

TEJUS

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NEWSLETTER OF COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY



Dr. M.S. Valiathan is presenting Prof. M.V. Pylee Award for the best Academician of India to Dr. Jancy James, former Vice Chancellor, Mahatma Gandhi University.

Cusat Vice Chancellor Dr. J. Letha presided over the function. Dr. K. Poulose Jacob, Pro-Vice Chancellor, Dr. K.A. Zakkaria, Sri. R.S. Sasikumar (Syndicate Members), Dr. K.G. Nair (Director, Centre for Sciene in Society) and Dr. S. David Peter, Registrar offered felicitations.

The Prof. M.V. Pylee Award consists of a purse of Rs. 1 lakh and a citation. Dr. Jancy James, who was earlier a professor at Institute of English

Tough to find Best Teacher: Dr. Valiathan

The main goal of a teacher should be to teach the students effectively, said Padma Vibhushan Dr. M.S. Valiathan, noted educationist.

In his address after presenting the Prof. M.V. Pylee Award for the Best Academician of India instituted at Cusat to Dr. Jancy James, former Vice Chancellor of Central University, Kasargod, at Cusat on 16th February, Dr. Valiathan pointed out that the number of teachers encouraging their students to follow their dreams seems to be declining. It has become tough to find best teachers, he said.

In her acceptance speech Dr. Jancy James said employability skills of students in the country require a lot of scaling up despite advancements in the higher education sector. She also advised researchers not to look for shortcuts while pursuing their goals. and Director of the Centre for Comparative Literature at the University of Kerala, was the first woman to become a University Vice Chancellor in the state of Kerala.



Dr. M.S. Valiathan is addressing the audience after presenting the award. Dr. K. Poulose Jacob, Prof. M.V. Pylee, Vice Chancellor Dr. J. Letha, Dr. Jancy James, Dr. K.G. Nair, Sri. R.S. Sasikumar, Dr. K.A. Zakkaria and Dr. S. David Peter are on the dais.

Editorial...

I am excited and thrilled by the news that all the seven B. Tech Engineering programmes offered by the School of Engineering, Cusat have been accredited for two years by the National Board of Accreditation (NBA) under Tier-I system. I take this opportu-



that an Engineering institution in Kerala is getting accredited by NBA under Tier - I Category. As you

come eligible for "substantial equivalency" in 15 foreign countries including the US and the UK. Thus the School of Engineering, Cusat has acquired a unique position among the institutions offering Engineering programmes in the state.

The National Board of Accreditation (NBA) has been accorded perfor accreditation in its signatory countries. Established in 1989, the signatories as of 2014 are Australia, Canada, Taiwan, Hong Kong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Russia, Singapore, South Africa, Sri Lanka, Turkey, the UK and the USA.

The agreement recognizes that there is substantial equivalence of programme accredited by those signatories. Graduates of accredited programs in any of the signatory countries are recognized by the other signatory countries as having met the academic requirements for entry to the practice of engineering. This accreditation is a shot in the arm for all concerned in their march to ensure total quality in engineering and technology education. It is our duty to take this achievement as a stepping stone for future glory. I hope this honour will provide a new impetus to all Cusat fraternity in their efforts to achieve global standards of quality in all academic activities.

Dr. J. Letha

Testimonial of Academic Excellence

nity to personally congratulate the teaching and non-teaching staff as well as the students of the School of Engineering for achieving this honour. I am sure that this will ensure transnational mobility and competitiveness of our students.

Our B.Tech programme in Civil Engineering, Computer Science & Engineering, Electrical & Electronics, Electronics & Communication, Information Technology, Mechanical and Safety & Fire Engineering have thus achieved a covetable position among the prestigious institutions in the country.

It's for the first time

may be aware, Tier-I programs are housed in institutions with the autonomy to review the curriculum content and make changes based on recommendations from accreditation visits. The programme offered by IIT's, IISc's, NIT's, Constituent Departments/Colleges of Central. State and Deemed-to-be Universities and Autonomous Institutions are eligible for accreditation under Tier-I system. All the colleges affiliated to a University are accredited only under Tier-II system.

Currently, from the State of Kerala, only these seven programmes offered at School of Engineering, Cusat have bemanent signatory status of Washington Accord on 13th June 2014. As per Washington Accord agreement, recognition of programs by other signatories applies only to programme accredited by NBA and offered by providers education accepted by NBA as Tier 1 Institutions. The Washington Accord covers undergraduate engineering degrees under Outcome-based education approach.

As we know, the Washington Accord is an international accreditation agreement for professional engineering academic degrees, between the bodies responsible

Maritime Research Advisory Board constituted

In an effort to overcome the unprecedented challenges with regard to control of emission from ships in the wake of MARPOL convention, the K.M. School of Marine Engineering, Cusat has formulated a Maritime Research Board involving the representatives of organizations such as Indian Register of Shipping, Directorate General Shipping, Mercantile Marine Dept., State Marine Development Corpo-

ration, Indian Maritime University etc. MARPOL Commission of IMO stipulates the reduction of emission of oxides of Sulphur & Nitrogen from various ships, said Dr. K.A. Simon, Director, K.M. School of Marine Engineering. The Director of the School further explained that the immediate priority of the research wing is the following. (I) Exhaust gas recirculation in Marine diesel engine as a primary mea-

ns of NOx reduction. (II) Fuel oil emulsification techniques to comply with emission requirements. (III) Water injection into combustion chamber of compression ignition engine and scavenge air moisturizing in order to regulate NOx production and (IV) Study of nozzle flow characteristics of sonic and subsonic flows with the aid of anechoic chamber.

The Stratosphere Troposphere (ST) Radar installed in the Cusat campus has commenced issue of weekly weather bulletins from Monday, 2nd November, 2015. Cusat Vice Chancellor Dr. J. Letha released the first weather bulletin during a function organized at The Centre for Atmospheric research at Cusat campus. She has also inaugurated the 32 m tall Meteorological Tower and Automatic Weather Station on the occasion. An introductory speech was delivered by Dr. K.



Cusat Vice Chancellor Dr. J. Letha is inaugurating ST Radar Weather Station. Dr. S. David Peter, Sri. Sebastin Ouseph, Dr. S. Anilkumar, Dr. K. Poulose Jacob and Dr. K. Mohankumar are also seen

Cusat ST Radar: Weather Bulletins commenced

Mohan Kumar, Director of the Advanced Centre for Atmospheric Radar Research. Dr. K. Poulose Jacob, Pro-Vice Chancellor, Dr. S. David Peter, Registrar, Sri. Sebastian Ouseph, Finance Officer and Dr. S. Anil Kumar, Director, Public Relations and Publications were also present among faculty, scientists and media persons on the occasion.

Conventionally weather predictions are made with the help of periodic relays from Radio Sonde equipment carried by helium-filled balloons. The

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205 MHz. Radar of Cusat can detect and analyze even the slightest changes in air and other atmospheric forces at a height of 20 km above the earth's surface on a 24-hr basis. Established with funding of Rs. 20 Cr. from Dept. of Science and Technology, Govt. of India, the project is the only one of its kind in India with ST Radar, Meteorological Tower, Automatic Weather Station and GPS Radio Sonde.

The ST Radar project's prediction of wind storms and monsoon based on its analysis of atmospheric conditions will contribute immensely towards diverse sectors like atmospheric research, defense, air transport and weather analysis, according to Dr. K. Mohan Kumar, Project Director. Weekly weather bulletin is available on www. acarr. cusat.ac.in, www.cusat.ac.in.

Training brochure on Taxonomy of Bivalve Molluscs

Cusat Vice Chancellor Dr. J. Letha released the brochure of first International training workshop on "Taxonomy of Bivalve Molluscs" on 10th December 2015 in the School of Marine Sciences Auditorium, Cusat. The workshop was organized by the Dept. of Marine Biology, Microbiology and Biochemistry, Cusat and co-organized by the Dept. of Aquatic Biology and Fisheries, University of Kerala, in collaboration with National Museum of Wales and School of Ocean Sciences, Bangor University, UK, said Dr. Bijoy Nandan.



Dr. K. Mohankumar is elaborating the working of ST Radar to Cusat Vice Chancellor Dr. J. Letha and other dignitaries

Ocean Wealth: India should exploit our seabed: NSTL Director

"The seabed has vast resources of mineral wealth, which have not been exploited through seabed explorations by India. On the other hand. China has established a huge lead in seabed exploration by developing the world's deepest diving vehicle, which can go deep even beyond 7000 metres. Our nation has to accelerate its programs on a war footing for the extraction of strategic rare earth metals from the seabed", said Dr. C. Durgamalleshwar, Director, Naval Science & Technological Laboratory, Vishakhapatnam.

