



TEJUS

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NEWSLETTER OF THE COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

Jurisprudence and value-system should be part of the engineering curricula and the engineering institutes are responsible for ensuring such values, said Dr. E. Sreedharan, Chief Advisor, Delhi Metro Rail Corporation. 2 or 3 hours of class-time should be set apart every week for such study. He was speaking after inaugurating the Seminar on *Recent Advances in Civil Engineering* organized by the Civil Engineering Division of School of Engineering, Cusat.

The Civil Engineering sector is facing huge difficulties due to excessive brain drain. More than just a job, engineers should treat Civil Engineering with passion. Although 20 lakh engineering



Dr. E. Sreedharan, Chief Advisor, Delhi Metro Rail Corporation delivers the inaugural address at the National Conference on Recent Advances in Civil Engineering, organized by the Division of Civil Engg., Cusat. Dr. P. S. Sreejith, Principal, SOE, Dr. A. Ramachandran, Registrar, Cusat Vice Chancellor Dr. Ramachandran Thekkedath, Dr. Godfrey Louis, PVC, Sri. Cherian Varkey, Former National President BAI and Dr. Benny Mathews Abraham, Head, Division of Civil Engg. are on the dais.

Engineering curriculum should be value-based : E. Sreedharan

graduates pass out every year, those capable of contributing to the development of the nation are only a few. It has become a trend today for the smart engineers who go abroad for higher studies to get employed and stay on there, he

added. Cusat Vice Chancellor Dr. Ramachandran Thekkedath presided over the function while Dr. Godfrey Louis, Pro-Vice Chancellor, Prof. Nedumudi Harikumar, Syndicate Member, Dr. A. Ramachandran, Registrar,

Dr. Benny Mathews Abraham, Head, Division of Civil Engg., Sri. Cherian Varkey, former National President, Builders Association of India, Dr. P. S. Sreejith, Principal, SOE, and Dr. Shobha Cyrus, faculty member spoke.

Prof. M.V. Pylee award for Dr. Lalji Singh

The Prof. M.V. Pylee Award for the Distinguished Academician of India 2012 will be presented to Dr. Lalji Singh, Vice Chancellor



of Banaras Hindu University. Dr. Singh is an Eminent Biotechnologist of international repute and recipient of the Padmashri Award from the President of India in 2004.

The triennial award, instituted in the name of Prof. M. V. Pylee, Emeritus Professor and former Vice Chancellor of Cochin University of

Science and Technology consists of a citation, memento and a cash prize of Rupees Two lakhs.

The Award will be handed over at a function to be held on 7th February 2013 at the School of Photonics auditorium, Cochin University of Science and Technology.

Editorial...

As the great Buddha said, everything changes, nothing remains without change.

Change is here to stay, regardless of whether we like it or not.



Research should be practical to the core, based on scientific fundamentals. The relevance of an incubation cell for properly nurturing research activities is amply highlighted here. Collaboration with the right agencies is quite

clear that money paid by the people as tax is being used for research. It is therefore the duty of each researcher to work towards the overall development and self-reliance of the country. In this context I would like to add that only

Research should be in tune with the changing global environment

It is a constant, continuous and permanent phenomenon. Change is all-pervasive; it takes place everywhere, in all spheres of activity, including science and technology. Academicians, scientists and researchers should learn and be prepared to adapt to the changes in their environment, in order to have a smooth transition to the new world order. When researchers work at a pre-determined objective, there is a good chance that by the time they are within achievable distance the conditions around them have changed a lot, so much so that their objective has become

The relevance of an incubation cell for properly nurturing research activities is amply highlighted here. Collaboration with the right agencies is quite necessary for fruitful completion of research. It shall also be noted that since most research projects are funded by the government through different agencies, it is clear that money paid by the people as tax is being used for research. It is therefore the duty of each researcher to work towards the overall development and self-reliance of the country.

obsolete, a thing of the past. Basic research should be flexible and dynamic to match the ever changing environment on a day-to-day basis so that the end result can find positive applications in the economic environment.

necessary for fruitful completion of research. It shall also be noted that since most research projects are funded by the government through different agencies, it is

excellence in research as well as teaching activities make University Departments stand out from other educational institutions. And when all Departments excel on their own merits, the status of our University would automatically be elevated to that of a world class institution.

Let us unite and rededicate ourselves towards creating a unique institution of international repute with aspirations and ambitions grounded in reality.

Dr. Ramachandran Thekkedath

Controller of Exams, and IRAA Director take charge

Dr. A. B. Bhasi from Division of Mechanical Engineering, School of Engineering,



Cusat, has taken charge as Controller of Examinations. A Post Graduate in Engineering and

Management areas, Dr. Bhasi has more than 25 years of industrial and academic experience. He earned his Ph.D. from Indian



Institute of Science Bangalore. Dr. S. David Peter has taken charge as Director,

International Relations and Academic Admissions, CUSAT. Earlier he has been the Head,

Division of Computer Science and also served as Principal, School of Engineering.

