COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

TEJUS

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NEWSLETTER OF COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Maiden voyage of newly acquired Cusat research vessel 'Indfish' operated by the School of Industrial Fisheries.

National Institutional Ranking:

Cusat Excels...

Cochin University of Science and Technology has bagged the 30th position in the academic ranking by Union Ministry for Human Resource Development. Cusat is the only state University from Kerala selected to this coveted list. The ranking was undertaken by the National Institutional Ranking Framework under the Ministry of HRD.

Cusat Vice Chancellor Dr. J. Letha congratulated the campus community for their efforts to win a fair position in the academic ranking. "This achievement is a shot in the arm for the university which is awaiting NAAC accreditation. All efforts will be made to take Cusat into the top 10 list of universities in the country", said Cusat Vice Chancellor Dr. J. Letha.

The institutions were judged on four parameters – teaching/learning resources, faculty –student ratio with emphasis on permanent faculty, research, employability and social & gender inclusivity. The NIRF ranking also provides a new impetus to the School of Engineering, the engg. college functioning under Cusat by

(See page : 10)

Sky is not the limit : A view of the indigenously built Cusat ST Radar which earned the Prime Minister's "Make in India" status recently.

Editorial...

Scaling unparalleled heights

I am so happy to share my ecstasy on our University securing a fairly good position in the NIRF (National Institutional Ranking Framework) performance rating of Indian Universities released by the Union Ministry for HRD recently. It certainly makes me proud to say that CUSAT is the only State University from Kerala State to earn a place in this roll of honour. The ranking, seen as India's answer to international ranking agencies, is awarded based on several parameters such as teaching, learning and resources, research, consulting and collaborative performance, graduation outcome, outreach and inclusivity and perception.

School of Engineering, our in-campus Engineering College has also bagged a covetable position in the National Ranking of Engineering Colleges.

The prestigious Performance Excellence Award instituted by Indian Institution of Industrial Engineering (IIIE) for the year 2015 was also won by our University. The award was based on the outstanding contributions made by CUSAT towards national development.

The University has also been busy with its outreach activities such as weekly weather forecast, On-line distribution of pesticide-free organic fruits & vegetables to the campus community, supporting the authorities to enforce traffic rules & regulations and popularization of science. A novel concept aptly named Campus Emergency Response Team (CERT) was also brought into service recently to take care of any emergencies or eventualities in the campus. The scheme, which can be considered the first of its kind in the State of Kerala, aimed at personality development and nurturing of humanitarian values among the students through a critical care solution is managed by volunteers of National Service Scheme.

As you know, the main thrust of our Post Graduate Courses is high quality research. In this context it has been decided to introduce a mandatory interdisciplinary elective course for all Post Graduate students with the aim of encouraging students to take up high-level research programmes. Elective subjects are offered by a separate department. The University also plans to introduce a common time-table for the PG Programmes, in order to include the electives in the daily slots for each course.

I am happy to share with the CUSAT fraternity our decision to move ahead with the Massive Open On-line Courses (MOOC) which will be initiated during this academic year itself with two innovative courses on Industrial Safety and Environment, through an appropriate platform. Our On-line packages will be simple, effective, cost effective and therefore, the best. CUSAT will launch a short episode on prevention of electrocution, free of cost for the general public, as a prelude. I hope the KSEB will join hands with us in this venture wherein learners will be introduced to the risks involved in handling electrical equipments.

We at Cusat are committed to skill acquisition and knowledge up-gradation among our students. With this single aim, the University has formulated a series of activities for the benefit of our student fraternity.

We at CUSAT are committed to skill acquisition and knowledge up-gradation among our students. With this single aim, the University has formulated a series of activities for the benefit of our student fraternity. In this context, I would like to invite your attention to a recent study conducted by the ICT Academy of Kerala which reveals serious job skills deficiency in our state. The study was conducted at 18 colleges, both Government and Private in the state of Kerala. It should become an eye-opener to all of us who are in the process of sculpting an efficient and result-oriented system of engineering education.

I am concluding this note with a word of commitment from my part to fulfill the clarion call by our Hon'ble Chancellor to improve the quality of education in our Universities, thereby ensuring academic excellence and a bright future to the students who enroll in our institutions. Let's all join together and strive for a smart, fruitful and socially responsible campus.

- Dr. J. Letha

Cusat Vice-Chancellor Dr. J. Letha is inaugurating the Emergency Response Team. Also seen are Dr. Vivek Rejithlal, Dr. K. Poulose Jacob, M.B. Santhoshkumar, Dr. S. Anil Kumar and Dr. G. Madhu

Cusat Emergency Response Team initiated

Trained youngsters at the Cochin University of Science and Technology will play the role of the first line of responders in an emergency on the campus from 17 August, the first day of the Malayalam era onwards.

Cusat Vice-Chancellor Dr. J. Letha formally launched the first campus emergency response team involving student volunteers. They will get state-of-the-art training to meet any emergency situation.

This is the first time a University in Kerala is initiating such an emergency response team for the needy and helpless. "To begin with, the team consists of select students and it will be later expanded by involving the teaching and non-teaching staff. The objective is to strengthen emergency response capabilities among the stakeholders", said Dr. J. Letha, Vice Chancellor.

