kannan Megalingam: "Wind Power Generation: Parameter Measurement Analysis and Networking"**, "IEEE sponsored III International Conference on Computing of Power, Energy & Communication" "IC-CPEIC-2014" on April 16-17, 2014 organised by Adhiparasakthi Engineering College, Melmaruvathur, Kanchipuram.

**Goutham P, Vivek J, Athul A T and Mourya G of ECE S-8, and Rajesh Kannan Megalingam : Smartphone Based Continuous Monitoring System for Homebound Elders and Patients, International Conference on Communication and Signal Processing - ICCSP' 14 at Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu, India during April 3-5, 2014 (Will be published in IEEE Explorer)**

**Nistul Raj, Amal Lehar Soman, Lakshmi Prakash, Nivedha Sathesh, Divya Vijay of ECE S-8, and Rajesh Kannan Megalingam : Smart, Public Buses Information System - International Conference on Communication and Signal Processing - ICCSP' 14 at Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu, India during 3-5, April (Will be published in IEEE Explorer)**

**Lekshmi S Lal (S4 MTech VLSI) and Rajesh Kannan Megalingam : Piezoresistive MEMS Pressure Sensors using Si, Ge, and SiC Diaphragms: A VLSI Layout Optimization-International**

Conference on Communication and Signal Processing - ICCSP' 14 at Adhiparasakthi Engineering College, Melmaruvathur, Tamilnadu, India during 3-5, April 2014. (Will be published in IEEE Explorer).

Joshua Freeman, Kiranlal EU and Rajasree SR : '**Study of the Errors Influencing Heliostats for Calibration and Control system Design**' IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014) May 09-11, 2014, Jaipur, India.

Neethu Maheswary and Jayasree PR : '**Parallel Loaded-Resonant Converter for Battery Charging Application**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, April 16-17, 2014, India.

Vineeh Kumar PK and Asha CA : '**An Efficient Solar Power Converter with High MPP Tracking Accuracy for Rural Electrification**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, April 16-17, 2014, India.

Remya R, Nandagopal JL and Lakshmi R Chandran : '**Design and Simulation of a Single-Stage Half-Bridge AC-DC Converter for Power Factor Correction**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

**Bhavya P and Jayasree PR : 'Design and Simulation of Low Cost Boost-Half Bridge Microinverter with Grid Connection'** IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Seena Mathew, T.Sreejith Kailas and Vivek A : '**Novel Soft Switched Boost Converter for Standalone PV Systems**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Arya AP and Anudev J : '**Dynamic Response Analysis of a Hysteretic Controlled Three Level Buck Converter**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Umesh M and Angel TS : '**Interfacing of Permanent Magnet Synchronous Generator Wind Energy System to Grid Using a Solid State Transformer**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Reshma V and Disha Dinesh : '**Design and Simulation of the direct control method for SEPIC converter with variable INC MPPT for standalone PV system**', IEEE sponsored III International

Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Neethu S, Indu V and Anudev J: '**Design and Modeling of Switched Capacitor dc-dc Converter Based Maximum Power Point Tracker for Photovoltaic Source**', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Shebin Jacob, Preetha P K and P S Chandramohan Nair : '**Dependent Source Equivalent Circuit Model of Star-Star-Delta Utilized Distribution Transformer**' IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Sreekumar AV and Arun Rajendran : '**Performance Enhancement of PV Arrays Under Partial Shading Conditions Using SEPIC Converter**' IEEE sponsored 3rd International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Reshma R Nair and Pratibha S Babu : '**A method for Error Detection and Correction of the PMU Measurements**' IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Viji Vijayakumar, Divya R and Vivek A : '**Sliding mode Con-**

trolled Quadratic Boost Converter' IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Deepika Vasanthakumar and Srikanth V : 'DC-DC Converter Control using IP Controller', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Ruby Raj and Divya R : 'Bi-Directional DC/DC Converter with PFM/PWM Controller Implementing Soft-Switching', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Sambhu S and Angel T S : 'Soft Computing Technique for On-line Monitoring of Voltage Stability Margin of a wind penetrated power system', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Anupama A, Seema PN and Srikanth V : 'Variable Step-Size Algorithm Implemented Two Phase Soft-Switched Interleaved Boost Converter', IEEE sponsored III International Conference on Computation of Power, Energy, Information and Communication, 16-17 April, 2014, India.

Manitha P V, Jishnu Sankar V C, Anjana P, Visal Raveendran and

Manjula G Nair: '**Design and Development of a mini custom Power Park**', 2013, II AASRI Conference on Power and Energy Systems.