Cusat admissions : National test on 11 May

The national level entrance examination for various academic courses including BTech & PG courses at Cusat will be conducted during 11 & 12 May 2013. The exam will be conducted at selected places in the country.

Smart antennae to be designed to meet consumer requirements



Cusat Vice Chancellor Dr. Ramachandran Thekkedath lights the ceremonial lamp during inauguration of the National Symposium on Antennas & Propagation, organized by the Dept. of Electronics, Cusat. Prof. C.K. Aanandan, Head, Dept. of Electronics, Prof. K.G. Nair, Chairman, APSYM 2012, Dr. C.P. Girija Vallabhan, President, Kerala Science and Technology Society (India), Dr. Godfrey Louis, PVC, and Dr. K. Vasudevan, Vice Chairman, APSYM 2012 are looking on.

Electronics researchers should develop smart antennae that meet the requirements of the consumer and neglect the conventional

models, Prof. C. P. Girijavallabhan, President, Kerala Science and Technology Society (India) said. He was speaking after inaugurating the National Symposium on Antennas and Propagation (APSYM 2012) organized by the Dept. of Electronics, Cusat during 17-19, December 2012.

Cusat Vice Chancellor Dr. Ramachandran Thekkedath, who presided over the function, said that University institutions should take the initiative to design and develop products that meet the needs of industries. The proceedings of the Symposium were released by Dr. Godfrey Louis, Pro-Vice Chancellor. Dr. K. Vasudevan, Dean, Faculty of Technology, Dr. C. K. Anandan and Dr. K. G. Nair spoke during the function. Around 50 research papers were presented. APSYM was attended by around 100 persons.

Seminar on Impact of STCW Convention held at KM School of Marine Engineering

The impacts and implications of STCW Convention and Code on the Flag Administrations, Marine Training Institutes, Ship owners and Seafarers were discussed in detail at the technical seminar on 'STCW-2010-Impacts and Implications' organized at Kunjali Marakkar School of Marine Engineering (KMSME), Cusat.

The STCW Convention and Code adopted by the International Maritime Organization (IMO) and accepted and ratified by its members prescribes the minimum standards relating to training, certification and watch keeping for seafarers which the member countries are obliged to meet or exceed. It is the basic foundation on which all the pre-sea and post-sea training courses are developed for the use and benefit of all the 1.2 million and odd seafarers of the world. The need for the develop-



Cusat Vice Chancellor Dr. Ramachandran Thekkedath, delivering the presidential address at the one day technical seminar on STCW-2010-Impacts and implications, organized at KM School of Marine Engineering. Dr. P.V. Sasikumar, Professor, KMSME, Sri. Johnson Mathew, MD, Trans Asia Shipping Services Pvt Ltd., Dr. K.A. Simon, Director, KMSME and Sri. Roy V Paul, Course Co-ordinator, KMSME are on the dais.

ment of this code was felt by IMO for the reason that shipping is a global industry and therefore there should be universally-accepted training programmes developed

and implemented in all countries for both the officers and crew of different nationalities who are operating different types of ships across the globe.



Cusat, Vice chancellor, Dr.Ramachandran Thekkedath inaugurating the 10-day Residential Course in Research Methodology organized by the School of Management Studies, Cusat. Dr.D.Mavoothu, Associate Professor and Deputy Course Co-ordinator, Dr.M.Bhasi, Director, SMS, Prof.P.R.Poduval, former Director, SMS & Dr. C.V.Jayamani, Professor and Course Co-ordinator are also seen.

Researchers should maintain Professional integrity : VC

Publication is not the ultimate aim of the researcher, but keeping the personal integrity and quality consciousness, according to Cusat Vice Chancellor Dr.Ramachandran Thekkedath. Quoting his US experience in research, he

opined that generating new knowledge is an integral part of Social Sciences research, which should get the first priority and that world-class research works must emerge from Indian universities. He was speaking after

inaugurating the ICSSR-sponsored 10-Day Residential Course on Research Methodology for SC/ST PhD Research Scholars in Social Sciences on 10 January at SMS, Cusat.

The main objective of the course is to sensitize the Research Scholars about the changing research environment and to expose them to research areas, resources and gaps. It also aims to equip the scholars with the best research techniques and the latest applications. SC/ST Research Scholars in Social Sciences from nine different universities in South India are participating in the course. The participants are being provided free travel, food and accommodation. The inaugural function was presided over by Dr.M.Bhasi, Director, SMS, Cusat, Prof. C.V.Jayamani, Course Director, welcomed the gathering and Dr.D.Mavoothu, Course Co-Director, proposed the vote of thanks. Prof.P.R.Poduval, former Director, SMS offered felicitations.