The meeting presided over by Dr. K. Poulose Jacob was attended by Dr. S. Anil Kumar, Director, Public Relations and Publications, Dr. K. Madhu, former Principal and Dean of Engineering, M. B. Santhoshkumar, NSS Co-ordinator, CUSAT and Dr. Vivek Rejithlal, noted expert in the field of emergency care and critical treatment. In the initial phase, the team will mainly consist of B. Tech student. More students from other campus departments will be made part of the group in the coming months.

Dr. J. Letha said that experts would provide training to the students on first-aid measures to be carried out in an emergency. They would be also trained on how to use different types of life saving equipments. The varsity is also planning to buy basic emergency response kits and support systems to step up the efficiency of response team, she said. *Help for Helpless*, a charitable society involved in emergency care in Paravur, will provide training to the students emergency team.

Cusat Vice-Chancellor Dr. J. Letha inaugurates the newly constructed University Information Counter. Dr. S. Anil Kumar, Dr. S. David Peter, Dr. K. Poulose Jacob and Sri. Sebasian Ouseph are also seen.

Cusat Researcher bags prestigious DBT Award

Dr. Jayesh P., Post Doctoral Fellow of Cusat, has been selected for the prestigious Innovative Young Biotechnologist Award of the year 2015 instituted by Department of Biotechnology, Govt. of India with a single aim to prevent brain drain of highly talented and motivated young Scientists in Biotechnology. This is the first time a University from Kerala receives the coveted award. IYBA was instituted by Department of Biotechnology, Government of India in 2005, under the Ministry of Science and Technology, to be given away every year to outstanding young Scientists in India below the age 35 with innovative ideas and desire to undertake research in frontier areas of Biotechnology.

outcome of this project will help in understanding molecular mechanism in neurodegenerative diseases in humans especially Alzheimer's and Parkinson's using Daphnia as model animal. The award consists of Rupees 50 lakhs research grant, monthly fellowship, gold medal, certificate and a citation.

He was also a recipient of "Brain Korea 21 Plus", a post-doctoral Scientist award of Govt. of South Korea and CCMB Post-doctoral fellowship and participated in Indian Arctic Scientific Expedition in 2015. The IYBA will be implemented at National Centre for Aquatic Animal Health, Cusat. He is the son of Mr. P. K. Chandrasekharan (Retd. Teacher) and Smt. P. Sobhana of Puthumana, Maraloor, Quilandy, Calicut.

Innovative Young Biotechnologist Award consists of Rupees 50 lakhs research grant, monthly fellowship, gold medal, certificate and a citation

Dr. Jayesh was selected for the award in recognition of the potential of his research in the area of *crustacean cell reprogramming* under the guidance of Prof. I. S. Bright Singh and its continuation to find application to study neurogenesis and neurodegenerative diseases. The

Cusat Professor appointed KUFOS Vice Chancellor

Dr. A. Ramachandran, Professor, School of Industrial Fisheries and Dean, Faculty of Environmental Studies, Cusat has been appointed as the Vice Chancellor of Kerala University for Fisheries and Ocean Sciences (KUFOS).

Dr. Ramachandran has served as the Registrar of Cusat and Director of School of Industrial Fisheries besides being an expert member of Kerala State Coastal Zone Management Authority, Govt. of India.

Cusat- CAT 2016 results

The results of the first online Common Admission Test (CAT 2016) for B.Tech Admissions conducted by Cusat was announced.

Nithin Benny Myppan of Halam Nivas Koratty secured the first rank while Akshay Anand from Kavumbhagham, Pathanamthitta, secured the second rank.

Out of 23937 candidates who appeared, 8537 candidates are from states other than Kerala.

Maiden Voyage of Indfish : Dr. M. Harikrishnan, Cusat Vice Chancellor Dr. J. Letha, KUFOS Vice Chancellor Dr. A. Ramachandran and other faculty members are on the deck.

Cusat Research Vessel inaugurated

M.B. Indfish, a scientifically well-equipped research vessel acquired by the Cusat School of Industrial Fisheries was inaugurated by Cusat Vice Chancellor Dr. J. Letha, on 4 August 2016. Dr. A. Ramachandran, Vice Chancellor, Kerala University of Fisheries and Ocean Studies (KUFOS) was the chief guest of the function held at the Cusat boat Jetty, located near Fine Arts Avenue, Kochi.

The vessel made up of fiber glass has around 11 meter length and 45 BHP motor. The cost of the boat is around 25 lakhs, sponsored by the *PURSE* project of DST and has facilities to accommodate around 10 research scholars to travel in rivers and backwaters. Other facilities of the fiber boat include water quality analysis, sustainable fishing, and identification of various biological changes of inland water bodies, said Dr. M. Harikrishnan, Director, School of Industrial Fisheries, Cusat.

Dr. R. Sinha, Director, CIFNET, Kochi, Dr. S. Girija, Director, NIFPHATT, Kochi, Dr. C. Hridayanathan, Former Director, School of Industrial Fisheries, Cusat, Krishna Kumar, Managing Director, M/s Nautical Miles, Dr. S. Bijoy Nandan, Dept. of Marine Biology of the School of Marine Sciences, Cusat and Dr. K. T. Thomson, Former Director, School of Industrial Fisheries, Cusat spoke during the function.