Sherin Sunny : "**Framework for evaluating Capture The Flag (CTF) security competitions**", International Conference for Convergence of Technology, Pune, on April 8, 2014.

Deepu S : "**An Ideal Secret Sharing Key**", International Conference on Intelligent Computing, Communication & Devices (ICCD-2014) Bhubaneswar, Odisha, India.

Athira Lal : "**Serious Games based approach to cyber security concept learning: Indian context**" in IEEE International Conference on Green Computing, Communication and Electrical Energy (ICGCCEE'14) Coimbatore on March 7.

Akhila CA : "**Customizing EP-Cglobal to Fit Local ONS Requirements**", International Conference on Intelligent Computing, Communication & Devices (ICCD-2014) Anusandhan University, Bhubaneswar, Odisha, India, during April 18-19, 2014.

#### **Papers Accepted**

**Anurag Das (S8ME)** - Paper Title - Design, Fabrication and Testing of the Suspension Subsystem of a Single Seater Off-Road Buggy.[ AMAEAP-2014 (JNU Conference)]

**Aswathy M S (S8ME)** - Wake Structures around sharp and

chamfered square cylinders. [ISTP-25.]

**Gokul S (S8ME)** - 'Sensitivity studies of flow parameters on the performance of film cooling of a high temperature plug type valve used in a propulsion test facility.' - ICCSME 2014 at Nagpur.

Manuscript T-ITS-13-08-0414. R2, entitled "Yaw Estimation Using Cylindrical and Ellipsoidal Face Models" by **S Athinayanan, MR Kaimal and Bijlani Kamal**, has been accepted for publication as a regular paper in the Transactions on Intelligent Transportation Systems. The paper will be published in IEEE Xplore edition and the print edition of the Transactions.

Computer Vision based Attention Detection Methods in E-Learning, authored by **Athinayanan S, Ramachandran Kaimal M, Kamal Bijlani, Prasanth M and Sunil Kumar K**, has been accepted at ICONIAAC 2014.

Enhancing E-learning Education with Live Interactive Feedback System authored by **Sethu Subramanian N, Sruthy Anand and Kamal Bijlani**, has been accepted at ICONIAAC 2014.

**Rajesh Kannan M, Goutham P, Vivek J, Athul AT and Mourya G** : 'ECG, Pulse Rate, SpO2, BP and Temperature measurements: Preventive measures in Pre-Natal Health Care' - International Conference on Intelligent Computing, Communication & Devices (ICCD-2014) organized by

Siksha 'O' Anusandhan University, Bhubaneswar, Odisha, India during April 18-19, 2014.

**Rajesh Kannan M, Ushma U, Athira S, Goutham P, Vivek J, Athul AT and Mourya G:** 'Wearable medical devices in preventive health care: Cuffless blood pressure measurement: International Conference on Intelligent Computing, Communication & Devices (ICCD-2014) organized by Siksha 'O' Anusandhan University, Bhubaneswar, Odisha, India during April 18-19, 2014.

**Rajesh Kannan M, Aparna N, Anu T, Anjali and Megha N:** 'Sound and Touch based Smart Cane: Better Walking Experience for Visually Challenged: - International Conference on Intelligent Computing, Communication & Devices (ICCD-2014) organized by Siksha 'O' Anusandhan University, Bhubaneswar, Odisha, India during 18-19, April 2014.

**Rajesh Kannan M, Aparna N, Anu T, Anjali and Megha N :** 'Wheeled Patient Monitoring System': International Conference on Intelligent Computing, Communication & Devices (ICCD-2014) organized by Siksha 'O' Anusandhan University, Bhubaneswar, Odisha, India during 18-19, April 2014.

**Ms Veena G and Lekha NK,** "A Concept based Clustering Model for Document Similarity" accepted at the conference ICDSE 2014.

**Dr Ramanathan PV :** a paper titled "Learning and Teaching

Languages for Empowerment" – in an online International Journal, The Journal of Higher Education & Research Society: A Refereed International (ISSN 2321-9432).

### **National /International Seminars / Conferences /Workshops /Symposium organised by the School /Centre**

Mr Joshua D Freeman, Mr Meher Madhu D and Mr Vivek A organized a National Instruments Technology Day at the Campus. As part of this a team from National Instruments demonstrated in person various real world applications of Labview software and Data Acquisition and Control hardware followed by a one day hands-on training in Labview during July 18-19, 2014.