Research is the highest end of learning - Dr. Godfrey Louis

Research is the highest end of learning and research scholars must create knowledge for the society, according to Dr. Godfrey Louis, Pro-Vice Chancellor, Cusat.

“Social Science research” must have scientific methodology. The name “social science” has replaced the old name “social studies” because of the need for scientific approach to social science research. It is the scientific approach to social sciences that will give consistent research results in that discipline. Also, the researchers must fully tap the technology to make their job easier than that of the previous generation of researchers, especially in the area of literature survey”, he added while delivering the valedictory address at the ICSSR sponsored 10-day Residential Course in Research Methodology for Ph.D scholars in



Dr.Godfrey Louis, PVC, Cusat inaugurating the Valedictory function of the 10-day Residential Course in Research Methodology. Also seen are Dr. Rajitha Kumar, Dr. A. Ramachandran, Registrar & Dr. K.C. Sankaranarayanan.

social sciences area, conducted by the SMS, Cusat. The course which began on 16 January came to a close on 25 Jan and was attended by several research scholars from different states in southern India.

The valedictory was presided over by Dr. A. Ramachandran, Registrar, Cusat. Dr. Rajitha-

Kumar, Director-in-charge, SMS and Dr. K.C.Sankaranarayanan, former Head, Dept. of Applied Economics, delivered special addresses. Dr. C. V. Jayamani, Course Director and Dr. D. Mavoothu, Co-Course-Director also spoke. Dr. Godfrey Louis, PVC presented certificates.

Training on Energy Conservation

With a view to creating an awareness on the recent development in energy conservation measures, current trends in research on various alternative energy technology, emerging energy efficient technologies and concept of green building, a short-term training programme was conducted at Cochin University of Science and Technology.

The five-day programme, organized by the Electrical and Electronics Engineering Department, SOE, was inaugurated by Cusat Vice Chancellor Dr. Ramachandran Thekkedath on 5 November 2012.

He emphasized the need for conservation of energy and steps to be taken for energy management in a built up environment. With per capita consumption of energy being the yardstick to measure the socio-economic development of any country, steps to produce, conserve and manage energy is the need of the hour. Energy is a critical input to the production and consumption activities in an economy.

P S Chandramohan, former Director of ANERT and Professor and Chairman, Department of Electrical Engineering, Amritha University offered the keynote address. He spoke on the role of renewable energy in energy management. He emphasized the need to preserve fossil energy for the future and the significance of renewable resources.

Dr. C.A. Babu, Head, Division of Electrical & Electronics, Dr. G. Madhu TEQUIP Co-ordinator and coordinators Dr. Latha P.G. and Dr. Sheena K.M. also spoke.



Inaugural function of the workshop on capacity building for women managers : Dr. Godfrey Louis, Pro-Vice Chancellor is lighting the lamp together with K.C. Rosakutty, Chairperson, Kerala Women's Commission. Dr. A. Mohamuda Beegum, Syndicate Member & Dr. M. Meera Bai, Director are also seen.

Women's empowerment should begin from the family

The empowerment of women should begin from the family, according to Smt. K.C. Rosakutty, Chairperson, Kerala Women's Commission. The representation of women in the higher education sector is very low, she opined. Smt. Rosakutty was delivering the inaugural address at the 'Sensitivity-Awareness-Motivation Residential Workshop' organized by the Women's Studies Centre of Cochin University of Science and Technology, on 21 January. Dr. Godfrey Louis, Pro-Vice Chancellor presided. Dr. M. Meera Bai, Director

Women's Studies Centre welcomed the gathering.

A preview and introduction of the workshop was given by Professor Dr. K.G. Uma, Resource Person, and Dr. Moly Kuruvila, Regional Co-ordinator, UGC, National Consultative Committee. Dr. A. Mohamuda Beegum, Cusat Syndicate Member offered felicitations and Dr. Merlin Joseph proposed the vote of thanks. The 5 day workshop which concluded on 25 January was attended by participants from across the state.

Honour for Cusat Research Scholar



The Indian National Academy of engineering has selected V Pramitha, a research scholar from Cochin University of Science and Technology for their Innovative Student Project Award.

She was guided by Dr. C. Sudha Kartha (Dept. of Physics) and had collaborated with Dr. Rani Joseph, (Dept. of Polymer Science and Rubber Technology) and Dr. K. Sreekumar, (Dept. of Applied

Chemistry). The award consisting of a citation and cash prize of 10,000 will be presented during the Academy Annual Convention on 6th December 2012 in Roorkee.