He was delivering the inaugural address at the 13th International Symposium on Ocean Electronics (SYMPOL 2015), organized by the Dept. of Electronics, Cusat on 18 November 2015. The Govt. of India has now put up a claim for a possible addition of nearly another million square kilometers to the EEZ, after the necessary survey as per the specific clauses of the UN Convention of Law of the Sea.

"India has to develop several key cutting edge technologies for surveying the nation's potential EEZ as well as design the required underwater systems and technologies for harvesting the oceanic resources from various depths. A wide technology gap exists in various spheres of ocean technology in India and there is demand to develop multiple technologies to tap our seabed resources. Indian seas also have rich potential fishing grounds with more than 100



Dr. C. Durgamalleshwar, Director NSTL is inaugurating SYMPOL, 2015 Dr. P.R.S. Pillai, Dr. K. Poulose Jacob, Cusat Vice Chancellor Dr. J. Letha, Sri. K.G. Nair and Sri. S. Kedarnath Shenoy are on the dais

varieties of commercially important fish stock. It is grossly underexploited and the catch is less than one third of the total potential. The development of low cost fish finding sonar to help the poor fishing community is the need of the hour, which will certainly fetch substantial export earnings to the country. In the defence sector, our nation is self-reliant in underwater systems and technologies as well as

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underwater weapons and weapon delivery systems. The weapon systems include light-weight /heavy-weight torpedoes, mines and decoys. India has also excelled in developing stealth technologies for naval platforms", he added.

Cusat Vice Chancellor Dr. J. Letha who presided, said that in these times of sea-piracy and terrorism, ocean electronics researchers should focus their activities on national security rather than sea-bed explorations for commercial gains. Ultra-sensitive sonars should be installed at critical areas on the sea-surface as well as seadepths to monitor even the slightest movements, she added. Sri. S. Kedarnath Shenoy, Director, NPOL, Dr. K. Poulose Jacob, Pro-Vice Chancellor, Dr. K.G. Nair, Director, C-SiS, Dr. P.R.S. Pillai, Chairman, SYM-POL, and Dr. M.H. Supriya, Coordinator, SYMPOL spoke. Around hundred participants attended the Symposium which continued for three days.

Oceans have an important role in climate change

To understand the role that oceans play in climate change in-depth, studies should be initiated on both short term and long-term basis, according to Dr. N.A. Atmanand, noted Ocean Scientist and former Director, National Institute of Ocean Technology, Chennai. With the continuous droughts and famines, global warming has made its presence felt in South East Asia and the chance of its repetition have increased. He was speaking at the



Dr. N.A. Atmanand

concluding session of SYMPOL 2015, the Symposium on Ocean Electronics, organized by Dept. of Electronics, Cusat on 20 November 2015.

India has placed buoyed monitoring cylinders to study the presence of carbon in the Arctic Ocean. Satellite controlled buoys that help in the study of climate change and forecast of Tsunami have been installed in the Indian Ocean also. he added. Dr. P.R.S. Pillai. Chairman. SYMPOL and Dr. M.H. Supriya, Co-ordinator, SYM-POL and Head, Dept. of Electronics, spoke on the occasion. Around hundred research papers were presented duringthe three day symposium.

Radar Centre to collaborate Euro Union funded project

Cusat has received an invitation to be part of an international research programme on climate change funded by the European Union.

The varsity's Rs. 20 crore Stratosphere Troposphere (ST) Radar, managed by its Advanced Centre for Atmospheric Radar Research, is expected to play a key role in generating valuable data towards the StratoClim research project. The aim of the ambitious venture is to assess the role of upper troposphere and stratosphere in climate change and it involves 28 institutions in 11 countries.

"The Dynamic Meteorology Laboratory in Paris has recommended a joint venture to study the impact of the Indian monsoon convection on the topical tropopause layer and climate.

The StratoClim project is planning a measurement cam-

paign all over India during summer 2016 with a high altitude aircraft that will bring a host of unparalleled information," said K. Mohankumar, Director of the Advanced Centre for Atmospheric Radar Research.

The aircraft payload will include instruments devoted to characterize aerosols and ice crystals as well as the chemical composition of gas tracers. Dr. Mohankumar pointed out that the distribution of ground sources and the transport properties across the layer are still poorly understood.

"The goal of the project is to make advances in our understanding of the processes ruling the composition of the TTL and the paths of air parcels going through. It will build on a unique combination of opportunities on the observation side," he said.

Padma Bhushan Dr. S.Z. Qasim remembered

A commemorative meeting to pay tribute to late Syed Zahoor Qasim, renowned Marine Biologist and Oceanographer and the leader of the first Indian Antartica expedition for his great contributions and services rendered in the academic and research area of Marine Biology was held in the School of Marine Sciences Auditorium. Cusat on 10 December 2015 Cusat Vice Chancellor Dr. J. Letha recalled his great contribution in the field of Marine Science during the occasion. Dr. K. Poulose Jacob, Pro-Vice Chancellor, Justice K. Sukumaran, Dr. K. Sajan, Director, School of Marine Sciences, Mr. Mathew Puthussery, Dr. S. Anil Kumar, Director PR & P and Dr. A.N. Balchand, Dean, School of Marine Sciences, graced the event.

Eminent Scientists Dr. Bhattathiri P.M.A., Prof. Abdul Azis, Dr. G.K. Vinci, Dr. Rosamma Stephen and Dr. A.A. Mohamed Hatha shared experiences.

Meet CUSAT'S Hands-on VC

When Dr. J. Letha, the first woman Vice-Chancellor of the Cusat assumed office in October 2014, the university lacked many things. There were many gaps to be filled; almost all departments of the university had many vacant positions as far as faculty positions were concerned. Her first priority was to fill those gaps. She made arrangements to advertise about the recruitment process. And, now, a major chunk of the vacant seats have been filled and notifications have been given for the rest.

"The reason for focusing on this particular issue was that we could not go for new projects and accreditation process without sufficient faculty", says Letha in a soft voice.

Her far-sightedness was true. The National Board of Accreditation (NBA) has accredited seven B. Tech programs Electrical & Electronics, Electronics & communication, Civil Engineering, IT, Mechanical, Safety & Fire Engineering and Computer Science offered by the School of Engineering (SOE), which comes under Cusat, for two years under its Tier-1 system, a first of its kind in the state.

"We got the accreditation two months ago; It is included in a project funding called Technical Education Quality Improvement Program (TEQIP) and to continue in the loop, accreditation is a must. After coming here, I understood that priority must



be given to the accreditation process and we completed all accreditation procedure within a short span of time. I had gone to

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other colleges and conducted meetings to motivate them, "says Letha, who was the Principal of College of Engineering, Trivandrum earlier.

Since I have been a part of accreditation processes in my

former college, I was confident about doing this; I could give them instructions. Of course, they also tuned to it quickly and finally we achieved it, "she says, explaining the parameters they had to meet.

There were almost 16 parameters related to different areas of the courses, including teaching mode, syllabus, and the number of research scholars. "There is a particular mark for each criterion. Those who get above 600 are eligible for the accreditation. We did self-assessment many times. Once we achieved more than 600, we submitted that data," she says.

During her tenure in the campus, Letha has activated some fresh thoughts. We have introduced new schemes such as 'Enrich' in which students and faculties will be given incentives for their achievements and a 'Adjunct Faculty', where interested industry people could come to the campus and teach a subject for which they will be paid. Then, we introduced a technology business incubator with an intention to make students job providers rather than jobseekers," she elucidates.

Now, after NBA accreditation, the university is gearing up for NAAC accreditation. How has her journey been so far? "It has been good. I am friendly with the students. If they come up with justifiable reasons, I yield to them. Even if they get frustrated, I stay calm. I think that is the best part of being a woman."

(By Elizabeth Thomas, Deccan Chronicle, 17.2.2016)



Dr. Pulickel Ajayan is inaugurating Cochin Nano '16. On the dais are Dr. M. Junaid Bushiri, Cusat Vice.Chancellor Dr. J. Letha, Dr. K.A. Zakkariya, Sri. Gunther Schatz, Dr. M.R. Anantharaman, Dr. K. Poulose Jacob, Dr. S. Jayalakshmi, Sri. S. Kedarnath Shenoy and Dr. S. David Peter

"Nanotechnology will ensure availability of safe drinking water in the rural areas of the country, besides putting a logical end to the persistant threat of plastic menace. Nano-filters used in water taps will be capable of filtering not only microbes, but also particles that cause chemical pollution," pointed out Dr. Ajayan. He added that Nano-science was an enabling technology through which

Time ripe for India to invest in Nano-research : Dr. Ajayan Pulickel

The time is appropriate for India to make maximum investment in Nano-research and related technology, which will pay rich dividends to the country, said reputed Nano-scientist Dr. Pulickel Ajayan, who is also founder-director of the Nano-

science Dept. at Rice University, USA.

