

May 2013

NEWSLETTER OF COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY



Shri. Hamid Ansari, Hon'ble Vice President of India inaugurating the KM Mani Centre for Budget Studies. Dr. M. Govinda Rao, Member, Finance commission, Sri. K. M. Mani, Hon'ble Finance Minister and Sri. Oommen Chandy, Hon'ble Chief Minister of Kerala are on the dais.

University of Science and Technology on 17 February 2013. The Budget, being a definite political statement by the Government, should clearly mention the particular areas of the economy which are being focused on. It should also reflect the economic status of the country, state or local self-government. Budget making is an exercise in striking a fine balance between completing objectives and priorities of the government within the budgetary constraint. The setting up of the Centre for Budget Studies (see page 10)

# **Budgets are not Govt.'s income and expenditure statement - Vice President**

We are living in a world where fiscal imbalances in government finances are being blamed for most of the ills of national economies. Budgets should not be degraded to being mere income and expenditure statements of Governments, said Sri. Hamid Ansari, Hon'ble Vice-President of India.

He was inaugurating the K. M. Mani Centre for Budget Studies for facilitating comprehensive studies on budgets established at Cochin



An attentive audience at the inaugural address by the Hon'ble Vice President of India at the old Legislative Hall.

## Editorial...

A new concept, Trans-National Education (TNE) is expected to shake the foundations of the global higher education sector. It is based on the broad idea that education takes place through various routs, not necessarily confirmed to the physical location



that they cross a national border. The scope of TNE ranges from joint degrees, twinning and validacussion over the financial viability of branch campuses, and many experts advise caution for local institutions engaging in arrangevalidation ments where teaching and course delivery is provided primarily by the partner institution. The majority of learners engaging in TNE are undergraduates. Engaging in TNE

for local delivery, faculties in educational villages, twinning arrangements with study in both countries, distance learning programmes and advanced standing or articulation agreements.

Science research and education have no borders. They take place everywhere. The importance of inputs

## **TNE to revolutionalize the Higher Education Scenario**

of the facility. Its immediate manifestation is the emersing practice of providing education to students.

TNE has become a major part of the global higher education landscape, and sits at the heart of the internationalization strategies of many universities across the globe. For example. by 2010 the number of students (undergraduate and postgraduate) studying for a UK degree overseas was greater than the number of international students studying in the UK. TNE here refers, not to the traditional student recruitment market where students travel from one country to another for their studies, but to a wide spectrum of educational activities defined by the fact

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tion arrangements, to online learning, franchising and the establishment of branch campuses.

Participation in TNE programmes is predicted to continue rising significantly, particularly through engagement in newer forms of TNE provision. TNE is often conceptualised in terms of educational export - India-based awarding institutions can claim a part of the tuition fees paid by overseas students to the overseas institution, providing a flow of income into the national economy.

While the potential benefits are significant, there are a number of financial and reputational risks associated with the provision of some forms of TNE. There is wide-ranging dis-

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can give institutions the opportunity to reach a new highly potential market of students who seek an Indian degree, but who don't have the means to travel and study in India and vice versa. They can also tap in to a new stream of revenue, develop their brand in a new market, expand their international operations and internationalization strategies, as well as open doors to other types of partnerships, such as research links.

There are many different models of TNE, including full-scale campuses, validation of local programmes by Indian institutions, collaborative delivery with shared input in curriculum, e.g. joint/ double/dual degrees, franchising of degrees cannot be stressed more in this context. Universities and higher education institutions maintaining suinternational perior relations stand to gain the most in this scenario. The dissipation of knowledge from Kalamassery located in a small state like Kerala to recipients in some remote part of world can be a present reality, instead of a pipedream.

This is a rare opportunity for Indian universities to show-case their strengths, design innovative non-traditional courses, instill greater student strength from a worldwide market and at the same time improve their finances. The opportunity exists and can be grabbed now. As the saying goes, the early bird gets the worm.