Although the Academy confers five awards every year, the thesis from Cusat was the only doctoral-level thesis from any University to win an award this year. The other four awards went to two IITs and two IISc. Pramitha has also received the Best Thesis Presentation Award from the Indian Laser Association-Department of Atomic energy in January 2012.



team of 40 contestants under the leadership of Dr.P.K.Baby, Director, Department of Youth Welfare participated in the programme. It is the first time in the history of the University that the team winning overall either in arts or Sports events. Dr.Samson David, Deputy Secretary, Association of Indian Universities and Prof.E.T.Puttaiah, Vice Chancellor of Gulberga University and Prof.S.L.Hiremath, Registrar, Gulberga University distributed prizes. The team reached the Cusat campus on 20 evening. Dr.Godfrey

Cusat Cultural Team won Music championship in South Zone fete

Cochin University of Science and Technology grabbed Music overall Championship and first runner up in all events in the Gulfest 2012-South Zone Inter University Youth Festival organized by Association of Indian Universities and Ministry of Youth Affairs and Sports, Govt.of India held at Gulberga University, Gulberga, Karnataka from 15 to 19 December 2012.

Arun Naik and Kalesh V from Toc H Institute of Science and Technology, Arakkunnam won first prize in light vocal solo and Eastern Classical Music respectively. Akhiljith, Department of Instrumentation, placed first in Mimicry and the team comprising Aruna A, Ishak Rahman, Hena Titus, Fahad K.A, Gokulakrishnan and Kavya S, placed first in mime.

Amrutha Raj, School of Legal Studies and Joel Andrews, Kochi Medical College, Kochi placed second in Debate. The team comprising Arun Naik, Kalesh V, Justin C, Jerish Thomas, Mithu S Valsan, Charles Binny, Aswathy P.S and Ayyappathejus placed 2nd position in Western Music. Venkit Raman from MG College of

Engineering, Thiruvananthapuram, Nikhil P N, from School of Engineering placed third in classical Instrumental Percussion, classical instrumental Non-percussion, Western Solo and Classical Dance respectively. A

Louis, Pro-Vice Chancellor, Cochin University of Science and Technology, Dr.A.Ramachandran, Registrar, Cusat, and Sri. Sebastian Ouseph, Finance Officer, Cusat congratulated the team on their victory.

Fight against cancer should start from the kitchen : Dr. Thomas Varghese

The fight against cancer should begin from the kitchen and it does not require any preparation, according to renowned cancer specialist Dr. Thomas Varghese. Cancer is a serious threat on a global basis. Kerala is not an exception. The changes in lifestyle are the main reason for the increased occurrences of cancer among Keralites. The surgical oncologist from Lakeshore Hospital was speaking after inaugurating the One-day Workshop on Early Detection of Cancer organized by the National Service Scheme unit

of Cusat on November 1. One out of eight deaths in the world is due to cancer. Intestinal cancer that results from common diseases is the most prevalent worldwide. If detected in the early stages cancer can be cured completely. Dr. Godfrey Louis inaugurated the A-View facility through which viewers from all Departments can watch live the programmes being conducted in the University. Dr. A. Ramachandran, Registrar, Dr. M. B. Santhosh Kumar, NSS Programme Co-ordinator and Sri Unni A. M, Programme Officer spoke on the occasion.

Young managers should not be like blinkered horses and they should be able to adapt to the changes occurring around them, according to Sri. V. K. Ibrahim Kunju, Hon'ble Minister for Public Works. During these times when any small scale business requires the services of MBAs, the managers should be capable of following the pulse of the business world. Sri. Ibrahim Kunju also pointed out that commerce and industry are mutually complementary. He was delivering the inaugural address at Talentime, the Management Arts



Sri.V.K.Ibrahim Kunju, Hon'ble Minister for Public Works, inaugurating the Talentime, the Management Arts Fest organized by the students of SMS, Dr.D.Mavoothu, Dr.M.Bhasi, Director, SMS, Sri. Shyam Srinivasan, CEO & MD, Federal Bank, Dr.K.A.Zakkariya, Syndicate Member are on the dais.

Young managers shouldn't be blinkered horses : Minister V.K. Ibrahim Kunju

Fest organized by the students of SMS, Cusat. Dr. M. Bhasi, Director, SMS presided over the inaugural function while Sri. Shyam Srinivasan, CEO & MD, Federal Bank, Dr.

K. A. Zakkariya, Syndicate member, Dr. D. Mavoothu, Faculty, Dr. Ramesh Babu, Secretary, SMS Alumni Association, Sri. James Thomas, Chairman, Talentime

and Sri. Jofin Varghese addressed. The 3-day talent-fest witnessed competitions that tested the mettle of the participants in arts as well as management themes.