He was delivering the inaugural address at Cochin Nano-2016, a four-day international seminar on Nanotechnology organized by the Dept. of Physics at Cusat. anything could be achieved for the welfare of mankind. "It also helps to enhance the efficiency of solar cells, storage batteries and other electronic devices," the Nano-scientist said.

Cusat Vice Chancellor Dr. J. Letha presided over the inaugural function, at which Pro-Vice Chancellor Dr. K. Poulose Jacob released the Proceedings of the Seminar.

Organizing secretary Dr. M.R. Anantharaman; NPOL Director Sri. S. Kedarnath Shenoy, Gunther Schatz from the University of Konstanz, Germany, Cusat Syndicate members Dr. K.A. Zakkariya and Dr. V.S. Sebastian, Registrar Dr. S. David Peter and Dr. M. Junaid Bushiri also spoke.

According to Dr. Anantharaman, Convener, Nano 2016 around 300 delegates from 35 countries participated in the seminar, at which about 300 research papers presented.

Sidelining of reformers is dangerous - Sethu

The cultural deterioration in Kerala is the result of sidelining the reform leaders, according to Sri. Sethu, renowned author. We can escape from this sorry state only by

renowned author. We can escape from this sorry state only by understanding

Novelist Sethu is addressing the audience. Dr. K. Vanaja and Dr. N. Mohanan are also seen

and adopting the real meaning of their teachings and ideals, he added. He was delivering a special address at the 'Kerala Piravi' celebrations organized by Dept. of Hindi, Cusat. Dr. K.

Vanaja, Head, Dept. of Hindi presided over the function while Dr. N. Mohanan, Dean, Faculty of Humanities, Dr. R. Sasidharan and Dr. K. Ajitha (Faculty member) spoke.



CUSAT Gets 1 Crore Financial support for the Technology Business Incubator (TBI)

The Govt. of Kerala has sanctioned Rs. One crore to Cusat to set up a state of the art Technology Business Incubator (TBI) in the area of communication technologies. Finance Minister, Govt. of Kerala in the Budget speech 2015-16, had declared setting aside Rs. 11 crore to provide Rs. 1 crore each to set up Incubation Support Centers in the Universities in the State. CUSAT is the first university in the state to receive this funding, according to Dr. P. Abdulla,

Director and Dr. Sam Thomas Assistant Director of the Centre.

In tune with the state govt. policy of encouraging student entrepreneurs, Cusat has already set up the basic TBI under the Centre for Innovation Technology Transfer and Industrial Collaboration (CITTIC) of Cusat. The university has allocated 5000 sq.ft. premises for the same. The centre hosts a series of training programmes and workshops for the budding student entrepreneurs of the uni-

versity. More than 100 students attend these programmes regularly. The syndicate has already passed the rules and the incubation policies governing the operation of the TBI. The student incubates will be assigned from January 2016.

The funding from the state govt. will be utilized for proper networking and furnishing of the space, purchase of equipments and furniture, organizing workshops and other recurring expenses.

A home rebuilt with love for Paru Amma

In her later 70s, she had resigned to a life in her gutted one-room hut.

Being nothing but a bother to her five children for long, hope seemed non-existent. But, Smt. K.N. Paru didn't count on the compassion of the students of SoE, Cusat behind which stood her rundown house.

For generations of students in Cusat, she has been Paru Amma, the granny who unfailingly swept the campus. Moved by her plight, a few students of the school of engineering decided to repay by refurbishing her home. And on Friday the School of Engineering Principal G. Madhu, handed over the keys of her renovated house.

Its all started after Nitin Vasanth, a final year B.Tech student, spotted the septua-



Smt. Paru Amma

genarian sweeping the campus on a rainy evening last November. "She told her story and her attachment to our campus," said Nitin who posted it on Facebook page.

As knocks at numerous doors went unanswered, the students decided to undertake the task on their own with the support of the Principal and faculty members. But it was not easy. It took countless

visits to local body offices to clear issues related to the 0.90 cent of plot and get the clearance.

The students started with pulling down the gutted structure. They took turn to help masons. The truss work was done using welding machines at the mechanical lab. They braved cold December mornings to water the cement structures, painted the house during evenings after the classes and electrified the house. A contractor provided an earthmover free of cost to clean up the mess in the front yard.

Finally, when a tearful Paru Amma boiled the milk to mark the house warming they were all present as if to make up for the absence of her own children.

(The Hindu, 17.1.2016)

'We are not alone'- noted Astro-Physist Dr. Jayant Narlikar

Dr. Jayant Narlikar, noted astro-physist and science writer expressed hope that life forms may be existing in some parts of the universe outside earth, based on various balloon experiments conducted with the support of Indian Space Research Organization.

Dr. Narlikar was delivering a talk on 'Are We Alone?' at the Dept. of Physics in collabora-



Dr. Jayant Narlikar

tion with Inter University centre for Astronomy and Astrophysics on 11 February 2016. Dr. S. Jayalakshmi, Head Dept. of Physics and Dr. V.C Kuriakose, IUCCA Centre Coordinator spoke.

'Emerging trends in Mechanical Engineering' conference held

The Division of Mechanical Engineering, School of Engineering, Cusat has organized an International Conference on "Emerging Trends in Mechanical Engineering" during 16-17 December. Cusat Vice Chancellor Dr. J. Letha inaugurated the Seminar on 16th December at Cusat Seminar Complex.

Dr. G. Madhu, Principal,

School of Engineering presided over the function. Dr. Biju N., Dr. K.P.S. Nair, Dr. K.A. Zakkaria, Dr. M.R. Anantharaman, syndi-cate members P.K Dileep, Dr. P.S. Sreejith and Dr. M.R. Radhakrishna Panicker spoke. Prof. Atul Chokshi, Dr. Shreyes N. Melkote, Prof. John Tharakan and Dr. Dong-Hwan Park were the keynote speakers.



Cusat Vice Chancellor Dr. J. Letha is inaugurating Icetime'15, Dr. P.S. Sreejith, Dr. Biju N., Dr. K.A. Zakkaria, Dr. M.R. Anantharaman, Dr. K.P.S. Nair, Dr. G. Madhu, Dr. M.R. Radhakrishna Panicker and P.K. Dileep are also seen

C-SiS training programme for teachers

The Centre for Science in Society (C-SiS), Cusat organized a one day training program on Experimental Optics for Teachers in Schools and colleges on 19 December 2015. Dr. Suresh Das, Executive Vice President, KSCSTE inaugurated the Seminar.

Cusat Vice Chancellor Dr. J. Letha presided. Dr. K.G. Nair, Director, C-SiS offered felcitations. C-SiS is conducting the training program in connection with the celebration of International Year of Light 2015 in association with Kerala State Council for Science Technology and Environment (KSCSTE).

Paper presented at Int'l conference

Dr. V.R. Renjith, Associate Professor, Safety and Fire Engineering Division of School of Engineering



presented a paper titled "Risk Assessment of LNG Storages using LOPA and FTA: An integrated approach" at the international symposium held at Mary K O Connor Process Safety Centre of Texas A & M University, USA during 27-29 October 2015.

The paper focused on the need for identifying and analyzing the safety hazards associated with Liquefied Natural Gasthrough the FTA (Fault Tree Analysis) & LOPA integrated approach.

Explore mechanisms to control plastic pollution : Dr. Masataka Sugimoto

The Dept. of Polymer Science and Rubber Technology, Cusat and the Indian Rubber Institute (IRI), Kerala Branch jointly organized a two day International Conference on 'Advances in Polymer Technology' (APT '16) during 25-26 February, 2016. Dr. K. Poulose Jacob, Pro-Vice Chancellor, Cusat presided over the function.

Prof. Masataka Sugimoto, Head of the Dept. of Polymer Science and Engineering, Yamagata University, Japan presented the plenary lecture. During this lecture Dr. Masataka Sugimoto reiterated the need of scientists to explore appropriate mechanisms to control the rate of pollution spreading due to the over usage of plastic in our daily life. He also said that the rate of prospering of industries would initiate the real development of Science and Technology. Prof.



Dr. Masataka Sugimoto lighting the lamp during the inaugural function of APT '16. Looking on are Dr. Thomas Kurian, Dr. A.P. Kuriakose, Dr. Joseph Francis, Sri. P.K. Mohamed, Dr. Sunil Narayanankutty and Dr. Rani Joseph

Sugimoto is the Executive Board member of the Japan Society of Polymer Processing and an expert in Electro Magnetic Rheology, Nano composites and Polymer Processing.