Amrita E-learning Research Lab conducted **14 National Online A-view Workshops**

Amrita E-learning Research Lab conducted **A-view online demo for polytechnic colleges** which are allotted as a nodal center under DOTE.

Amrita E-learning Research Lab conducted a **Hands-on Workshop** as part of Effective use of NMEICT products for Teaching in NITTR Chennai, during July 8-9, 2014

Amrita E-learning Research Lab lent technical support to QEEE (Quality Enhancement in Engineering Education) program for one hundred engineering colleges, conducted by experienced teachers from IIT, through A-VIEW.

### **Distinguished Lectures / Invited Talks**

**Dr. Claude Petitpierre,** EPFL, Switzerland did an online lecture/talk on Arcimboldo – an Environment for a Structured Design of Applications on April 28-29, 2014

**Dr. S. Mohan,** Director, NIT-TTR, Chennai, delivered a talk, 'On need of teacher training in higher education,' April 2014

**Dr. Deepak Phatak,** Professor and Chair, Dept of Computer Science, IIT-M spoke on the topic, 'Blended MOOCs approach,' on April 8, 2014.

**Dr S. Gurumurthy,** renowned journalist delivered a talk as part of Amritamgamy Spiritual retreat programme on May 25, 2014

**Smt Nivedita Bhide,** Vice-president of Vivekandakendra, Kanyakumara and well known social activist delivered a talk as part of Amritamgamy Spiritual retreat programme on May 25, 2014.

Mr Sundaram of Infosys Global Education Center, Mysore –gave a talk explaining the history of Infosys, the operations, activities etc. and also about training process at Global Training Centre, infrastructure, capacity etc.

Mr. Shekar Reddy of 'Amrita' Mysore Campus – delivered a talk delivered on "Learning Theories".

**Prof. Abhiram Ranade and Prof. Phatak** of IIT Bombay spoke on "Teaching Introductory Programming courses through

graphics-Technology in Education”.

**Prof. Sahana Moorthy** of IIT Bombay delivered a talk on “Interdisciplinary Program in Education Technology (IDP-ET)”.

**Prof. Kannan M. Moudgalya** of IIT Bombay spoke on “Spoken Tutorial”.

**Sri Bella Tony** of IIT Bombay delivered a talk on “FOSSE” (Free open source software for education).

### **Papers published in International / National Journal**

Ganesh Udupa Aswath S, Chinmaya Krishna Tilak and Amal Suresh – **Human Gesture Recognition for Real-Time Control of Humanoid Robot**, ICAET 2014, Vol. 1, pp 423-427, Singapore.

Ganesh Udupa, Aswath S, Chinmaya Krishna Tilak, Kalyani J, Anila G Nair, Arathi S Nair, and Aiswarya Mohan – **Innovative Fish Robot Based on an Asymmetric Flexible Pneumatic Actuator**, ICAET 2014, Vol. 1, pp 428-433, Singapore.

S Athi Narayanan, MR Kaimal and Kamal Bijlani – **Yaw Estimation using Cylindrical and Ellipsoidal Face Models**, IEEE Transactions on Intelligent Transportation Systems, 2014, (In Press, Early Access Article), pp. 1 - 13.

B Sahoo and V Sarma – **Error feedback based noise shaping in a double sampled ADC**, Springer Analog Integrated Circuits

**and Signal Processing**, Vol. 78, Issue, 2, pp. 421-430, Feb. 2014.

B Sahoo, H Wei, P Zhang and B Razavi – **An 8-Bit 4-GS/s 120-mW CMOS ADC** - Springer Analog Integrated Circuits and Signal Processing, Vol. 78, Issue, 2, pp. 421-430, Feb. 2014. IEEE Journal of Solid State Circuits, April 8th 2014.

### **Papers Accepted in International / National conferences**

**Ms Manjusha Nair** - Large-Scale Simulations of Cerebellar Microcircuit Relays using Spiking Neuron on GPUS - International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics, University of Cambridge, department of Computer Science.

**Ms Veena G and Lekha N.K** – Advance in Intelligent Informatics - Third International Symposium on Intelligent Informatics (ISI'14)

**Jyothisha J Nair and Neethu Mohan** – A Robust Non Local means maximum Likelihood Estimation Method for Rician Noise reduction in MR Images - proceedings of the IEEE International Conference on Communication and Signal processing, ICCSP 2014.

**Jyothisha J Nair and Bindhya Bhadrans** – Denoising of SAR Images Using Maximum Likelihood Estimation - proceedings of the IEEE International Conference on Communication and Signal processing, ICCSP 2014.