Our culture and language have been heavily affected by globalization and horrifying perversions are happening in the society, according to Prof. M. K. Sanu. He was addressing the concluding session of "Madhuram Malayalam" in celebration of Malayalam week organized by Cochin University Women's Welfare Organization and Local Funds Audit Cusat unit. In these times when nature is fast losing its beauty and paddy fields are becoming mere memories, we should cherish the love for our language and hold on to it with passion.

Malayalam should be introduced to children in their infancy itself, by teaching them poems that they can recite easily. By enhancing their word power, the love for Malayalam should become a passion for children. Advocacy for Malayalam should not be through neglect of English, which should have the importance it deserves. As the national language, Hindi also

Globalization has influenced language and culture : Prof. M. K. Sanu



Dr. A. Ramachandran, Registrar is honouring the noted liteature Prof. M.K. Sanu as Sri. Rajendra Kumar and Smt. Priya A.S. are looking on.

deserves consideration. Today, it is very difficult for those who cannot handle English well to succeed professionally. Proficiency in Malayalam, Hindi and English is now necessary. But the approach towards Malayalam should be an emotional one, he said. Dr. A.

Ramachandran, Registrar presided over the programme while Sri. Madhav Ramdas, Director of the film "Melvilasom", Smt. A. S. Priya, author, Sri. Rajendra Kumar, Joint Director, Local Funds Audit Dept., Sri K.R.Vinith, Smt. Raji and Smt. M. Sulochana also spoke.

Small scale solar power generation is the solution to the power crisis : Experts



Dr.K.Raveendranathan Thampi, University College, Dublin, inaugurates the Int. Conference on Opto-Electronic Materials and Thin Films .Dr. B. Pradeep, Dr. Godfrey Louis, Dr.Ramachandran Thekkedath, Dr.K.R.Muraleedharan Nair, & Dr.M.K.Jayaraj are looking on.

By setting up solar cells in all houses & establishments and facilitating income generation by the sale of the electricity thus generated to the Electricity Board, the present power crisis can be solved permanently, according to Dr. K. Ravindranathan Thampi, renowned solar power expert and

Professor of Solar Energy at University College, Dublin, Ireland. Since solar power generation on a small scale does not require huge investments or FIIs, it can be undertaken by anyone with sufficient funds. But no one is interested in the immediate legislation required for this, he

added, while inaugurating the International Conference on Opto-Electronic Materials and Thin Films for Advance Technology organized by the Dept. of Physics, Cusat.

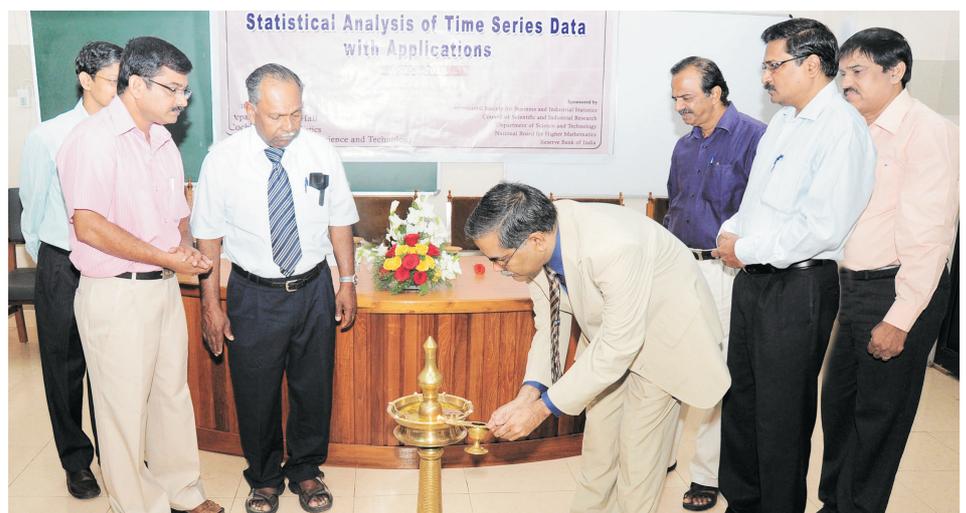
The creation of a system for continuous power generation can in the long run effectively eradicate the unemployment in the state. Small scale solar power producers can get back their investment in four years. Such ventures have been hugely successful in countries like Germany. The obstacle to the popularization of solar energy is not technological issues but a diffident attitude.

The Conference held at Hotel Riviera Suites was presided over by Cusat Vice Chancellor Dr. Ramachandran Thekkedath, on 3 January. Prof. K. R. Muraleedharan Nair, Dean, Faculty of Science offered felicitations. Prof. B. Pradeep, Head, Dept of Physics welcomed and Prof. M. K. Jayaraj, Programme Convenor conveyed the vote of thanks.

Study of Statistics can improve quality of life ...

The study of Statistics and the accumulation of scientific database can help to scientifically solve all problems faced in our daily lives and thus improve the quality of life, said Prof. Bovas Abraham, Emeritus Professor, Waterloo University Canada.