#### Dr. Ramachandran Thekkedath

#### University Pro-Vice Chancellor Vacates post

The Pro-Vice Chancellor of Cochin University of Science and Technology, Dr. Godfrey Louis has retired from the post on completion of his term. He was given a befitting send-off at a function organized at the Senate Hall of the University on 25 May 2013 which was presided over by the Vice



Chancellor Dr. Ramachandran Thekkedath.

Dr. Louis, a famous Astrophysicist of international reputa-

Dr. Godfrey Louis tional reputa

A high-level team from U.S -India Education Foundation visited Cochin University of Science and Technology on 18 March 2013 to explore areas for collaboration in higher education under the Fulbright Nehru International **Educational Administrators** Programme. The team which represents 12 Universities/ Colleges in the U.S is visiting selected Universities in Delhi, Mumbai and Kochi to study policies. their planning. education administration. etc. addition academic In to collaboration. analysis of teacher-student communication and evaluation of the facilities available for American students for education in India are also being pursued as well as the formation of a consortium of Universities on curricula. The team met Cusat Vice Chancellor Dr.Ramachandran



Cusat Vice Chancellor Dr. Ramachandran Thekkedath handing over a memento to Dr. Godfrey Louis at a send-off function at the Senate hall of the University. Smt. Laly Godfrey, Dr. A. Ramachandran, Registrar and Sri. K. V. Mohanan, Asst. Registrar are also seen.

tion was appointed as Pro-Vice Chancellor while he was working as Professor in the Dept. of Physics. His research on the red rain phenomenon, raising the possibility of extra- terrestrial life has won him international acclaim through New Scientist, BBC etc. He will continue to serve the university as Professor in the Department of Physics.

Dr. A. Ramachandran, Registrar, Dr. A. B. Bhasi, Controller of Exams and Sri. K. V. Mohanan, Assistant Registrar offered felicitations.

## High-Power U.S. Education Team visits Cusat



Cusat Vice Chancellor Dr. Ramachandran Thekkedath having discussions with the High-Power US Education Team along with Dr. Godfrey Louis, Pro-Vice Chancellor, Dr. A. Ramachandran, Registrar, Dr. Paulose Jacob, Head of Computer Science, Syndicate Members and other University Officials.

Thekkedath and other officials of the University over lunch and had discussions with heads of various departments. The team visiting Kochi comprised of representatives from California, South Florida, Hawaii, Michigan, Western Washington and St. Louis Universities as well as Pitt Community College, Smith College, Juniata College, Colorado College & Loras College.



## U S Consul General visits Cusat

The U S Consul General Ms. Jennifer McIntyre paid a visit to Cochin University of Science and Technology on 19 March 2013 with a view to exploring areas of collaboration in the higher education sector. She had discussions with Cusat Vice Chancellor Dr. Ramachandran Thekkedath alongwith Dr. Godfrey Louis, Pro-Vice Chancellor, Dr. A. Ramachandran, Registrar, Sri Sebastian Ouseph, Finance Officer, Dr. A. B. Bhasi, Controller of Examinations. Dr. Sunil K. Narayankutty, Head, Dept. of Polymer Science and



The U S Consul General Ms. Jennifer McIntyre has discussions with Cusat Vice Chancellor Dr. Ramachandran Thekkedath and Dr. A. Ramachandran, Registrar.

Rubber Technology, Dr. S. David Peter, Director, IRAA and Dr. S. Anil Kumar, Director, Public Relations and Publications during a luncheon meeting. Later she also visited the Inter University Centre for Intellectual Property Rights Studies and met with the officials before leaving for Chennai. The Consul General was formally received at the administrative office by Dr.A Ramachandran, Registrar.