Cusatified'- new Cusat Mobile App

The Cochin University of Science and Technology has come up with a digital idea by way of a new 'Mobile App', to support the students attending counselling programmes at the University. This venture was undertaken by Centre for Innovation Technology Transfer and Industrial Collaboration (CITTIC) and volunteered by its selected student researchers under the guidance of Dr. Abdulla P. and Dr. Sam Thomas, Director and Asst. Director of CITTIC respectively. CITTIC is the Major Startup promoter of Cusat and manages the Technology Business Incubator (TBI).

The Mobile App. titled *'Cusatified'* helps the students to become familiar with University Campus. 'Cusatified' or rather Cusat Simplified is an Android application catering to the basic information needs about the campus, making it easier and safer for the freshers to settle around reliably. The application is loaded with a wide range of features aimed at helping and guiding effectively the newly admitted students to familiarise themselves with the campus atmosphere. 'Cusatified' has various sections ranging from accommodation to Shopping or from Banking to Hotels. The full text of the Cusat syllabus is also provided in the application along with the list of best books and authors to refer.

Sri. Bhagavandas Morwal inaugurates the UGC National Seminar at the Department of Hindi. Dr. K. Vanaja and Dr. N. Mohan are also seen.

Prof. M. K. Sanu inaugurates a Seminar on Malayalam Stories organised by Dept. of Hindi as part of the UGC Seminar.

National Seminar on Hindi

The Department of Hindi, Cusat had conducted a three Day UGC National Seminar on *"Navajagaran Kaleen Hindi Aur Malayalam Katha Sahitya"* from 17 to 19 March.

Renowned Fictionist Sri. Bhagavandas Morwal (New Delhi) inaugurated the seminar and delivered the Keynote address. Dr. K. Vanaja, Head. Dept. of Hindi and Dr. N. Mohanan, Dean, Faculty of Social Science spoke. Prof. Garima Sreevastav (New Delhi), Prof. Karuna Sankar Upadhay (Mumbai), Dr. Rajeev Ranjan Giri (New Delhi), Dr. Chandra Sekhara Reddy (Thirupati), Dr. Jayasankar Babu (Puducheri), Dr. R. Jaya chandran (Trivandrum), Dr. V. K. Subramaniam (Calicut) were the main speakers.

The third day of the seminar was based on Navajagaran Kaleen Malayalam Kadha Sahitya, was inaugurated by Prof. M. K. Sanu. Dr. P. K. Rajasekharan, Smt. Latha Lakshmi, Dr. Anil Chelembra & Sri. Sreekumar Mukhathala were the main speakers.

Dr. K. Poulose Jacob nominated as DRDO Panel Chair

Dr. K. Poulose Jacob, Pro-Vice Chancellor, Cochin University of Science and Technology has been nominated as the Chairman of the Scientific Computing Panel of the DRDO Naval Research board by a Search-Cum Selection Committee. Dr. Poulose Jacob was the Head, Dept. of Computer Science, Cusat for around 20 years prior to the Pro-Vice Chancellorship of Cochin University of Science and Technology.

The purpose of Naval Research Board (NRB) is to encourage and fund basic research in pertinent scientific disciplines of broad relevance to our future Navy by enabling and supporting emerging talent, most particularly in academic institutions and other scientific institutes to create and evolve a knowledge base potentially applicable to the Naval Science Technologies.

National Technology Day - 2016

Cusat Vice Chancellor Dr. J. Letha is inaugurating the National Technology Day celebrations organised by Directorate of Public Relations and Centre for Science Communication. Dr. S. Anil Kumar, Dr. V. Ajith Prabhu, Dr. K. A. Simon and Prof. N. G. Nair are on the dais.

Revamp education to activate students for innovation: Dr. Ajit Prabhu

"The education system needs radical improvement to build the spirit of enquiry in the children to create an environment for new ideas and innovations", said Dr. V. Ajit Prabhu, State Nodal Officer, Patent Information Centre and Joint Director, Kerala State Council for Science, Technology and Environment.

He was delivering the National Technology Day Oration at Cochin University on 11 May, sponsored by KSCSTE & DST. According to Dr. Prabhu, Idea Box and Innovation Workstations are essential in the University system to promote Innovations. Adequate care should be taken to protect the Innovation by patenting and other Intellectual Property protection. Innovation ecosystem and metamorphosis for converting ideas to industry needs are to be promoted, he added.

Level of Technology determines the economic standard of any country and is in reverse proportion with poverty. Before 1000 years our country was rich in S&T and was a centre of knowledge. But now we are trailing behind as we lost knowledge as it was not protected. Even now India may be economically poor but not mentally or intellectually. Innovation has four components: Curiosity, Creativity, Compassion, and Collaboration" said Dr. Prabhu.

According to Dr. Prabhu, China stands on the top of filing maximum number of patents around 1.8 lakh a year. Even South Korea has beaten Japan by

Dr. V. Ajit Prabhu

investing heavily in science, technology and innovation. China and South Korea are doing very well in science because their investment is very high. Invest more in education and science to secure the future of India. India needs to invest more in science as its future is linked with it. If India invests in science over the next 10-20 years as much as China and South Korea do, we would be able to make up the lost time and catch up with them.