He was speaking at the workshop on “Statistical analysis of Time Series Data with applications” organized by the Department of Statistics, Cusat on 14 January. Cusat Vice Chancellor Dr. Ramachandran Thekkedath inaugurated the workshop, which was presided over by Dr. Godfrey Louis, Pro-Vice Chancellor. Dr. A. Ramachandran, Registrar released the proceedings. Dr. K. R. Muraleedharan, Dean, Faculty of Science, Dr. N. Balakrishna, Convenor and



Cusat Vice chancellor Dr. Ramachandran Thekkedath lights the ceremonial lamp while inaugurating the workshop on Statistical analysis of Time Series Data. Dr. Godfrey Louis, PVC, Dr. A. Ramachandran, Registrar, Dr. K. R. Muraleedharan Nair, Dean, Faculty of Science, Prof. Bovas Abraham and Dr. N. Balakrishna are looking on

Dr. K. C. James, Head, Department of Statistics spoke on the occasion. The three day workshop during

14 - 16 January was attended by around 100 delegates from across the country.

Digital Spell-checker for Indian languages needed : Dr. B.B. Choudhuri

It is high time that digital researchers came forward to develop a comprehensive spell-checker for Indian languages, opined Dr. B. B. Choudhuri, noted Digital Imaging expert from Indian Statistical Institute, Kolkata. The facility already exists in certain other countries. He was delivering the inaugural address at the 3rd National Conference on Indian Language Computing organized by the Department of Computer Applications, Cochin University of Science and Technology on 19th January.

Cusat Vice Chancellor Dr. Ramachandran Thekkedath who presided over the inaugural function opined that research to develop advanced software that can identify individual voices has to be enhanced. Sri. M. G. Biji, Vice President, Computer Society of India-Cochin chapter, Sri. K.



Dr.B.B.Choudhuri, Indian Statistical Institute is inaugurating the 3rd National Conference on Indian Language Computing. Dr. Poulouse Jacob, Head Dept. of Computer Science, Dr.K.A.Zakkariya, Syndicate Member, Cusat Vice Chancellor Dr. Ramachandran Thekkedath, Dr. K.V. Pramod, Head, Dept. of Computer Applications and Sri. M.G. Biji, Vice President CSI-Cochin are on the dais.

Poulouse Jacob, Head, Dept. of Computer Science, Dr. K. A. Zakkariya, Syndicate Member and Smt. Malathi, Faculty member spoke on the occasion. Around

100 delegates from across the country participated. Seventeen research papers were presented in four technical sessions during the Conference.

Safety of multi-storeyed buildings to be enhanced : Cusat VC

The safety measures adopted in the state's multistoried buildings have to be revamped, according to Cusat Vice Chancellor Dr. Ramachandran Thekkedath. The safety standards in the buildings like apartment complexes, hospitals, shopping malls, etc. are far below the mark and they have to be corrected on a war-footing, he opined while inaugurating the

Training workshop on safety standards organized by Safety and Fire Engineering Division of School of Engineering as part of the TEQIP project on Monday, 3rd December. Dr. A. Unnikrishnan, Associate Director, NPOL delivered the key-note address. Dr. A. Ramachandran, Registrar, Dr. G. Madhu and Dr. D. K. Sahu also addressed the gathering.

Young Scientist Award for Researcher



A Neuroscience researcher from Cochin University of Science and Technology has won the Kerala State Young Scientist Award 2012 for Biological Sciences from Kerala State Council

for Science Technology and Environment. Dr. Anju T.R. Research Associate at Centre for Neuroscience, Department of Biotechnology, Cusat won the award for her research related to 'Neurotransmitter receptors' under the supervision of Dr. C.S. Paulose, Professor, Centre for Neuroscience, Dept. of Biotechnology.

Best Paper Award in Kerala Science Congress

Ms. Soumya H, who is a research scholar of the Department of Instrumentation, working under the guidance of



Prof. Jacob Philip has won the Best Paper Award in the category of Physical Science in the 25th Kerala Science Congress held during January - February 2013 at Trivandrum. Ms. Soumya won the award for her research paper entitled "Thermal diffusion in thin coatings and plates under dimension control". The award carried a cash prize of Rs. 10,000/ and a contingent grant of Rs. 1,00,000/- for two years.