Appolo Tyres Research Head P.K. Mohamed inaugurated the

Seminar. Dr. Thomas Kurian Head, Dept. of PS & RT, Dr. Sunil Narayanankutty, Convenor, Dr. Rani Joseph, President, Indian Rubber Institute, Dr. Joseph Francis and Dr. A.P. Kuriakose spoke on the occasion. P.K. Mohamed, Global R &D Chief, Apollo Tyres Ltd. delivered the keynote address.

Guinness Record for Cusat faculty

Dr. K. Girish Kumar, Professor, Dept. of Applied Chemistry won a Guinness record by organi-



zing the largest practical science lesson with 2000 participants during India International Science festival held at IIT Delhi on 7 December, 2015. Dr. Girish Kumar, the chief co-ordinator of the program sponsored by *Vijnan Bharathi* was assisted by

his research scholars Ms. Shalini Menon and Ms. Ammu Rosin Jose (Dept. of Applied Chemistry) as instructors.

The session based on practicals in catalysis was formally inaugurated by Dr. Harsha Vardhan, Hon'ble Union Minister for Science and Technology and Smt. Smrithi Irani, Hon'ble Union Minister for MHRD, Govt. of India. This record was achieved by breaking the existing record of Royal Society of Chemistry, London.

Green Clique clicked

The official blog GREEN-CLIQUE of the eco club in the Dept. of Polymer Science and Rubber Technology was inaugurated by Dr. S. David Peter, Registrar, Cusat on 10 February, 2016. Prof. Thomas Kurian (Head, Dept. of PS&RT) and Prof. Honey John (Coordinator, Eco club) were the other speakers. The blog was designed by Mr. V.B. Bhagyesh, Research Scholar of the Department.

The twelfth three day National Workshop on Science Communication and Science Journalism organized by the Cusat Public Relations and Centre for Science Communication in collaboration with KSCSTE concluded on 4 February, 2016 at Cusat with a clarion call for down-to-earth reporting in science for the common man.

During the inauguration on 2 February, Dr. Suresh Das,



Dr. Suresh Das is inaugurating the National Workshop in the presence of Dr. S. Anilkumar, Dr. M.R. Anantharaman, Cusat Vice Chancellor Dr. J. Letha, Dr. K. Poulose Jacob, Sri. Sergi Antony and Dr. K.A. Zakkaria

12th National Workshop on Science Journalism

Executive Vice President of the Kerala State Council for Science, Technology and Environment exhorted the journalists to boil down Science writing to create scientific awareness among common man, else its target itself will fail. He promised the support of KSCSTE in organizing Science Journalism Workshops in all the districts of the State in collaboration with the Centre for Science Communication, Cusat.

According to Dr. Das, the media has a strong role in formulating public opinion on pertinent issues like genetically modified crops, global warming over usage of pesticide etc. Hence extra care should be taken while reporting such issues.

In their rush to make brea-

king news, the media is ignoring the science, said Sri. J. Sergi Antony, Chairman Kerala Media Academy. He deplored the practice of providing little space to science in news papers.

Media is a mediator between science and the people, it can play an important role in creating scientific awareness among people. Truth is the essence of news and hence the facts that the media is reporting must be true and factually correct, said Dr. J. Letha, Vice Chancellor. Cusat.

Dr. K. Paulose Jacob, Pro-Vice-Chancellor, Cusat released the book, 'science ezhuthumbol' authored by Dr. S. Anil Kumar for Centre for Science Communication and published by Directorate of Public Relations & Publications during the function. Dr. K.A. Zakkariya and Dr. M.R. Anantharaman (Syndicate Members) and Smt. K.G. Binimol, Section Officer, DPR&P offered felicitations. Over 150 delegates from various parts of the country participated in the three day programme, where experts in the area lead various sessions, said Dr. S. Anilkumar, Co-ordinator of the workshop.

Dr. K. Ajith Prabhu, Sri. Kumar Chellappan, Dr. S. Anil Kumar Vadavathoor, Smt. Sudha Nampoothiri, Sri. Francis Perera, Sri. G. Shaheed, Dr. K.G. Nair, Prof. S. Sivadas, Sri. D. Pradeep Kumar, Sri. C.P. Byju, and Sri. D. Pramesh Kumar lead various seminars. With the conclusion of this 12th edition of Science Journalism workshop, a total number of 1200 young journalists/journalism students were taught the art and craft of Science Journalism, according to Dr. S. Anil Kumar, Co-ordinator of the programme and Director, Public Relations and Publications, Cusat.



Dr. K. Poulose Jacob is releasing the book 'science ezhuthumbol' by handing over a copy to Sri. Sergi Antony, Chairman, Kerala Media Academy

Budget is not mere income-expenditure statement: Minister V.K. Ibrahimkunju

The budget is not a mere income & expenditure statement but a document of destiny, said Sri. V.K. Ibrahimkunju,

Minister for Public Works. He was laying the foundation stone for K.M. Mani Centre for Budget Studies. The Minister added that



Sri. V.K. Ibrahimkunju, Minister, PWD is unveiling the plaque. Dr. M.A. Ummen, Prof. Lopus Mathew, Smt. Jessy Peter, Cusat Vice Chancellor Dr. J. Letha, Sri. R.S. Sasikumar, Dr. S. David Peter, Prof. D.K. John, Dr. K.A. Zakkariya, Dr. Joseph John, Sri James Joseph and Dr. A. Mujeeb are on the stage

a practical approach based on reality is essential in the preparation of budgets. Otherwise the total approach becomes unscientific and irrational.

Cusat Vice Chancellor Dr. J.
Letha presided over the function. Dr. K. Poulose Jacob, ProVice Chancellor, Dr. Joseph John, Dr. K.A. Zakkaria, Sri. R.S.
Sasikumar, Sri. George Paul,
Prof. D.K. John, Dr. A. Mujeeb
and Dr. A. Mohammuda Beegum (Syndicate Members) Prof.
Lopus Mathew (Member, Kerala
PSC), Jessy Peter (Municipal
Chairperson, Kalamassery) and
Dr. S. David Peter, Registrar
spoke during the occasion.

Kinfra, Cusat join hands to set up Nanotech facility



Cusat Vice-Chancellor Dr. J. Letha and Dr. G.C. Gopala Pillai, MD Kinfra are addressing the delegates.

Kerala Industrial Infrastructure Development Corporation (KINFRA) and Cusat will join hands to set up the proposed Nanotechnology facility at KINFRA Hi-tech Park at Kalamassery. It was decided at a brain-storming session held at Cusat administrative office.

The event, presided over by

Dr. G.C. Gopala Pillai, MD, Kinfra was inaugurated by Cusat Vice Chancellor Dr. J. Letha. Speaking on the occasion, Dr. Gopala Pillai said the proposed

materials park with special emphasis on Nanotechnology could become a trend-setter in the country. The session arrived at a con-sensus to set up a basic common facility, which could be utilized by researchers & entrepreneurs.

Cusat Vice Chancellor Dr. J. Letha in her address said that there was a need for scholars to continue their research even after they get Ph.D. Therefore, the proposed facility could be on the lines of discovery laboratories or venture business laboratories. She also called for a formal framework within which KINFRA and Cusat would collaborate on the project.

A 'Nanotechnology Zone' has been earmarked inside KINFRA Hi-tech Park for promoting Nano-technology based industries. As part of this, KINFRA proposed to set up a common facility with suitable infrastructure to encourage research scholars from universities and other R & D institutions to establish their business ventures with the support of Cusat.

Transform the fruits of basic sciences to innovations: Dr. Suresh Das



Dr. Suresh Das is lighting the lamp marking the inauguration of MATCON '16 in the presence of Dr. N. Manoj, Prof. Herbert W. Roesky, Dr. K. Poulose Jacob, Dr. Joseph John and Dr. K. Girish kumar

The Executive Vice President of KSCSTE, Dr. Suresh Das exhorted the scientists and technologists to harness the process of transforming the fruits of basic science research to innovations. He stressed the need to do more research on indigenous materials like bio-materials and bio-composts.

Dr. Suresh Das was inaugurating an international conference on 'Materials for the Millennium, MATCON'16' organized by the Dept. of Applied Chemistry, Cusat on 14 January, 2016.