Cusat Vice Chancellor Dr. J. Letha inaugurated the programme. The celebrations organized jointly by the Cusat Directorate of Public Relations, Centre for Science Communication and K. M. School of Marine Engineering was presided over by Dr. K. A. Simon, Director, K. M. School of Marine Engineering, Dr. S. Anil Kumar, Director, Public Relations and Publications, Prof. N. G. Nair, Course-in-Charge, K. M. School and Smt. K. G. Binimol, Section Officer, DPR&P spoke. Dr. Ajit Prabhu presented prizes to the winners of Techno-Quiz.

Cusat Radar to be Mooted for 'Make in India'

Dr. V. K. Saraswat, Member NITI Ayog is inspecting the Strosphere-Troposphere Radar facility of Cusat.

NITI Ayog member and former Director General of DRDO, Dr. V. K. Saraswat said he would propose projects in line with Stratosphere-Troposphere Radar in Cusat to be included in the Prime Minister's 'Make in India' programme, so that a network of such 20 Radars could be set up along the length and breadth of the country to help in weather prediction and monsoon variability studies.

Dr. Saraswat was speaking after visiting the indigenously-developed Stratosphere Troposphere Radar on the campus on March 9, 2016. He said an apex committee with NITI Aayog member and the secretaries of the Union Ministry of Science and Technology, Ministry of Earth Science as the members, will be formed to finalise this proposal. He suggested that a high-end high performance computer be established at the ST Radar Centre for operational purpose and simulation experiments. "The Centre should aim to commence state of the art scientific and technical courses such as integrated Ph.D for developing skilled human resource in this advanced field. The Centre should collaborate with other universities and national agencies to share knowledge and experimental facilities and transform itself into a 'Centre of Excellence' by achieving international standards". Cusat Vice Chancellor Dr. J. Letha, Dr. K. Poulose Jacob, Pro-Vice Chancellor, Dr. S. David Peter, Registrar, Dr. K. Mohankumar, Director, Advanced Centre for Atmospheric Radar Research received the guest.

Cusat Vice Chancellor Dr. J. Letha is inaugurating the workshop at SMS.

Case Studies instil confidence in Management Students: VC

Case Studies in the contemporary areas will instill confidence among the students, said Cusat Vice Chancellor Dr. J. Letha. She was inaugurating the two day workshop on Case Teaching organized by School of Management Studies, Cusat. Dr. Moli P. Koshy, Director, SMS presided. Dr. Manoj Edward, Dr. Simon George (Tapmi, Manipal) and Prof. Dr. Anandakuttan (IIM, Kozhikode) led various sessions.

Anti-Ragging awareness programme

The University level Anti-ragging awareness programme was inaugurated by Sri. N. Anilkumar, Principal District & Sessions Judge, Ekm on 22 July. Cusat Vice Chancellor Dr. J. Letha, presided. Sri. P. N. Unnirajan IPS, Rural SP, Ekm, Sri. C. S. Mohit, Sub Judge and Secretary, DLSA and Dr. A. B. Bhasi, Controller of Examinations, spoke on the occasion.

Cusat Vice Chancellor Dr. J. Letha inaugurates the discussion on Economic Survey, Union Budget and Future Plans for India organised by K. M. Mani Centre for Budget Studies.

Parameters used to assess the GDP rate is not fool proof : Dr. Pinaki Chakraborty

"The parameters used to assess the GDP rate is not fool proof", said Dr. Pinaki Chakraborty (National Institute of Public Finance and Policy). According to him such estimation may create problems in the process of planning. He was speaking at a discussion on 'Economic Survey, Union Budget 2016-17 and Future Plans for India' organized by K.M Mani Centre for Budget Studies (KMMCBS), Cochin University of Science and Technology.

Cusat Vice Chancellor Dr. J Letha inaugurated the function. Dr. D. Rajasenan (Executive Director, KMMCBS), Dr. M. A. Oommen (Honorary Director, KMMCBS), Dr. Joseph John and Dr. Zakkariya K. A. (Syndicate Members) and Dr. Sabu Thomas (Co-ordinator, KMMCBS) offered felicitations.

Mathematical Models in Data mining Process inaugurated at Cusat

In order to acquire latest knowledge which helps in research a 5 day training program on 'Mathematical Models in Data mining Process' for the faculty and PG students was organized by Division of Applied Science and Humanities, School of Engineering, CUSAT.

Dr. A. B. Bhasi, Controller of Examinations, Cusat, inaugurated the training programme. Dr. Sobha Cyrus, former Principal, SOE presided over the function. Dr. K. K. Saju, Director, IRAA, Dr. M. R. Radhakrishna Panicker, Asso. Professor, Mechanical Engineering Div. and Dr. Sasi Gopalan, Faculty, SOE, Cusat spoke.

Different methods for developing models in the field of Applied Mathematics & Engineering were discussed during the 5 day workshop, where eminent resource persons handled sessions.

Respond positively to changes: Cusat VC

Cusat Vice Chancellor Dr. J. Letha urged the researchers to respond positively to the contemporary changes. She was inaugurating a three day workshop on Research Programing organized by School of Management Studies on 12 May. Dr. Moli P. Koshy, Director, SMS presided.