**Simi S, Jisha** – Energy Efficient

Topology Control Scheme For Wireless Sensor Networks – International Conference on Advances in Computing, Communications and Informatics (ICACCI-2014), IEEE, June 2014.

**Ramya R K Menon, Chinchu P Shaji and M R Kaimal** – Singular Value Decomposition - A Revisit on A CUDA Platform – International Conference on Emerging Research in Computing, Information, Communication and Applications, ERCICA 2014, Elsevier.

**Geetha M and Rakendu R** – An Improved Method for Segmentation of Point Cloud using Minimum Spanning Tree – International Conference on Communication and Signal Processing, India, IEEE, April 3-5, 2014, pp 1055-1059.

**Jasmine Bhaskar, Sruthi.K and Prema Nedungadi** – Enhanced Sentiment Analysis of Informal Textual Communication in Social Media By Considering Objective Words and Intensifiers – IEEE International Conference on Recent Advances and Innovations in Engineering (ICRAIE-2014), May 09-11, 2014, Jaipur India.

**Geetha M and Meera P Paul** – An Improved Content Based Image Retrieval in RGBD Images using Point Clouds – International Conference on Communication and Signal Processing, India, IEEE, April 3-5, 2014, pp 1050-1054.

Ramya RK Menon, Athira K and MR Kaimal – Parallel Sparse Coding For Categorical Data – International Conference on “Emerging Research in Computing, Information, Communication and Applications”, ERCICA 2014, ELSEVIER.

Mrs Sandhya Harikumar, Shyju M and M R Kaimal - SQL-MapReduce Hybrid Approach towards Distributed Projected Clustering – 4th International Conference on Advances in Computing and Communications (ACC-2014).

**Mrs Sandhya Harikumar, Shyju M and M R Kaimal** – Sematic Integration of Heterogeneous Relational Schema Using L1 Linear Regression and SVD – 4th International Conference on Advances in Computing and Communications (ACC-2014).

**Rajesh Kannan Megalingam, Sanesh Kavile Valappil, Vishnu Rethan Dev E V, Sarath S Pillai, Nandbal Narayanan and Naveen Sivaramakrishnan** – Wind Power Generation: Parameter Measurement Analysis and Networking – IEEE sponsored 3rd International Conference on Computing of Power, Energy & Communication ICCPEIC - 2014 on April 16th and 17th, 2014 Organized by Adhiparasakthi Engineering College, Melmaruvathur, Kanchipuram

**Amit Dhar, Kamalanathan Kandasamy and Sethuraman Srinivas** – Capturing the Captcha - A Novel Technique to build Self updating Multi-domain

training dataset for researchers – ICONIAAC 2014 conference (International Conference on Interdisciplinary Advances in Applied Computing) to be held in Ettimadai campus in Oct 10, 2014.

Shiju Sathyadevan, Akhila CA and Jinesh MK – Customizing EPC global to fit Local ONS Requirements – International Conference on Software Engineering, Hyderabad June 2-7.

**Shiju Sathyadevan, Boney S and Jinesh MK** – Security, Trust and Implementation Limitations of Prominent IoT Platforms – International Conference on Software Engineering, Hyderabad June 2-7.

#### **Participation of Faculty in**

#### **National/International Seminars / Conferences**

**Dr Ramanathan PV** of the Department of English presented a paper and gave a talk on “Simple, Sure Steps to Good English” at the National Seminar on New Trends in English Literature and Language at Noorul Islam University on April 30, 2014.

**Dr Maneesha V. Ramesh and other faculty members** participated in the international workshop on Small Satellite and Sensor Technology for Disaster management (SSTDM) organized by IISc., Bengaluru during March 31-April 2, 2014.

**Dr Kalyan Sasidhar**, Assistant Professor, Centre for Amrita Wireless Networks and Applications presents at International

Conference on Information Processing in Sensor Networks (ISPN), Berlin.

**Ms Geetha M and Dr Jyothisha J Nair** participated in National workshop on 3D Vision and Multimedia Streaming (MAGS 3D – 2K14) at Amrita School of Engineering, Coimbatore, on 2-4 May, 2014.

#### **ACM-ICPC**

A team of B.Tech. students consisting of S Kaushik, Krishnan, Nakul, R Prasanth and Sachith G Pai along with Br Anand Shenoy, Assistant Professor and Regional Contest Director, ACM-ICPC and Dr. Bhadrachalam Chitturi, Associate Professor, School of Engineering, Amritapuri participated in the 38th Annual World finals of the ACM-International Collegiate Programming Contest (ICPC) in Russia hosted by Ural Federal University during June 22-26, 2014.