#### Cusat Researchers on Indian Geotraces Cruise

In a first mission of its kind. a team of largely young researchers including students from Cusat set off from Mormugao port on 01 2013. March aboard oceanographic research vessel on a 60 day Indian Ocean mission. The purpose of the mission was to determine the distribution of selected trace elements and isotopes in the marine environment. The mission was undertaken aboard the SagarKanya on a path towards Australia and the ship ported at Jakartha in Indonesia on their return trip to Chennai.

The "Geotraces India" project team consisted of 28 reseachers, including 7 women, hailing from 9

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scientific institutes such as PRL,NCAOR, NIO, Cusat, Mangalore University, Pondichery University, Goa University and ISER. The state- of -the- art clean laboratory and CTD winch onboard the ship were also inaugurated during the The cruise was occasion. successfully completed on 10th May at Chennai port. The researchers from Cusat were led by Dr. Sujatha.C.H., Reader. Department of Chemical Oceanography, School of Marine Sciences, who was the Principal Investigator, Akhil. P.S. Research Scholar, Mrudul Rag. S. K., Research Fellow and Arsha Krishnan, M.Sc Student of Cochin University also participated in the voyage.

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## Workshop on Cryptology held

Increasing complexities in the global arena are boosting the significance of Cryptology, said Cusat Vice Chancellor Dr.Ramachandran Thekkedath. The science of Cryptology has become essential to preserve the independence and interests of individuals as well as corporates, he added, while delivering the presidential address at the National Instructional Workshop on Cryptology organized by the Department of Mathematics, Cusat on 6 May 2013. Prof. R. Balasubramaniam, Director, Institute of Mathematical Sciences, Chennai inaugurated the workshop. Dr. K. R. Muraleedharan Nair, Dean, Faculty of Science, Dr. P. G. Romeo, Head, Dept. of Mathematics and Dr. A. Vijayakumar, Coordinator spoke.

## ₹76 Crore grant for Cusat Physics Dept.

In recognition of the academic excellent performance and research achievements in the areas of **Materials** Science and Theoretical Physics, the Department of Physics, Cochin University of Science and Technology has been sanctioned an amount of Rs. 1.76 Crore by the Department of Science and Technology (DST), Government of India. The grant is intended to strengthen the post-graduate teaching and augment the existing research facilities in the department under Fund for Improvement of Science and Technology Infrastructure in Universities and Higher Educational Institutions (FIST)

Program. The Department of Physics conducts research in the frontier areas of Optoelectronic devices, magnetic nano- structure, functional materials, holography, polymer materials, thin film technology, solar cells, lithium batteries, thermoelectric materials. quantum computing, astrobiology and neutrino physics. A major chunk of the grant will be utilized to procure scanning electro-microscope, spectroscopic elipso meter, software packages etc. Prof. B. Pradeep, Head of the Department of Physics said that this recognition can be considered as another feather in the cap for the department which is celebrating its 50th year of existence.

## Solar lamps to brighten Engineering School

In a bid to lighten the burden of surging electricity charges, the engineering students of Cusat are building and installing solar lamps in the campus on their own. The first year IT and Computer Science Engineering students of School of Engineering are making use of discarded materials available on the campus to create the solar lamps between class hours. The encouragement from their Principal Dr. P.S. Sreejith coupled with the prototype of the lamp winning the first prize in the Working Model category the recently at concluded All Kerala Technical Fest (Dhishna) prompted the

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students to embark on this noble venture. The students led by Anantharaman, Keshav Unnithan, Sufiyan, Syam Mohan. Vishnu Das. Vishnu. Azhar. Sreeram and Sudheendran were assisted by the technical staff at the Mechanical and Civil laboratories. Financial assistance from the TEQIP project was a blessing for the budding engineers who plan to install two lamps each semester so that when they complete eighth the semester, the whole campus will be equipped with solar lamps which will reduce the electricity consumption by half.

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## Cusat Syndicate: New members nominated

Dr. Joseph John, Associate Professor, Department of Chemistry, S. H. College, Thevara, has been nominated to the syndicate of Cochin University of Science and Technology by the Government of Kerala.