Dr. Das said that India has achieved the 13th position in the number of publications in the Basic Science research, Dr. K. Poulose Jacob. Pro-Vice Chancellor, Cusat presided. Dr. N. Manoj, Chairman Matcon'16, Dr. Joseph John (Member, Syndicate), Prof. Herbert W. Roesky (Institute of Inorganic Chemistry, Germany), Prof. Hiroaki Misawa (Hokkaido University, Japan) and Dr. K. Girish Kumar (Convener, Matcon'16) offered felicitations on the occasion.

The International Conference in which 350 delegates from all over the world participated concluded on 16 January, 2016. More than 100 papers were presented.

Research Sans Frontiers: Cusat VC

Cusat Vice Chancellor Dr. J. Letha called upon the scientists to come forward for new innovation by liberating research from the rigid frame of individual subjects. She was inaugurating the Workshop on "Research Methodology in Physical Sciences organized by Dept. of Physics on 11 December 2015.

Dr. S. Jayalakshmi, Head, Dept. of Physics presided over the function. Sri. R.S. Sasi Kumar, Syndicate Member, Dr. Godfrey Louis, Dean, Faculty of Science, Dr. M.K. Jayaraj, Dr. M. Junaid Bushiri, Dr. M.R. Anantharaman, (Syndicate member), Dr. Padma Nambisan and Smt. Arathi Ashok offered felicitations.

Open House and Competitions in STIC

In connection with National Science Day, Sophisticated Test & Instrumentation Centre (STIC) at Cusat organized various competitions for students and an open house for general public on 26 February, 2016. The science day activities are based on the theme 'Make in India: S & T driven innovations'.



Cusat Vice Chancellor Dr. J. Letha is inaugurating the workshop on Research Methodology. Dr. Godfrey Louis, Sri. R.S. Sasikumar, Dr. S. Jayalakshmi, Dr. M.K. Jayaraj and Dr. M. Junaid Bushiri are also seen



JAIMIND - Cusat Vice Chancellor Dr. J. Letha is saluting the National Flag after the flag hoisting ceremony during Republic day celebrations on 26th January 2016 in front of the administrative office

The Conference was intended to create awareness among people about the need and relevance of computing in regional languages and would serve as a platform for interaction and communication among experts in this area and activists all over world. The thrust areas of the Conference were Machine Translation, Transliteration, Indian Language Understanding, Character Recognition, Speech Recognition, and similar areas, said Dr. K.V. Pramod, Convenor.

Language Computation reduces Digital Gap: Dr. Ujjwal Bhattacharya

Computation of Indian regional languages will reduce the digital gap that exists between haves' and have not's of the society, said Dr. Ujjwal Bhattacharya, noted computer expert and Professor of Computer Vision and Pattern Unit, Indian Statistical Institute, Kolkata. Dr. Ujjwal was speaking while inaugurating the 6th two day National Conference on Indian Language Computing organized by Dept. of Computer Application at Cusat on 26 February, 2016.

Dr. Ujjwal also emphasized the need for computation of regional languages for the enrichment and outreach of languages. This will also help the exchange of local and regional cultures and languages which leads for the betterment of national integration, said Dr. Ujjwal. He exhorted the Govt. to initiate steps for strengthening such key areas for the ultimate benefit of

common man. He explained the constraints of alphabets of bigger fonts like in Bangla language, had caused significant bottle necks in the development of language recognition tool. Such latest techniques developed in this area will be fruitful to handle similar kind of constraints in an efficient way.

Dr. B. Kannan, Head, Dept. of Computer Application presided over the function. Dr. K.A. Zakkaria, Member, Syndicate released the proceedings. Dr. Sumam Mary Idikkula, Head, Dept. of Computer Science, Dr. K.V. Pramod, Convenor and Dr. S. Malathy, faculty member spoke. About 150 delegates participated in the conference.



Dr. Ujjwal Bhattacharya is inaugurating the National Conference on Indian Language Computing. Dr. Sumam Mary Idikkula, Dr. B. Kannan, Dr. K.A. Zakkaria and Dr. K.V. Pramod are on the dais

Promote indigenous innovations: Prof. Sivadas



Science Day Oration by noted Science Writer Prof. S. Sivadas. Dr. K.A. Simon, Prof. N.G. Nair and Dr. S. Anilkumar are on the dais

The Universities should come forward to develop indigenous and innovative science and technological ideas and to develop the same for the welfare of the nation, said Prof. S. Sivadas, noted popular science writer and winner of central and state sahitya academy awards. He

was delivering the National Science Oration at a function organized by Cusat Directorate of Public Relations & Publications and Centre

for Science Communication on 4 February, 2016.

Prof. Sivadas urged the youth to come forward to dream new ideas and to materialize innovations. It is dangerous to skip away from the path of scientific innovations. At a time when the world is moving at a high speed through the super highway of knowledge, it is unfortunate that we are still trapped in the bullock cart era, he added.

Dr. K.A. Simon, Director, K.M. School of Marine Engineering presided. Prof. N.G. Nair, Course in Charge, K.M. School of Marine Engineering, Dr. S. Anil Kumar, Director, Public Relations & Publications and Centre for Science Communication and Smt. K.G. Binimol, Section Officer DPR&P offered felicitations. Prof. S. Sivadas distributed the certificates & prizes.

The programme was sponsored by the Kerala State Council for Science, Technology and Environment and Dept. of Science and Technology, Govt. of India.

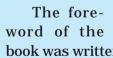
Cusat Book on Mangroves released

A book titled 'Manual on Mangroves' published by the Directorate of Public Relations and Publications, Cusat was released by Vice Chancellor Dr. J. Letha, by handing over a copy to Dr. K. Poulose Jacob, Pro-Vice Chancellor. The book release function was organized at the School of Marine Sciences



Cusat Vice Chancellor Dr. J. Letha is releasing the brochure on "Taxonomy of Bivalve Molluscs" by handing over a copy to Justice K. Sukumaran

Auditorium, Cusat Lakeside Campus by the Dept. of Marine Biology, Microbiology and Biochemistry.



book was written by the famous Environmentalist Dr. Madav Gadgil and was edited by Dr. S. Bijoy Nandan with S. Sreelekshmi, C.M. Preethy, Rani Varghese and Philomina Joseph as Associate Editors.

Hon'ble Justice K. Sukumaran was the Chief Guest. Dr. K. Sajan, Director, School of Mar-



chemistry. Cusat Vice Chancellor Dr. J. Letha is releasing the book
'Manual on Mangroves' by handing over a copy to Dr. K.
The fore- Poulose Jacob, Pro-Vice Chancellor, Cusat.

ine Sciences presided over the function. Former Cusat Vice Chancellor Dr. P.K. Abdul Azis, Dr. A.N. Balchand, Dean, Faculty of Marine Sciences, Dr. S. Anil Kumar, Director, Public Relations & Publications, Sri. Mathew Puthussery, Vanamithra award winner of 2014 and several other dignitaries spoke.

When Makers showed the way for learners

What if a film poster was to deliver a hit dialogue by your favorite star when you just walked past?

Such a "talking poster" was one of the highlights of the Maker Weekend organized by the technology business incubator of the Cusat, Centre for Innovation, Technology Transfer and Industrial Collaboration, with the support of Kerala Startup Mission on the University campus on 16 January, 2016. The event witnessed sharing of knowledge between startups and students from schools and colleges.

The poster was putup by Mumbai-based Rituparna Matkar to drive home the concept behind an open source-based development board named Tah created by him.

It can be plugged into any USB port and with the help of an app turns a smartphone in to a remote control for devices "We ran a campaign worth \$29,000 on the crowd funding platform Kick starter and sold 700 boards in 90 countries," said Mr. Matkar.

Jeff Salim, all of 12 years, seems too young to be an innovator.

Only, he does not think so. The class 7 student is into home automation through smartphones.

The youngster, who is fascinated by wireless technology, stumbled upon the idea on the Internet, wrote the relevant code and got the mobile app created to execute his idea.

"The Bluetooth module helps to control multiple deviceswithin a 20-metre radius. But there would be no such distance restriction if a router were to be used," he said.

It was not all technology and innovation at the event as non-technical sessions were also held alongside. Clay modeling, painting and even a dance workshop provided the perfect backdrop for the event.

More than 500 participants, including students from three schools and various colleges, visited the event.

(The Hindu 17.1.2016)

Maritime Day Celebrated

The K M School of Marine Engineering, Cusat celebrated World Maritime Day-2015 on 23 September 2015. Prof. Dr. K.A. Simon, Director of the School welcomed the gathering. Shri. Ajithkumar Sukumaran, Principal Officer, MMD delivered the key note address and the inaugural address was given by Shri.