#### **Funded Projects**

Research project entitled CFD studies of heat pipes and thermosyphon under normal operation and transients - Funded by Board of Studies in Nuclear Sciences No. 2013/36/51-BRNS.- Total sanctioned amount Rs. 32,08,850/-.

Amrita research project titled Video Analytics based Identification and Tracking in Smart Spaces has been approved for a grant of Rs.14. 64 lakhs from the Department of Science and Technology (DST), Government of India to Dr Vivek Menon.

## Awards / Recognitions

**Dr J.S. Jayakumar**, Dept of Mechanical Engineering – Book Chapter - “Helically Coiled Heat Exchangers” In the book “Heat Exchangers - Basics Design Applications” has been accessed more than 10000 times.

**Ms. Manjusha Nair**, Dept of Computer Science and Applications, awarded for her work on GPGPU-based Computational Neuroscience work as second runner-up in the world GTW’14 contest. This was the only Indian entry in that award list.

**Bri Dhivvya**, Dept of Computer Science has been recognized – as one of the top 25 percent instructors globally – for her impressive accomplishments and contributions to the Cisco Networking Academy program as an Advanced Level instructor during March 2014.

**Shobhit Sharda**, our Alumnus who graduated with BTech-IT IN 2011, won International Accolade on Developing New Android App at the Ericsson Application Awards 2014 for developing an Android app, PDF Annotator.

## Others

**AYUDH** rganized a 2-day Spiritual-cultural retreat ‘Amritamgamaya’ 2014’ on May 24-25, 2014. It is noteworthy that this was a programme for the entire faculty-staff-researchers fraternity guided by Swami Amritagitananada Puri. The programme was a good blend of spiritual,

intellectual, yoga and meditation sessions. The residential nature of the session helped the programme to be greatly effective and focused. The success and the feedback on ‘Amritamgamaya’ encouraged AYUDH Amritapuri to conduct more Sat-Sang meets with Swami Amritagitananada Puri who kindly agreed to offer more such programmes, the latest being a series of spiritual discourses on Thulasidas Ramayana, during the Ramayana Masam.

**CAMPUS DAY ‘2014** was celebrated at Amritapuri on April 23, 2014. Swami Amritagitananada Puri delivered the benedictory address. The Chief Guest was Prof Bhaskar Ramamurthi, Director, Indian Institute of Technology, Madras, Dr Venkat Rangan, Vice-Chancellor also spoke to the Amrita fraternity during this auspicious occasion.

**Amritapuri Campus is happy to introduce the following New Programmes from the academic year 2014-2015**

**1.M.Tech. in Control & Instrumentation Engineering**

**2.M.Tech. Robotics and Automation**

**3.MCA (Master of Computer Applications) – Lateral Entry**

**4.BCA (Bachelor of Computer Applications)**

**5.PhD in various disciplines ■**

## “Environment Quiz”-

### Answers

- (1) June 5, of every year
- (2) March 21
- (3) April 22
- (4) International Union for the Conservation of Nature and the Resources. This has its HQ in Morges, Switzerland.)
- (5) It is the association between two organisms of different species which is beneficial to both (- like a bird picking the teeth of a crocodile that has just made a good meal of a big beast)
- (6) This refers to the belief that all human beings are deeply influenced and moulded by the environment and natural phenomena.
- (7) It included all the physical, chemical and biological factors that surround the earth along with all the living beings on it.
- (8) It means ‘the study of the relationship between living beings and their environment’.
- (Under this, the inter-relationship between living organisms and their environment is analyzed and studied.)
- (9) It signifies ‘a change in attitude of mankind towards man, society and nature so as to realize that ‘man’ is an integral part of Nature.
- (10) Right! (who else lacks the common sense to ‘rush in where angels fear to tread’ and own the responsibility for such a colossal, unimaginable, diabolic and horrendous load on his/its own feeble shoulders?)

-pvr-

# Amrita Kalotsavam' 2014 @ ASBT







*Joy and exuberance, vibrant*

*music, a creative outburst of*

*talent everywhere you look...*

Joy and exuberance, vibrant music, a creative outburst of talent everywhere you look – all this coupled with an atmosphere invigorated with excitement – these are some of the indicators that it is that time of the year once again for ‘Amrita Kalotsavam’. This two-day annual arts fest sets a platform that enables the students to showcase their abundant talents outside the arena of the classroom. This year the events included an assortment of events on and off-stage such as various styles of dance and music, acting, poetry recita-

tion essay, story, and poetry writing in various languages, drawing, painting plus much, much more, creating an atmosphere of celebration for two full days.