Cusat Vice Chancellor Dr. J. Letha is inaugurating the Cusat Fit 'n' Fine Fitness Centre. Dr. K. Vanaja, Dr. S. David Peter, Dr. Ajith Mohan and Dr. Job Thomas are also seen.

Mega placements for Cusat B.Tech students

A total number of 400 Cusat B.Tech students were well placed through a campus recruitment drive even before the final year B.Tech results were out, according to Cusat placement office. The maximum pay package is 12 lakhs per annum and the average annual pay package is 4.82 lakhs said Dr.G.Madhu, Principal, School of Engineering and Sri. C. V. Premkumar, Placement Co-ordinator, Cusat. According to them 90% of the total eligible Cusat B.Tech students got placed including MCA students.

Out of the 400 placements TCS, a noted IT firm, offered 220 placements. According to the Placement Officer Sri. C. V. Premkumar around 44 organizations have already visited the campus for placement drive which includes Indian Oil Corporation (Maharatna Company), Bharat Petroleum & Oil India (Navaratna Companies), Reliance Industries, Unisys, Verizon, Amazon, Maxeed Telecom, JWL, IOTL, Musigma, Amadens Labs, Shoretel communications, Corel Technologies, Broad com, L&T, JK Tyre and CEAT.

Cusat Vice Chancellor Dr. J. Letha is inaugurating the seminar on Nano Technology for Aged. On the dais are Dr. N. Mohanan, Dr. Godfrey Louis, Dr. Poulose Jacob, Dr. M. R. Anantharaman, Dr. D. Dhanya and Dr. M. Junaid Bushiri.

Nano for Aged: Seminar conducted

Cusat Vice Chancellor Dr. J. Letha urged the researches to enable the aged using modern technologies to manage their affairs rather than assist them. She was inaugurating the National Workshop on Recent Trends in Nanotechnology for Aged conducted by Centre for Enabling Technology for the Aged, Cusat.

Dr. K. Poulose Jacob, Pro-Vice Chancellor presided while Dr. M. Junaid Bushiri (Director, Centre for Enabling Technology for the Aged), Prof. N. Mohanan, Prof. M. R. Anantharaman (Syndicate members) and Dr. Godfrey Louis and Dr. T. Dhanya offered felicitations.

Dr. G. Radhakrishna Pillai, Dr. Prasanth Raghavan, Dr. Baby Chakrapani P. S and Dr. Binu Paul led the discussuions on the latest advancements of nano technology for the treatment of Alzheimer's and various other age-related brain disorders.

Cusat Excels... *(from page 1)*

scoring the 55th position among the list of selected engineering colleges. Only 100 colleges in the country found a place in the list of honour.

All these institutions were ranked across five parameters – teaching learning and resources, research, consultancy and collaborative performance, graduation outcome, outreach and inclusivity and perception.

While 1438 engineering colleges participated in the ranking process, 609 management institutes, 454 pharmacy colleges, 28 architecture colleges, 803 art and science colleges and 233 universities took part in the NIRF ranking process.

UGC Financial Aid to Hindi Dept.

UGC has sanctioned Rs.29 Lakhs of financial assistance from the 12th five year plan to the Dept. of Hindi, Cusat for establishment and infrastructural developments viz language lab, and for the library upgradation activities of the department.

The grant has same terms and conditions which are applicable for granting the fund for the development program of universities under the 12th plan, informed Dr. K. Vanaja, Head, Department of Hindi, Cusat.

Cusat Professor at Maths Congress

Dr. A. Vijayakumar, Dept. of Mathematics, Cusat presented a research paper in 13 International Congress on Mathematics held at University of Hamburg during 24-31July 2016.

Dr. K. Poulose Jacob, Pro Vice Chancellor of Cusat is receiving IIIE Excellence Award. Dr. M. Bhasi is also seen

IIIE Excellence Award received

Dr. K. Paulose Jacob, Pro Vice-Chancellor, Cusat received the prestigious Performance Excellence Award instituted by Indian Institution of Industrial Engineering for Cochin University of Science and Technology at a colorful function organized in connection with the CEO conference at Nagpur.

The award has been assessed based on the outstanding contributions made by Cusat towards achieving excellence. The award was presented by Shri. R. H. Khwaja, IAS, former Secretary, Ministry of Mines, Govt. of India, and Mr. R. K. Singh, Former Chief Managing Director, BPC Ltd.

Surplus Budget for Cusat: No new Courses

The Syndicate of Cochin University of Science and Technology held on 19 March approved the 44th annual budget presented by Dr. K. Poulose Jacob, Pro-Vice Chancellor, with Rs.325.77cr income and Rs.302.36cr expenditure with a surplus of Rs.23.41cr. This however includes a deficit of Rs.2.65 crs in the non-plan sector. There are no new courses or departments proposed in the budget. Cusat Vice Chancellor Dr. J. Letha presided over the meeting.

The budget also shows a deficit of Rs.11.02cr in the self-financing sector with an expected income of Rs. 39.80cr and an expenditure of Rs.50.82cr. The state Govt. has sanctioned an amount of Rs.100.54 cr in the non-plan sector and Rs.21cr in the plan sector to Cusat for the financial year 2016-17.

The amount sanctioned under 'non plan' sector is however not sufficient. The non-plan deficit is attributed to higher financial commitment towards state pay and pension revision, fall in internal revenue due to de-linking of engineering colleges, filling up of vacant faculty positions and hike in daily wage and contract bills.