Ph.D Awardees

Renjusha S, Transition metal complexes derived from ketone based N(4) substituted thiosemicarbazones: crystal structures and spectral studies (Dr. M R. Prathapa Chandra Kurup, Dept. of Applied Chemistry, Cusat)

Korah P Kuruvilla, Serotonin receptor subtypes functional regulation and oxidative mediated apoptosis in 6-Hydroxy dopamine lesioned parkinsonian rats : functional recovery with serotonin, gaba and bone marrow cells (Dr. C. S Paulose, Dept. of Biotechnology, Cusat)

Nithyaja B, Photonic applications of biomaterials with special reference to biopolymers and microbes (Dr. V.P N. Nampoori, ISP, Cusat)

Hashim M, Distribution diversity and biology of deep- sea fishes in the Indian EEZ (Dr.N.G.K. Pillai)

Maheswaran Sithamsresan, Transition metal complexes of some N⁴ phenylsemicarbazones : crystal structures and spectral studies (Dr. M R. Prathapa Chandra Kurup, Dept. of Applied Chemistry, Cusat)

Shameena V.A, Design and development of compact printed ultra wide band antennas (Dr. P Mohanan, Dept. of Electronics, Cusat)

Sajeev S Nair, On (S,S) inventory policy With/without retrial and interruption of service /production (Dr.A.Krishnamurthy (Rtd.), Dept. of Mathematics, Cusat)

Sarin V.P, Investigations on the radiation characteristics of broadband strip loaded slotted microstrip antennas (Dr.K.Vasudevan, Dept. of Electronics, Cusat)

Nithin Viswambharan, Southern hemispheric features and their tele

connection with Indian monsoon (Dr. K Mohankumar, Dept. of Atmospheric Science, Cusat)

Sini P J, Investigations on phaeocystis SP, a harmful bloom forming alga isolated from cochin estuary (Dr. A V Saramma, Dept. of Marine Biology, Micro Biology & Biochemistry, Cusat)

Anisha P, Modelling and analysis of recurrent event data with multiple causes (Dr.P.G.Sankaran, Dept. of Statistics, Cusat)

Jessy Emmanuel, Crystal structures and spectral investigation of aroylhydrazones and their mixed ligand metal chelates (Dr. M R. Prathapa Chandra Kurup, Dept. of Applied Chemistry, Cusat)

Priyaja P, Pyocyanin (5-methyl - 1- hydroxyphenazine) produced by pseudomonas aeruginosa as antagonist to vibrios in aquaculture overexpression, downstream process and toxicity (Dr. Rosamma Philip, Dept. of Marine Biology, Micro Biology & Biochemistry, Cusat)

Sreekanth J.Varma, Investigations on polyaniline based systems for technologically important applications and some novel polymers as prospective candidates for fabricating polymer light emitting diodes (Prof. S Jayalekshmi, Dept. of Physics, Cusat)

Sudeep Elayidom M, Design and development of data mining models for the prediction of manpower placement in the technical domain (Dr. Sumam Mary Idicula, Dept. of Computer Science, Cusat)

Deepa Sankar, Fractal based techniques for classification of mammograms and identification of

microcalcifications (Prof. Tessamma Thomas, Dept. of Electronics, Cusat)

Abdul Jaleel K U, Macrobenthos of the continental margin (200-1000m) of south eastern arabian sea with special reference to polychaetes (Dr. R. Damodaran (Rtd.) Dept. of Marine Biology, Micro Biology & Biochemistry, Cusat)

Julie M David, Statistical Machine Learning Techniques for the prediction of learning disabilities in school-age children (Dr. B. Kannan, Dept. of Computer Applications, Cusat)

Smijin K Soman, Withania-somnifera and withanolide a mediated restoration of AMPA and NMDA receptor function in pilocarpine induced temporal lobe epilepsy (Dr. C. S Paulose, Dept. of Biotechnology, Cusat)

Jacob Elias, Analysis of system signals based on cross recurrence method for system dynamics characterization (Dr. V.N Narayanan Namboothiri, SOE, Cusat)

Smitha S L, Process optimization for the production of enzymes and antibacterials from a marine fungus penicillium citrinum S36 through solid state fermentation (Dr. Rosamma Philip, Dept. of Marine Biology, Micro Biology & Biochemistry, Cusat)

Jeeju P P, Investigations on some technologically important polymer nanocomposite films and semi crystalline polypyrrole films (Dr. S Jayalekshmi, Dept. of Physics, Cusat)

Neetha Joseph, Spatial and temporal variation of microbial community structure in surficial sediments of cochin estuary (Dr. Shanta Achuthankutty)

Kusum Komal Karatti, Ecology of chaetognaths in the Indian EEZ (Dr. T V Raveendran)



Rashtriya Gourav award for Cusat Professors



Dr. N. Mohanan, Professor and former Head, Dept. of Hindi and Dr. K. Vanaja, Professor, Dept. of Hindi have been selected for the Rashtriya

Gourav award. The selection for the award in recognition of the contributions towards higher education was conducted by India International Friendship Society. The award will be handed over at a function in Delhi.