V.J. Jose, Chief Mechanical Engineer (Rtd.), Cochin Port Trust. Capt. Naveen Vinod, Principal, Eurotech Maritime Academy, Cochin felicitated and Prof. Dr. P.V. Sasikumar, Professor, K M School of Marine Engineering presented the technical session out-line. The inaugural function ended with

Kerala Science Lit. Award for Dr. Anilkumar Vadavathoor

Dr. S. Anil kumar (Anil Kumar Vadavathoor), Director, Public Relations and



Publications won the Kerala State Science Literature Award for his book 'Mainakavum Koottukarum' (popular science) for his outstanding contributions in the area published by SPCS and distributed by NBS.

The award carries a cash prize of Rs. 50,000/-. Citation and certificate was instituted by Kerala State Council for Science, Technology and Environment, Govt. of Kerala in appreciation of his contributions for the promotion of science through writings in Malayalam.

vote of thanks by Prof. N.G. Nair, Course-in-Charge, K M School of Marine Engineering.

This was followed by technical sessions. Two groups each from K M School of Marine Engineering, METI, Cochin Shipyard Ltd., Cochin, Eurotech Maritime Academy, Cochin participated in the group discussions on selected topics based on the IMO's theme "Maritime Education and Training". Capt. Josekutty Thomas, CEO, M/s Expedo Ship Management Company and Shri. S. Krishnan Kutty, Ex. DGM of Shipping Corporation of India were the judges for the group discussions.

Hindi Language and Literature - Int'l Seminar



Cusat Vice Chancellor Dr. J. Letha is inaugurating the International seminar on Hindi Language and Literature. Dr. N. Mohanan, Smt. Tomocco Kikochi, Dr. K.A. Zakkaria, Dr. P.V. Vijayan Dr. K. Vanaja and Dr. Ram Nivas Sahu are on the stage

Deen Dayal Upadhyay Kaushal Kendra: M.Voc courses started

Cusat Vice Chancellor Dr. J. Letha urged the need of imparting employability in higher education, so that the students can be converted to entrepreneurs rather than job seekers. She was inaugurating the first batch of M.Voc courses allocated to the DDUKK of Cusat on 15 February,

2016. Dr. M.R. Anantharaman, Member Syndicate, Dr. S. David Peter, Registrar and Dr. K.A. Zakkariya, Director, DDUKK and Syndicate Member spoke. The function was presided over by Dr. K. Poulose Jacob, Pro-Vice Chancellor, Cusat.



Dr. K.A. Zakkaria, Director DDUKK is elaborating on the activities of DDUKK. Dr. M.R. Anantharaman, Dr. K. Poulose Jacob, Pro-Vice-Chancellor, Dr. J. Letha Vice Chancellor and Dr. S. David Peter, Registrar are on the stage.

The Dept. of Hindi, Cusat had conducted a three day International Seminar on "Hindi Language and Literature". Cusat Vice Chancellor Dr. J. Letha inaugurated the Seminar on 15 December.

Tomocco Kikochi (Japan), Manenare (Armenia), Dr. Vijay Bahadur Singh (Bhopal), Asgar Vajahath (Delhi), Dr. Rambex (JNU), Venkateshvar (Hyderabad), Pramod Kumar (Patna) and Dr. Ram Nivas Sahu (Mysore) participated and delivered keynote orations at the Seminar. The concluding session was presided over by Dr. K. Poulose Jacob, Pro-Vice Chancellor, Cusat on 17 December, 2015.

National Science Day Celebrations

The Dept. of Biotechnology, Cusat with the financial assistance of Kerala State Council for Science Technology and Environment and with the support of Dept. of Science and Technology organized various programmes on 25th February in connection with National Science Day 2016.

The programme was inaugurated by Cusat Pro-Vice Chancellor Dr. K. Poulose Jacob. Dr. Ajithkumar K., Scientist, NPOL, Kochi and Dr. Priya Rao, Director, Pelican Biotech and Chemicals Pvt. Ltd. spoke.

Essay and Quiz competitions were held for college students organised on the theme 'Make in India: S & T driven innovations'.

Crisis Management and Business Continuity Planning: Seminar held

The School of Management Studies, Cusat, had organized a two day National Seminar on Crisis Management and Business Continuity Planning" during February 11-12, 2016 at SMS Auditorium. The objective of the seminar was to create awareness about the need for disaster and crisis management and to develop the required conceptual skills.

The Vice-Chancellor Dr. J. Letha inaugurated the seminar. The representatives from the corporate sector, university and college teachers, researchers, NGO sector functionaries and students participated. Dr. Sekhar Lukose Kuriakose and Mr. Amal Raj (disaster management experts), Mr. Mohanachandran, (Chief General Manager, Federal Bank), Mr. Leo Samuel, (CEO, Technomix) and Mr. Gijo Joseph, (former C.E.O., Infopark) were among the experts to lead discussions.



Cusat Vice Chancellor Dr. J. Letha is inaugurating the National Seminar on Crisis Management organised by School of Management Studies, Cochin University of Science & Technology.

Music Workshop for young singers conducted



Dr. S. David Peter, Registrar, Cusat is presenting a Memento to noted film director Sri. Sibi Malayil. Dr. P.K. Baby and Sri. Suresh Manimala are also seen

A Music Workshop for the talented singers of student fraternity of Cusat was organized by the Youth Welfare Dept. on 27 & 28 February, 2016 at Dept. of Hindi Auditorium.

The Workshop was inaugurated by the noted Film Director

Sibi Malayil. Dr. J. Letha delivered the Keynote address. The Workshop was intended to cater professional training in singing, said Dr. P.K. Baby, Director, Youth Welfare Dept., Cusat. Shri. Suresh Manimala, Music Composer, Singers Chitra Arun and Beni lead the Workshop.

Cusat Faculty bags DAAD Project

Dr. M.R. Anantharaman, Professor of Cusat Physics Dept. bagged the prestigious DST-DAAD project, an Indo-German joint research collaboration project with Prof. Manfred Albrecht of University of Augsburg, Germany. DST-DAAD, is a Project based Personnel Exchange Program with India & Germany (PPP). This is the third time Prof. Anantharaman won the collaborative project under DAAD project.

New Short Term Training Programme in Cusat SoE

The Division of Mechanical Engineering, School of Engineering, Cusat started a short term training program on Industrial Automation & Measurements. The duration of the course is four weeks with a course fee of Rs. 10,000/-. Dr. Biju N., is the Course Coordinator.

Demystifying the Process of Patent Application

Cusat has launched a 'Knowledge Forum' comprising researchers and their guides to scale up patent filing.

The move comes after the varsity found that the filing of patents among the faculty members and researchers on the campus was sluggish and required a massive push. The forum will meet on the first Wednesday of every month.

The initiative is part of the Inter-University Centre for Intellectual Property Rights Studies of Cusat, which aims at demystifying the process of patent application.

"To begin with, the knowledge forum has nearly 50 members. They will present new research findings and discuss inter-disciplinary subjects in the meeting. The team will be expanded in the coming months by adding more researchers," said Dr. J. Letha, Vice Chancellor. The target levels have to go up to match the growth in patent filing achieved by nationally reputed higher educational institutions, she said.

"A resolution will soon come up in the Academic Council recommending that patent filing could be considered equivalent to research publication. Our focus is on promoting patent filing in interdisciplinary areas. The forum will evolve groups that would work specifically in interdisciplinary areas," Dr. Letha said.

Workshop on Accrual Based Budgeting in local governments

To provide first hand exposure to budget making and accounting at local levels, K.M. Mani Centre for Budget Studies, Cusat organized a workshop on Accrual Based Budgeting in Local Governments on 16 December 2015 at the International Shool of Photonics Auditorium. Cusat Vice Chancellor, Dr. J. Letha, inaugurated the function. The workshop was conducted for Vice President/Chairman, Finance Standing Comm-

ittee and Secretary/ accounts Officer from each Panchyath and Muncipalities in Kerala.

Dr. K. Poulose Jacob, Pro-Vice Chancellor, Cusat presided while Dr. M.A. Oommen, Director, KMMCBS, Dr. Joseph John, Dr. V.S. Sebastian (Syndicate members) and Dr. Sabu Thomas, Co-ordinator, KMMCBS spoke on the occasion. Sri. Udayabhanu Kandeth, Senior Audit Officer (Retd.), Accountant General's Office delivered the Special Address.



Cusat Vice Chancellor Dr. J. Letha is inaugurating the Workshop on Accrual Based Budgeting in local governments. Dr. M.A. Oommen, Dr. K. Poulose Jacob, Dr. Joseph John, Dr. V.S. Sebastian and Dr. Sabu Thomas are on the dais

Clean Fuel Marathon held at Cusat Campus

To create awareness on oil conservation and environmental protection, the Indian Oil Company in association with the NSS, Cusat main campus unit has conducted a marathon on 20 January 2016 at Cusat campus.