The Deans of Faculties of Cochin University of Science and Technology, Dr. K. Poulose Jacob, Professor, Department of Computer Science, Dr. G. Madhu, Professor. Division of Safety and Fire (School of Engineering) and Dr. Κ. Mohan Kumar, Professor, Department of Atmospheric Science, have been appointed to the Syndicate by the Vice-Chancellor on rotation basis.

## International Symposium on Ocean Electronics

The twelfth biennial Symposium on Ocean Electronics, 2013 (SYMPOL 2013) being organized by the Department of Electronics of the Cochin University of Science and Technology, is scheduled to be held during 23-25 October 2013.

This Symposium is intended to provide a forum for the researchers in the area of Ocean Electronics to interact with each other and present their innovative ideas and findings. Details can be had from the SYMPOL Secretariat at : sympol@cusat.ac.in or sympoltpcc@cuast.ac.in

## 'Material Characterization at Nanoscales' - Workshop at STIC

techniques. The background of this workshop was narrated by Dr. Jacob Philip, Director, STIC. Demonstration of experimental techniques with various

The Sophisticated Test and Instrumentation Centre at Cusat had organized a two day workshop on "Material Characterization at Nanoscales" during 25- 26 March 2013. This workshop was intended to make researchers and teachers familiar with various techniques for the characterization of nano-materials. The workshop was organized in the light of the fact that a good number of researches in diverse areas such as Physics, Chemistry, Biology, Medicine, Engineering and Environmental Sciences are related to materials with nanoscale dimensions.

The workshop was inaugurated by Prof. V.N. Rajasekharan Pillai, Executive Vice President, KSCSTE, who is also the Chairman of the Governing



Prof. V. N. Rajashekharan Pillai, Executive Vice President, KSCSTE, and Chairman, Governing Council, STIC delivers the inaugural address at the workshop on Material Characterization organized by STIC. Dr. K. G. Nair, Director, C-SiS and Dr. Jacob Philip, Director, STIC are on the dais.

Council of STIC, in a function presided over by Prof K.G. Nair, Director, C-SiS and former Director, STIC.

Prof. Rajasekharan Pillai stressed the importance of such workshops to equip researchers with modern experimental instruments available in STIC was an integral part of the workshop. The resource persons for the workshop were Dr. K. Nandakumar (Mahatma Gandhi University), Dr. M.K. Jayaraj (Cusat), Dr. D Mangalraj (Bharathiar University) and Dr. Jacob Philip (STIC).

## **Ramvilas Sharma: Seminar at Hindi**



Cusat Vice Chancellor Dr. Ramachandran Thekkedath inaugurating the Seminar on the literature of Ramvilas Sharma . Dr. R. Sasidharan, Dean, Faculty of Humanities, Smt. Brinda Bala Sreenivasan, Head, Department of Foreign Languages, Dr. Sivakumar Mishra, Hindi critic, Dr. A. Ramachandran, Registrar, Dr. K. A. Zakkariya Syndicate member & Dr. P.V. Vijayan, former Head, Dept. of Hindi are looking on.

The Department of Hindi, Cusat, conducted a two day UGC National Seminar on the 'Literature of Ramvilas

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Sharma' on 7-8 February 2013. The seminar was inaugurated by Cusat Vice Chancellor Dr. Ramachandran Thekkedath.

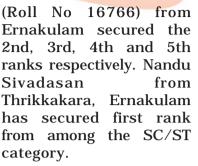
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Ramachandran. Dr. Α Registrar, presided over the function where Prof. Dr. Sivakumar Mishra. the eminent Hindi critic delivered the keynote address. Dr. K. A. Zakkariya, Member. Syndicate, Dr. R Sasidharan, Dean, Faculty of Humanities, Dr. P. V. Vijayan, former Head of the Dept. and Smt. Brinda Bala Sreenivasan, Head, Dept. of English and Foreign Languages offered felicitations. Dr. K Vanaja, Co-ordinator welcomed the gathering and Dr. N. Mohanan, Dept. of Hindi proposed the vote of thanks.