The Syndicate further mooted an action plan for financial self-sufficiency of the University. The members who participated in the budget discussion suggested to strengthen Massive Online Courses (MOOC) and to initiate more courses to increase income.

Cusat Certificate Verification to go online

Soon, Cusat will ease the process of degree certificate verification by introducing an online direct verification system.

The proposal is part of the measures being implemented to evolve an integrated online network and boost the quality of services being offered to the students and their potential employers. Students would no longer need to wait for the cumbersome manual verification of their certificates through courier once the online documentation system turns a reality.

"The idea is to simplify the process of verifying the authenticity of the degree certificates by going the digital way. All systems would be in place to ensure a speedy delivery of results, which would ultimately help our students and also the industries that absorb them". Dr. J. Letha, Vice Chancellor, told The Hindu.

The online system offers the students and their recruiters of fast-tracking the process of background verification and speeding up the process of verification of certificates and documents. In the conventional manual method, it takes at least 40 to 60 days for certificate verification.

The technology would be made available on the varsity website, where the details have to be entered. The images of the certificates would be uploaded and users could certify the authenticity of the certificates by paying the prescribed fee online.

An individual or an employer has to upload a scanned copy of the certificate or document that is to be verified. The scanned copy is then opened by officials at the university or college, who verify it and attest it with a seal and unique serial number. The serial number can be used to check the veracity of the documents any time. The system would also help anyone to cross-check or verify the certificates from the other major universities that had adopted a similar technology.

- G. Krishna Kumar @ 'The Hindu' Daily on 21.08.16

K M School Technofest inaugurated

A Techno cultural Fest *Propulzo 2016* organized by the K.M. School of Marine Engineering, Cusat was inaugurated by Madhu. S. Nair, Chairman and Managing Director, Cochin Shipyard on 4 August. He also took salute from the glittering marching cordon of Marine cadets of the school.

The degree award ceremony of first batch M. Tech students held in connection with this fest was presided over by Cusat Vice Chancellor Dr. J. Letha. The three day Marine fest was comprised of an International Seminar on Marine Pollution and Environment, Project Presentations, workshops and various technical competitions.

Dr. K. Paulose Jacob, Pro Vice Chancellor lighted the lamp of the festival. Sri. Ajith Kumar Sukumaran, MMD Principal Officer, Kochi delivered the key note address, Dr. Leslie Hemachandra, IMO Auditor released the souvenir, 'Seagull'. Dr. K. A. Simon, School Director, Dr. A. B. Bhasi, CE & Prof. N. G. Nair Course- in-Charge spoke.

National Maritime Honour to Cusat Professor

Dr. K. A. Simon, Director, KM School of Marine Engineering was bestowed with the prestigious National Maritime Day Award for his outstanding contributions to Maritime Education &

Training. The award is instituted by the National Maritime Day Celebrations (Central) Committee, under the Ministry of Shipping, Govt. of India. This is the first time that this award is bestowed to a South Indian by the NMDC, under the Director General of Shipping, Mumbai.

Cusat Vice Chancellor Dr. J. Letha is presenting the Degrees to the first batch of M.Tech students of KM School. Sri. Ajith Sukumaran, Dr. Leslie Hemachandra, Sri. Madhu S. Nair, Dr. K. Poulose Jacob and Dr. A. B. Bhasi are on the dais

Countries to check hazardous ship emission: Leslie Hemachandra

Countries should take stringent measures to control hazardous emissions from ships which jeopardize the marine environment, said Dr. Leslie Heachandra, of International Marine organization. He was presenting a key note address during an International seminar on 5 August on Marine Pollution organized by Cusat K.M School of Marine Engineering. Prof . N.G. Nair, Course-in-charge, K.M School presided.

Though the MARPOL convention on the prevention of pollution from ships stipulate stringent control of oxides of Nitrogen and Sulpher, which adversely affect the environment and threaten the existence of the ozone layer, it is the duty of the coastal countries to enforce such rules. By using low Sulphur fuel oil such as Marine Gas Oil and Compressed Natural Gas, the emission level can be controlled to a greater extent, he added.

Anthropogenic studies on marine ecosystem has clearly shown that the callous manner in which the wastes are dumped in coastal areas has affected the marine eco system and the fisheries, said Smt. V. Kripa of CMFRI. Similarly the oil and grease from fishing boats and other marine vessels has impacts on the sea food and plankton.

Capt. SoeLwin of Maritime Safety Administration (WMU Sweden) stressed the need of an environmental friendly ship recycling industry at par with International Standards.

Consider human right aspects while interpreting patent laws: Dr. N.R Madhava Menon

Noted legal luminary Dr. N.R. Madhava Menon urged the law makers to consider the human rights aspect of development while interpreting patent law. The development has to be inclusive and address the contemporary challenges assimilating the Directive Principles of state policy of the Constitution of India, he added.

Dr. Menon stressed the need for balancing the interest of various stakeholders, especially the weaker and marginalized sections of the society. He was delivering the keynote address during the inauguration of a refresher course on Patent Law and Development at the Inter-university center for IPR Studies at Cusat on 14 June. Justice Alexander Thomas, Judge, High Court of Kerala inaugurated the programme while Dr. K. Paulose Jacob, Pro-Vice Chancellor, Cusat presided. Dr. N.S. Gopalakrishnan, Director, Dr. N. S. Soman, Dean, Faculty of Law, Dr. P.S Seema and Karishma Birthare also spoke.