The Marathon was flagged off by Dr. M.B. Santhoshkumar, NSS Coordinator, Cusat. A.M. Santhosh kumar. State Institutional Manager (Lubes), Indian Oil Company Ltd., Y.D. Leelakrishna, Deputy Manager (Lubes), Indian Oil Company Ltd., Naveen S., NSS Programme Officer, Cusat main Campus Unit and Prabinraj P., Student Co-ordinator of the program spoke. Around 100 NSS volunteers of NSS main campus unit participated in the marathon.

Silver Jubilee of Ocean Electronics Centre inaugurated



Cusat Vice Chancellor Dr. J. Letha is inaugurating the Silver Jubilee Celebration of Centre for Ocean Electronics. Dr. K.G. Nair, Dr. P.R.S. Pillai, Dr. Poulose Jacob, Pro-Vice Chancellor and Dr. M.H. Supriya are on the dais

Green Room VI - skill development workshop held

The Dept. of Youth Welfare, Cusat has conducted three-day Skill Development Workshop-"Green Room-VI cultivating creativity" during February 12-14 for the students at the Hindi Auditorium. Noted theatre artist Sri. T.M. Abraham inaugurated the workshop. Sri. Sreejith Ramanan from School of Drama, Sri. Devendranath Sankaranarayanan from Che-

nnai Mind Screen Film Institute, Film actor and moderator, Smt. Parvathy and noted film theatre artist Appunni Sasi participated. A monodrama titled 'Theranjeduppu' was also staged by Sri. Appunni Sasi. According to Dr. P.K. Baby, Director, Youth Welfare, the skill development programme was well received by the campus community.

E-waste - a threat to ecosystem: Vice Chancellor Dr. J. Letha

Students should unite against the threat of e-waste, said Cusat Vice Chancellor Dr. J. Letha. E-waste which is generated from the excessive consumption by human beings has become a major threat to the ecosystem, she said. Controlling this hazard requires creation of awareness in a comprehensive manner. She was speaking after

inaugurating the Workshop on E-Waste Management organized by Cusat NSS Unit in collaboration with Clean Kerala Company at the University's Thrikkakara campus. Sri. Kabir B. Haroon, MD, Clean Kerala Company. Sri. M.B. Santhosh Kumar, NSS Co-ordinator and Sri. S. Naveen spoke on the occasion.

Cusat Vice Chancellor Dr. J. Letha urged the researchers to empower themselves to conquer the unknown areas of knowledge.

She was inaugurating the silver jubilee celebration of the Cusat Center for Ocean Electronics at the Dept. of Electronics on 8 February 2016. Dr. K. Poulose Jacob, Pro-Vice Chancellor presided. Dr. P.R.S. Pillai, Dr. K.G. Nair and Dr. Supriya M.H. offered felicitations. Silver Jubilee commemorative volume was released by Dr. K.G. Nair, Director, Centre for Science in Society, Cusat.

Chen Nanguang at ISP Seminar

International School of Photonics. Cusat in collaboration with Photonics Society of India has organized a National Photonics Symposium and Annual Workshop (NPSAW) on February 26 to 28 at the Photonics auditorium. Cusat. The focal theme of the symposium was "Recent Trends in BioPhotonics". Dr. Chen Nanguang, Professor, National University Singapore delivered the keynote speech. NUS ranked consistently as one of the world's top University ranking with 12th position.

C-SiS summer camp for Students

A Mid summer Science Talent & Total Capacity Development Programme (STDP) for school students will be conducted by Centre for Science in Society (C-SiS), Cusat in two modules starting from 1 April - May 28, 2016.

Nisha Nandakumar "Radio capacity and chemical resistance of elastomer barium sulphate nanocomposites with special reference to natural rubbr, ethylene propylene rubber and isobutylene isoprene rubber" Dr. Philip Kurian.

Navya Antony "Immobilization of diastase? - Amylase on to synthetic and natuaral polymers" Dr. P.V. Mohanan.

Srikrishnan S. "Software risk management in information systems off showring and outsourcing" Dr. M. Bhasi.

Abhilash S. "Studies on fish waste management practices in Aroor seafood industrial belt, Kerala and conversion of seafood waste in to a liquid plant growth supplement" Dr. Saleena Mathew.

Sreelakshmi N. "a quantile based analysis of income data" Dr. K.R. Muraleedharan Nair.

Sony Vijayan "Indian law on control of vessel sourced pollution in maritime ports" Dr. A.M. Varkey

Sonia Sunny "A hybrid architecture for recognising speech signals in malayalam" Dr. David Peter S.

Roshni Baby Thomas "Dopamine receptor subtypes functional regulation in insulin induced hypoglycemic neonatal rats: Effect of glucose, bacopa monnier; and bacoside a resuscitation" Dr. C.S. Poulose.

Jiya Jose "Studies on metal resistant bacteria in Cochin estuary and its response towards antibiotics and silver nano particles" Dr. Shanta Achuthankutty.

Abesh reghuvaran "Process improvement of coir pith degradation involving white rot fungi by substitution of urea with nitrogen fixing bacteria and application of biodegraded coir pith as plant growth medium" Dr. Anitha das rayindranath.

Sajitha T.S. "Novel [3+2] annulation reaction of nitrones with burgess reagent and a few related reactions" Dr. P.A. Unnikrishnan.

Sunitha Poulose "Marine yeast candida mccf 101 as feed supplement in aquaculture:

Ph. D Awardees

Nutritional quality, optimization of large scale production and evaluation of its protective effect on koi carp from aeromonas infection" Dr. I.S. Bright Singh.

Anish kumar M.S. "Development of 2-d mrt based image compression techniques" Dr. R. Gopika kumari.

A. Ramesh "Assessment of energy conservation in Indian cement industry and forecasting of \cos_2 emissions" Dr. G. Madhu.

Shiji. K. "Analysis of stochastic volatilty sequences generated by product autoregressive mosdels" Dr.N. Balakrishna.

Jeena N.S. "Genetic divergence in lobsters (crustacea : Palinuridae and scyllaridae) from the Indian ee2" Dr. A. Gopalakrishnan.

Bindhu B.K. "Influence of major operatonal parameters on aerobic granulation for the treatment of waste water" Dr. G. Madhu.

Siju M. Varghese "Integron study molecular typing and characterization of *salmonella* serotypes isolated from seafood and poultry" Dr. Sarita G. Bhat.

Sasidharan K.K. "Natural rubber latex filler masterbatch by soap sensitised coagulation-preparation, processing and evaluation" Dr. Thomas Kurian.

Anit M. Thomas "Algal blooms and associated bacteria along the south west coast of India" Dr. A.V. Saramma.

Alphonsa Vijaya Joseph "Characterization and pathogenicity of vibrio cholerae and vibrio vulnificus from marine environments" Dr. Sarita G. Bhat.

Renjini D. "Market orientation and organisational performance of nonprofit organisations in Kerala" Dr. Mary Joseph T.

Smitha V.S. "Sol-gel photocatalytic titanium dioxide multifunctional nanocomposites and coatings" Dr. K.G.K. Warrier.

Jayaprasad P.N. "Maximal compactness, minimal hausdorffness

and reversibility of frames and a study on automorphism group of frames" Dr. T.P. Johnson.

Anil kumar N. "A study on the quality of life of the members of self help groups assisted by nongovernmental organisations in Kerala" Dr. P.R. Wilson.

Midhu N.N. "Modelling and analysis of life time data using quantile functions" Dr. P.G. Sankaran.

Archana S.N. "Resource sharing among engineering college libraries affiliated to Mahatma Gandhi University, Kerala: A proposed model" Dr. Humayoon Kabeer S.

Prem Gopinath "Mosquito larvae borne viruses from the Central Travancore Region of Kerala: Isolation and Characterization" Dr. I.S. Bright Singh.

Prashob Peter K.J. "Modulation of hydrophobic partitioning affinity of humic acid from mudbank sediments and its potential applications" Dr. S. Muraleedharan Nair.

Ignatius Kunjumon K.V. "Computational techniques in the study of protein folding and the design of drugs" Dr. Babu Philip.

Jisha Jose "Biochemical effects of cadmium salinity and temperature on the catabolism of proteins and purines in oreochromis mossambicus (Peters)" Dr. Babu Philip.

Seena Kurian "Samakaleen hindi kavita mein lok tatv" Dr. K. Vanaja

Rajasree K.P. "Beta-glucosidases from aspergillus unguis nii 08123: molecular characterization properies and applications" Dr. Rajeev K. Sukumaran.