## Cusat CAT Results Announced

The provisional rank list of candidates who had appeared for the All India Common Admission Test (CAT 2013) of Cochin University of Science and Technology, conducted on 11th and 12th May 2013 has been announced on 21 May 2013.

Albin Jose George (Roll No 12834) from Kottayam secured the first rank while Sanal S Prasad (Roll No 17140) from Thoppumpady, Kochi, Akhil Ashok (Roll No 14107) from Kodungalloor, Thrissur, Arun Govind M (Roll No 18416), from Kuttur, Thrissur and R Srihari



From a total of 23937 candidates who appeared for the B.Tech. Programme, 21800 candidates qualified for admission of which 8537 candidates are from outside the state including Dubai Centre and 13263 from within Kerala.



ALBIN JOSE GEORGE



**AKHIL ASHOK** 





SANAL S. PRASAD



ARUN GOVIND. M.



R. SRIHARI





The Workshop on Physics: Scope and Awareness organized by ment of Physthe Dept. of Physics being inaugurated by Cusat Vice Chancellor ics, Cusat for Dr. Ramachandran Thekkedath. Dr. B. Pradeep, Head, Dept. of Physics, Dr. S. Jayalakshmi, Dr. M. Junaid Bushiri, Coordinator, and Dr. K. Sajan, Syndicate member are also seen.

It is the excellence in research as well as teaching activities that make University Departments stand out from other educational institutions, according to Cusat Vice Chancellor Dr. Ramachandran Thekkedath. Basic research should match the changing environment, he added while inaugu-

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While offering felicitations, Prof. K. Sajan, Cusat Syndicate Member said that most of today's technology is based on the basic sciences like Physics, Chemistry and Mathematics. Prof. B. Pradeep, Head, Dept. of Physics presided over the inaugural function of the workshop organized in associ-

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## Physics: Scope & Awareness Workshop

rating the workshop on P h y s i c s : Scope and Awareness, organized by the Department of Physics, Cusat for school children on 1 April 2013. ation with IUCAA Resource Centre (IRC) and SPIE Cusat Student Chapter. Dr. M. Junaid Bushiri welcomed the gathering and Prof. S. Jayalakshmi conveyed the vote of thanks. Sessions on various areas of Physics were handled during the Workshop by Prof. B. Pradeep, Prof. M. R. Anantharaman, Prof. K. P. Vijayakumar, Prof. Ramesh Babu, Prof. Sudha Kartha, Prof. S. Jayalakshmi, Prof. V. C. Kuriakose, Dr. Titus K. Mathew, Dr. M. Junaid Bushiri, Prof. M. Sabir, and Prof. M. K. Jayaraj. Dr. Godfrey Louis, Pro-Vice Chancellor distributed certificates to the participants during the concluding session on 6 April 2013.

### **GM Crops: Extreme Caution Needed** Dr. Lekha Sreekantan

Agriculture using Genetically Modified Crops should be undertaken with extreme care, according to Dr. Lekha Sreekantan, renowned expert on GM Crops. Interfering in the evolutions in the centuries- old ecosystem requires utmost delicacy, she said.

Dr. Lekha Sreekantan was delivering the National Science Day Oration on "*GM Crops-Charms and Challenges*" jointly organized by the Directorate of Public Relations & Publications and Centre for Science Communication, Cusat on February 7.

It is meaningless to blindly avoid GM Crops which deserve intense research. But the government should exercise a close monitoring system, since private companies are in the forefront of research in this area. It has not been established yet that GM Crops

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are safe. Even environmental activists are not sure about it. Many such crops have been seen to unexpectedly turn poisonous and the possibility of their genes entering into other living organizms exists.