Ph.D Awardees

Bindu Sharmila T. K., *Development of Epoxy Nanocomposites: Thermal, Mechanical and Microwave Properties*, Dr. P. M. Sabura Begum.

Nebula Murukesh, *Bioactive Metabolite and Biomarkers from Rhizophoraceae Mangroves - A Chemo Taxonomic Approach*, Dr. N. Chandramohanakumar

Dhiju Das P. H., *Investigations on the Structural and Operational Changes of Ring Seine Fishig Systems of Kerala and its Life Cycle Assessment (LCA)*, Dr. Leela Edwin

Dinesh R., *Design and Development of Spectral, Signature Based Chipless RFID Tags*, Dr. P. Mohanan

Anju K. Augustine, *Thermo-optic and Nonlinear – Optical Studies CDSE Quantum Dots for Photonic Applications*, Dr. M. Kailasnath

Misha Hari, *Investigation on Thermal and Non Linear Optical Properties of Metal Nano-structures for Photonic Applications*, Dr. P. Radhakrishnan

Indu Sebastian, *Investigations on Selected Chalcogenide Glasses towards the Realization of Photonic Devices*, Dr. Sheenu Thomas

Reena Murali, *Soft Computing Approach for Optimization of Sirna Efficiency Prediction For Post-Transcriptional Gene Silencing*, Dr. David Peter S.

Salini K., *Study on Microcredit in Kerala with special reference to Employment and Income Generation Through Microenterprises and Livelihood Projects*, Dr. G. Antony

Rajeev B., *SHGS and Cooperatives in the Fishing Sector: An Inclusive Development Option for the Fisher Folk of Kerala*, Dr. D. Rajasenan

Naveen Sathyan, *Molecular and Functional Characterization of Histone Derived Antimicrobial Peptides from Marine Organisms*, Dr. Rosamma Philip

Jacob Joseph, *Release of Genetically Engineered Plants into the Environment: A Study of the Indian Regulatory Framework*, Dr. N. S. Soman

Sindhu M. C., *Evaluation of Stress Reducing Capacity of Selected Anaesthetics for the Live Transportation of Green Chromide Etroplus Suratensis*, Dr. A. Ramachandran

Teena Thomas, *Flexible Conducting/Magnetic Nano Composites Based on Natural Rubber*, Dr. Eby Thomas Thachil

Jaya S., *Queues with Interruption in Random/Markovian Environment*, Dr. B. Lakshmy

Jiby K. Gopinath, *Theoretical Design and Synthesis of Donor Acceptor Conjugated Polymers for Photovoltaic and NLD Applications*, Dr. K. Sreekumar

Anju S. G., *Sono, Photo and Sonophoto Catalytic Removal of Chemical and Bacterial Pollutants from Waste Water*, Dr. Suguna Yeshodharan

Anand P. B., *New Studies on the Versatile Roles of Polyaniline and its Composites in Polymer Based Optoelectronic and Energy Storage Devices*, Dr. S. Jayalekshmi

Sameera S., *Synthesis and Characterization of Eco-friendly Inorganic Yellow Pigments for Coloring Applications*, Dr. P. Prabhakar Rao

Neethu C. S., *A Study on Psychrotrophic Bacteria from Arctic Region with Special Emphasis on Cold Active Lipase Production, Optimization and Characterization*, Dr. A. V. Saramma

Sivaprasad P., *Characteristics of Aerosols over the Indian Region and their Variability Associated with Atmospheric Conditions*, Dr. C. A. Babu

Krishnaprasad P. S., *Growth and Characterization of Polycrystalline and Domain Matched Epitaxial Oxide Dielectric Thin Films for Memory and Tunable Microwawe Applications*, Dr. M. K. Jayaraj

Rejeena I., *Laser Induced Linear and Nonlinear Optical Studies on Certain Metal Halides and Tartrate Crystals for Photonic Applications*, Dr. P. Radhakrishnan

Shalbi Mohanan, *Dayaprkash Sinha Ke Natom Mein Praygdharmita Ke Vividh Ayam*, Dr. R. Sasidharan

Vineetha Gopinath, *Ecology of Mesozooplankton Community of the Cochin Estuary with Special Emphasis on Planktonic Copepods*, Dr. N. V. Madhu

Sobha A. P., *Development of Functionalised Multiwalled Carbon Nanotube/Polyaniline Composites for Electrical Applications*, Dr. Sunil K. Narayanankutty

Shaju S. S., *Studies on Bio- Geochemistry, Bio Optical Proper-ties and Satellite Validation of Coastal Waters of South Eastern Arabian Sea*, Dr. B. Meenakumari

Rajeev Mukundan, *Product and Process Innovation: Antecedants and Performance Outcomes in Small it Firms in India*, Dr. Sam Thomas

Resmi T., *On Multi- Server Queues with Consultation by Main Server*, Dr. B. Lakshmy

Preetha Theresa Joy, *Design and Development of Cooperative Caching Framework for Improving Data Accessibility in Wireless Ad Hoc Networks*, Dr. K. Poulose Jacob