Naijil George "Adrenergic and muscarinic receptor subtypes functional regulation during diabetogenesis: Effect of curcumin and vitamin d3 pre-treatment" Dr. C.S. Poulose.

Preetha Nair K. Studies on the use of nanokaoline, mwcnt and graphene in nbr and sbr" Dr. Rani Joseph.

Mothi Krishna Mohan "synthesis, characterization and applications of modified tio2 systems" Dr. S. Sugunan.

Hamza V.K. "Cumulative approach to customer satisfaction with respect to compact segment car users" Dr. Zakkariya K.A.

Dhanya Alex "Risk disclosure practices in indian companies and the impact of risk disclosures on the cost of equity" Dr. K.B. Pavithran.

Hari Sankar H.S. "The major digestive enzymes in etroplus suratensis and oreochromis mossambicus distribution and characteristics Dr. Babu Philip.

Johnson Zacharia "Evolution and dynamics of the lakshadweep cold pool and lakshadweep low in the arabian sea" Dr. C.K. Rajan.

Preeth M. "Properties of equilibrium distributions of order n" Dr. N. Unnikrishnan Nair.

Neetha J. Eappen "Service provider switching:a study on the switching process in retail banking" Dr. K.B. Pavithran.

Girishkumar K.K. "Samakaleen hindi kavita mein nav upanivesh ka pratirodh" Dr. N. Mohanan

Nifty John "Distribution extra cellular virulence factors and anti biogram of mobile aeromonards in fresh water ornamental fishes and immune response of cyprinus carpio against aeromonas hydrophila infection" Dr. A.A. Muhammed Hatha

Pamy Sebastian "A study on semi group action on fuzzy subsets, inverse fuzzy automata and related topics" Dr. T.P. Johnson

Priya Rani M. "Investigation on phytochemical constituents and biological potential of some traditional medicinal plants" Dr. K.P. Padmakumari Amma

Anjali N. "Hindi nukkad natakam ka samajik srokar : Ek vishleshnatmak adhyayan" Dr. P.A. Shemim Aliyar

Manju P. Nair "Geochemical metal fractionation profile of the core sediment in the Cochin estuarine system" Dr. Sujatha C.H.

Chameswary J. "Butyl rubberceramic composites for flexible electronic applications" Dr. M.T. Sebastian

Priyesh K.V. "Studies on the

Tejus

interaction of two level atoms with quantized electromagnetic field" Dr. Ramesh Babu T.

Nemat Sheereen S. "A study on decision making and buying patterns of consumer of backery products in Kerala" Dr. Zakkariya K.A.

Sethulakshmi N. "Towards realization of magnetocaloric and magneto electric applications based on bulk and thin film forms of sodium substituted lathanum manganites" Dr. M.R. Anantharaman

Anitha G. Pillai "A study on mitigating the effect of sulphates in lime stabilised cochin marine clays" Dr. Benny

Jose Augustine "The art and craft of M.T. Vasudevan Nair reflected in his fiction based films and related works - A brief study" Dr. Mariamma Vincent

Chembrakalathil Prabha "Finite element analysisof doubly curved axisymmetric subsea sandwich shells" Dr. C.G. Nandakumar

Santhosh Simon "Data aggregation and mac layer approaches for enhanced energy efficiency in large scale wireless snsor net works" Dr. K. Poulose Jacob

Joemon Pappachan "Influence of frequent flyer programme and airline service quality on re-buy intentions of airline frequent passengers" Dr. Moli P. Koshy

George Joseph "Operational flexibility: A model for effective project management" Dr. Zakkariya K.A.

Vineetha S. "Ecosystem monitoring and modelling of benthic fauna in Maranchery Kole Wetland, Kerala" Dr. S. Bijoy Nandan

Aparna Thankappan "Studies on betanin natural dye incorporated zno composites at nano and micro scale for photonic device applications" Dr. V.P.N. Nampoori

Sreeja S. "Filamentation in air and water and non linear optical characterization of biopolymer using ultra short laser pulses" Dr. P. Radhakrishnan

Jiji K.S. "FEM based virtual prototyping and design of third harmonic excitation system for low voltage

brushless alternators" Dr. Jayadas N.H.

Jenish Paul "Modification of dgeba using epoxidised resins" Dr. Eby Thomas Thachil.

Sona Narayanan "Design and synthesis of Donor-Acceptor Low Band Gap copolymers for photoconductive and Non-linear Optical Applications" Dr. Rani Joseph

P.R. Suresh "Social Structural Determinants of Education among Tribes in Kerala" Dr. D. Rajasenan

Sandhya S. "Mrinal Pandey ka Rachana sansar" Dr. R. Sasidharan

Smitha Sebastian "Occurrence of filamentous algae and soil characteristics in the paddy fields of Kuttanad and Kole lands of Kerala" Dr. Ammini Joseph

Priyanka A. "Elucidation of molecular events underlying hypoxia induction dysfunctions in 3t3-l1 adipocytes and possible amelioration with bilobalide and curcumin" Dr. K.G. Raghu

Manju Sebastine "Population characteristics and taxonomy of lantern Fishes of genus Diaphus (Family Myctophidae) off south west coast of India" Dr. N.G.K. Pillai

Jaya V.L. "Development of N*N SMRT for N a power of 2 and its Applications in Image Enhancement" Dr. R. Gopikakumari

Ibrahim Y.C. "Export performance of Indian spices in the WTO" Dr. P. Arunachalam

Binesh T. "Realisation of Underwater Target Classifier With Improved Performance" Dr. P.R. Saseedran Pillai

Jayalakshmi M.S. "Development of Selected Electro-active polymer Ceramic Nanocomposites as Pyroelectric Thermal/Infrared Detector Matarials" Dr. Jacob Philip

Anju Pradeep "Investigation on Metamaterial Based Spiral Inductors For Compact Microwave Devices" Dr. S. Mridula

Anoop P.D. "Studies on Collective Excitations of Quasi-two-dimensional Bose-Einstein condensate" Dr. T. Ramesh Babu

Campus Notes

Junaid V.M. elected as University Chairman

V.M. Junaid M.Phil student. Dept. of Applied **Economics** has been elected as the Chairman of Cochin University Union (2015-16). Ms. Vinaya Baby of the Dept. Computer Applications is the new Vice Chairperson. Mohammed Ali Shamlu of the Mechanical Engineering (SoE) is the General Secretary and N. Hari Prasad, School of Environment Studies was selected as Secretary. Other Executive Commi-



Junaid V.M.



Vinaya Baby



Mohammed Ali Shamlu



N. Hari Prasad

ttee members of the Cochin University Union are Arjun Kuroor (International School of Photonics), Hafees Mohammed (School of Management Studies), Muhammed Shinos (Dept. of Ship Technology), Niyas N. (School of Industrial Fisheries) & Sanoon V. Jain (Polymer Science and Rubber Technology).

Aswin bagged 1st rank in Marine Engineering

The final year B. Tech Marine engineering results of 2015 batch of Kunjali Marakkar School of Marine



Aswin N.S.

Engineering, Cusat have been published. Aswin N.S. has bagged 1st rank securing 80% marks. Nithin M.S. and Anand G. Krishnan have come up with 2nd and 3rd ranks. Out of thirty students who successfully passed out, 15 have already been placed in shipping companies. The remaining students are being recruited and placed in various National and International Shipping companies according to Prof. N.G. Nair, Course in Charge.

R.N. Pillai Award for Cusat Scholars

Sriranganath C.G. Research Scholar, Dept. of Statistics, Cusat has won the Professor R.N. Pillai Best Paper Pre-



Sriranganath C.G.

sentation Award in connection with the International Conference on "Statistics for Twenty-first Century-2015" organized by the Dept. of Statistics, University of Kerala.

Ms. Nimitha John, Research Scholar, Dept. of Statistics,

Cusat won the Professor R.N. Pillai Young Statistician Award as part of the Annual conference of the Kerala



Nimitha John

Statistical Association held at Nirmala College. Muvattupuzha during 12-13 February 2016.

Marine Pollution: International Seminar at K.M. School

A Three day International Seminar on "Marine Pollution and Environment" is scheduled to be held at K.M. School of Marine Engineering commencing on 26 May 2016. The seminar will deal with the latest stringent requirements and restrictions imposed by International Maritime Organization on emission control from ships and Mandatory requirements with regard to the marine pollution.

Online payment of semester Fees

On-line payment of semester fee has been introduced in School of Engineering, Cusat. The on-line payment of semester fee is being done through the payment portal of State Bank of India linked to the School of Engineering website www.soe. cusat.ac.in. It is for the first time that such a system has been initiated in Cusat, said Dr. G. Madhu, Principal, School of Engineering.

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