Moot Court Competition at Legal Studies

The School of Legal Studies, Cochin University of Science and Technology is organizing the 2nd Dr. A. T. Markose Memorial National Moot Court Competition from February 01. Twenty teams of law students from various parts of the country will be participating in the 3-day event. Prof. K. V. Thomas, Union Minister of State for Consumer Affairs, Govt. of India will inaugurate the competition.

Science Day Oration

As part of the National Science Day Celebrations, the Centre for Science Communication and Directorate of Public Relations and Publications, Cusat are organizing a Science Day Oration on 7th February. Dr. Lekha Sreekantan, renowned expert on GM Crops from Kerala Agricultural University will deliver an oration on the topic "Genetic Crops-Charms & Challenges".

Annual General Meet

The Annual General Meeting of Academy of Physics Teachers, Kerala will be held on 16 of Feb 2013 at the Dept. of Physics, Cusat. The meeting will be inaugurated by Dr. Godfrey Louis, Pro-Vice Chancellor, Cusat. The Bhatnagar Award winner Dr. A. Ajaya Ghosh will be the Chief Guest.

Physics scope and awareness

The Department of Physics, Cochin University of Science and Technology is conducting a workshop called "Physics scope and awareness" for 9th and 10th standard school students from April 1 to 6. It will provide an opportunity for the students to interact with the faculty and also witness some of the advance experiments carried out in the research laboratories of the dept.

Track & Field and Games

The 30th Inter-Collegiate Track & Field and Games Meet organized by Cusat will be held from February 2 to 16 at the main campus in Thrikakkara. The Meet will be inaugurated by Dr. Godfrey Louis, Pro-Vice Chancellor, Cusat



Dr. Godfrey Louis, Pro-Vice Chancellor, Cusat is inaugurating the National Symposium on Emerging trends in Biotechnology at the Dept. of Biotechnology, Cusat. Dr. A. Ramachandran, Registrar and Dr. Sarita G. Bhatt are looking on.

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Ensure dissemination of scientific information : Dr. K. S. Radhakrishnan



Dr. K.S. Radhakrishnan, Chairman, Kerala Public Service Commission is delivering Dr. K.G. Adiyodi Memorial Science Oration organised by Centre for Science Communication and Directorate of PR & Publications. Dr. S. Anil Kumar, Director, PR&P, Dr. K.R. Muraleedharan Nair, Dean, Faculty of Science, Cusat Vice-Chancellor Dr. Ramachandran Thekkedath and Dr. A. Ramachandran, Registrar, Cusat are on the dais.

There should be a system by which the scientific knowledge acquired through research by science and technology universities and institutions can

reach the masses, according to Dr. K. S. Radhakrishnan, Chairman, Kerala Public Service Commission. He was delivering the Dr. K. G. Adiyodi Memorial Science Oration

organized by the Centre for Science Communication, Cochin University of Science and Technology in association with the Directorate of Public Relations and Publications on February 7. Communication is a problem in all fields. Different persons interpret the same thing differently. Most often they interpret things according to their desire and expectations. Human beings have long had this habit. Malayalis have many false pretenses and it is difficult to communicate with such people. There is no other state in India that teaches school children so many falsities, he added. Cusat Vice Chancellor Dr. Ramachandran Thekkedath presided over the function held at the Electronics auditorium where Dr. A. Ramachandran, Registrar and Dr. K. R. Muraleedharan Nair, Dean, Faculty of Science spoke. Dr. S. Anil Kumar, Director, Centre for Science Communication welcomed the gathering and Suresh Kumar G, Section Officer proposed the vote of thanks.

Cusat develops ocean surveillance system

Researchers at the Centre for Ocean Electronics (COE) in the Department of Electronics, CUSAT have developed an operational version of the ocean surveillance system which will help track presence of unidentified vessels or even torpedoes in the deep seas. The system, which includes three fixed surface buoy systems, will help in classifying, locating and tracking the underwater systems using a minimally configurable sensor network. "The sensors will pick up noises that are above the threshold level", said Dr. PRS Pillai, Principal Investigator. Following

the Taj terror attacks in Mumbai and the recent Enrica Lexie shooting incident, the Centre and state have been proposing a surveillance system to protect the coasts from invasion and also monitor the movement of vessels in territorial waters.

"The buoys will run on solar power and remain in dormant mode until they identify a new sound. Only then will the system get activated and generate the alert signal to the control Centre," explained Dr. Pillai, the Principal Investigator of the project. The

system had undergone trials in a hydroelectric reservoir in 2010. "We are looking for suitable production agencies interested in installing the harbor defence systems in ocean" said Dr. Pillai.

The trials were successful and a patent application has already been filed. The project, 'Development of Autonomous Buoy systems for Radio-Acoustic Positioning and Tracking', was funded by the Department of Information Technology with Dr. Supriya M.H. as Co-investigator of the project. ●