Challa Ravi Kiran, *Thermal Degradation Studies on Edible Oils During Deep Fat Frying Process*, Dr. A. Sundaresan

Sakkir S., *An Integrated Study on the Holocene Aquifer and the Water Resource Potential of Karamana River Basin, Southern Kerala, India*, Dr. K. Sajan

Noble K. Kurian, *Melanins from Marine Bacteria : Characterization, Production and Applications*, Dr. Sarita G. Bhat

Harisree P. Nair, *Metagenomics of Marine and Mangrove Sediments: Phylogenetic Diversity and Characterization of Amylase Obtained by Functional Screening*, Dr. Sarita G. Bhat

Lisha Raghavan, *Swift Heavy Ion Irradiation and Thermal Annealing Induced Modification of Structural, Topographical and Magnetic Properties in Monolayer and Bilayer Films Based on Fenimob and Zinc Ferrite*, Dr. M. R. Anantharaman

Asha Krishnan, *Novel Optical Properties in Size Tuned Cerium Oxide Crystals for Functional Applications*, Dr. S. K. Ghosh

Campus Notes

South Korea invites Cusat Professor

Dr. Sreejith P.

Dr. Sreejith P. S, Professor and Principal, Cochin University College of Engineering Kuttanad, was invited to visit South Korea for a series of invited talks on Sustainable Engineering and Friction Stir Welding Process from 30th of April to 9th May 2016. He has been invited by the Gyeongbuk Hybrid Technology Centre, South Korea. He delivered talks at the Department of Business Support Gyeongbuk Hybrid Technology Centre, Dong-A Metal Company, Yeongcheon City and Pusan National University Busan City.

Dr. K. K. Saju to Smart City symposium at Berlin

Dr. K. K. Saju

Dr. K. K. Saju, Director, IRAA, Cusat has been invited to participate as Indian delegate in the Indo-German Smart–City symposium to be held at Berlin during 27 to 29 April on a Governmental Agreement between Government of India and Federal Republic of Germany.

Cusat Vice Chancellor Dr. J. Letha salutes the National Flag during the Independence Day celebrations at the University.

Excel in the global competition scenario: Cusat Vice Chancellor

Young engineers should develop an endless quest and enthusiasm to achieve global excellence, said Cusat Vice Chancellor Dr. J. Letha while inaugurating the Induction Programme of 1st semester B. Tech of Cusat, at the Seminar Complex Auditorium on 3 August. She also inaugurated the Cusat Behavioural Studio and Couselling center. Dr. K. Paulose Jacob, Pro-Vice Chancellor presided. Dr. S. David Peter, Registrar, Dr. K. Sreejith, Dean, Dr. M. R. R. Panicker, Principal, SOE & Mrs. Rekha James, Secretary, PTA addressed the gathering

Cusat Vice Chancellor Dr. J. Letha is inaugurating the induction programme of 1st Semester B.Tech. Dr. M. R. R. Panicker, Dr. K. Sreejith, Dr. K. Paulose Jacob, Dr. S. David Peter & Mrs. Rekha James are on the dais

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Cusat Radar to be part of 'Make in India' Programme

The much anticipated indigenously developed Stratosphere-Troposphere Radar in Cusat is declared to be included in the Prime Minister's 'Make in India' program. The procedure took place at a meeting held on June 22, at the NITI Aayog, New Delhi under the Chairmanship of Dr. V. K. Saraswat, Member, NITI Aayog. 'Make in India' is a major national programme of the Govt. of India designed to facilitate investment, foster innovation, enhance skill development, protect intellectual property and build best in class manufacturing infrastructure in the country. The initiative hopes to boost the technological skill enhancement in India.The meeting was attended by high level officials comprising of Secretary of SERB, representatives of Union Secretaries to DST, Ministry of Earth Sciences, ISRO, Indian Air Force, Dept. of Space, in addition to the Cusat Team comprising Dr. K. Mohankumar (Project Director), Prof. P. Mohanan, Dr. M. G. Manoj and Er. Titu K. Samson.

The SERB, Dept. of Science and Tech-nology, had earlier initiated three projects to develop ST Radars as part of indigenous technology development efforts towards advanced scientific research in India. In the process, one Wind Profiler Radar at 205 MHz frequency of operation popularly known as ST Radar was developed and tested at Cochin for the first time in the world.

The Cusat ST Radar project is unique in terms of time resolution and height coverage (up to 20 Km) to address various scientific issues centered at Cochin.

StratoClim Project: Aircraft Geophysica is coming

As part of the StratoClim project where scientists from 26 Euopean research institutes will participate, the Cusat ST Radar Centre (ACARR) will organise a series of climate expeditions using M-55 Geophysical, a Russian high altitude aircraft. The aircraft reaches altitudes of up to 21 km and has a flight duration of up to 5 hours. The project intended to collect stratosphere data is expected to create a dynamic model of the atmosphere which will enable scientists to predict the climate changes for decades to come, said Dr. K. Mohan Kumar, Director, Cusat S&T Radar Centre. The aircraft, experiments are a part of the European research project Strato Clim. The Geophysica is having most modern instruments to find answers regarding various intriguing questions on Asian Monsoon and climate change.