The off-stage events were initiated even three days before 25th and 26th of April 2014, the dates of the ‘Kalotsavam’. Students lined up outside the third floor classrooms between class hours to squeeze in a quick Hindi – or any other language – essay submission or a cartoon – or any other entry – for the competitions. It was quite a colourful

event with an air of fun and joy enveloping the entire place, and particularly for the final year BSc students who excelled to win first place at most off-stage submissions. The audience commented that Minu Shyam, Jayalakshmi Jayakumar, Ashwin Perumal and Ariya Ajay, particularly, had stolen the show. ■



## From the Desk of Editors...

Standing on the threshold of another academic year, it simply and suddenly dawns on us that another year of great activity and hard work has passed. The last academic year, like the earlier few years, has made us take several strides in the desired direction of expansion and consolidation from what started as a teaching and learning process. Undoubtedly it was but the fructification of the selfless sacrifice of many, added to by the tireless tides turned over by the workaholics among us. The contribution of every (other) individual, however small and humble, has been in no way insignificant in this grand pool. While it is memory sweet enough to stop to rejoice and to pat ourselves on the back, it also serves as reminder that there is no substitute to hard work. It is no time, and there is no room, to rest complacent basking in the lime-light falling more heavily on us now, since we have greater goals to reach and several research miles to go before (we rest). Happily, we do have a stronger springboard now to catapult us to those shining heights of 'glory in service to society' already vibrant in our dreams and manifesting in various service endeavours.

The start of the new academic year 2014 aptly brings to mind the famous lines of William Wordsworth,

'Five years have passed;  
five summers

With the length of  
five long winters... ...'

but in a very different context, outlook and lookout—that, five years have passed after the last visit of NAAC and that, it is time to host them again. But doesn't it make more sense to say, acknowledging and appreciating the directions we get from the visiting Team, that NAAC, or, no NAAC, our march continues? For an upcoming research centre of consequence that Amritapuri is emerging fast as, and becoming the cynosure of all academic and research eyes, there can only be an academic interest, generally, in the 'start' of another academic year—an 'event' in passing and an added milestone—and by no means a 'start' at all, for, the long 'journey' charted out for 'Amrita' is already 'on' and our focus well set. But we do acknowledge it as an opportunity, no doubt, to pause to take stock of many a thing around, to set the house straight, redefine our immediate goals and to stir up our spirits for a better work-view of things so as to play a more fitting and stronger role in the fast changing scenario of demanding circumstances round 'this' corner. The NAAC visit will surely lend us an added knack when we get set to emulate our own past example of achievements.

Last but not least, this is the occasion to remind ourselves of the signal purpose of our Campus itself—in the light of the call given by Chancellor Amma to process actively the mission of an academic globalization, extending research

to a dedicated and meaningful service to all mankind and an all-out attempt to preserve Mother Nature. This, particularly in the context of the breakneck pace of 'progress' the world has witnessed in recent times which actually appears to also – inadvertently – push us off the very 'edge' of things (and existence itself?). One is only reminded again of the hallmark goal of education underlined by the wisdom of this land of the most civilized culture on the globe—man-making—which alone can assure peace on earth and a comfortable, happy and meaningful future for the Homo-sapiens on this planet.

Together, all these make it the hour for us to resolve to continue to be inspired by the intellectual and academic giants who have always studded the glory of this land and which we are direct heir to, as we march into the golden opportunity re-opening before us, to work as one soul to demonstrate to the eagerly watching world out there, how education is the manifestation of the perfection already in man (to use the golden words of Swami Vivekananda).

What is important is that every 'new' year should mean the birth of a better individual in each of us. To this end, as the first step, let us wish one another a bright, happy, active, prosperous, fruitful and meaningful

**NEW ACADEMIC YEAR  
2014-2015.**

# The Samved Team

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*Note: Any possible omission of news items since they did not reach us in time is regretted. Our student & staff editorial assistants in the various departments are requested to be alert to avoid recurrence of such a lapse in the future. Thank you all. (Please send feedback & Article to [samved@am.amrita.edu](mailto:samved@am.amrita.edu))  
Thanks.*



*This is very important for students.  
If someone argues with you, don't react.  
Your calmness will disarm the other person.*

*Amma*



**AMRITA**  
VISHWA VIDYAPEETHAM  
UNIVERSITY

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