Dr. Godfrey Louis, Pro-Vice Chancellor inaugurated the Oration at the Electronics Auditorium. Dr. K. Vasudevan, Dean, Faculty of Technology presided over the function. Dr. S. Anil Kumar, Director, Public Relations & Publications and Director, Centre for Science Communication welcomed the gathering and Suresh Kumar G., Section Officer proposed the vote of thanks.

The National Science Day Oration was sponsored by Kerala State Council for Science, Technology and Environment (KSCSTE) and Dept. of Science and Technology (DST), Govt. of India.



Dr. Lekha Sreekantan delivers the National Science Day Oration on 'GM Crops -Charms and Challenges'. Dr. K Vasudevan, Dean, Faculty of Technology, Dr.S Anil Kumar, Director, Public Relations and Publications and Director, Centre for Science Communication and Sri. Suresh Kumar G., Section Officer, DPR & P are on the dais.

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#### Cusat to collaborate with Coir Board in research

The Cusat Syndicate has decided to collaborate with the Coir Board to strengthen its research in the area of coir-geo textiles. The university will also conduct M. Tech programmes in coir engineering. The decision comes in the wake of the discussions held between Cusat Syndicate Works Committee Convener Prof. Nedumudi Harikumar and Coir Board Chairman Shri, G Balachandran, "It is a collaboration aimed at technology development as we will work out with Cusat ways and means by which durability of coir geo-textiles can be improved," said Shri. Balachandran according to media reports.

#### Bioinformatics-National Seminar at Marine Biology

The Department of Marine Biology, Microbiology and Biochemistry, Cochin University of Science and Technology conducted а Seminar National on "Bioinformatics in Marine **Biology: Next Generation** Sequencing Technologies and Applications" on 26 March 2013 at the School of Marine Sciences Auditorium, Lakeside Campus. Dr. K.C.Sivakumar, Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram, Dr. Oommen K. Mathew, National Centre for Biological Sciences, Bangalore, Dr. M. Milner Kumar, SciGenom Labs, Kochi and Dr. Ignatius Kunjumon, Cusat handled sessions on various topics.

## Seminar on Current Advances in Radio Frequency and VLSI

Division of Electronics Engineering (School of Engineering), CUSAT National Seminar on Current Advances in RF and VLSI Engineering organized on 1 March 2013 at Electronics auditorium.

Dr. K. Suresh Nair, CTO Nest Group delivered the keynote address. The intention of the seminar is to empower the delegates to keep up with the tremendous growth in the area of Radio Frequency with highspeed low power silicon technology, according to Dr.Binu Paul and Dr.Rekha.K.James, co-ordinators of the seminar. Dr. Suma Neeraj M N, Mr. Shrinivas Bhat, Mr. Jacob Mathews, Mr. Venkatesha S. lead various sessions.

Dr. Godfrey Loius, Pro-Vice Chancellor, inaugurated the seminar. Dr. R Gopika Kumari, Head, Division of Electronics Engineering, SOE, Prof. P. S Sreejith, Principal, SOE, Prof. K. Vasudevan, Dean, Faculty of Technology, Prof. K.G. Nair, Director, C-SIS, Prof. Poulose Jacob, Head, Department of Computer Science and Dr. Rekha K. James spoke in the occasion. The National seminar on radio frequency concluded on 2 March 2013.

## New Student Empowerment Centre at Cusat

In its continuous endeavor to arm the students with the necessary skills that suit the study environment that is changing with the times, Cusat will establish a Centre for Empowerment and Skills Acquisition. The Centre aims at the empowerment of students as well as teachers of the University in addition to enhancing their skills. The decision was taken at a meeting of the University Syndicate on 11 April based on a proposal put forward in March this year.

There are around 50000 seats in various engineering colleges in our state. And the number of MBA / MCA seats exceeds 15000. But the employability of the qualified youth is only 15 percent. The reasons for such a low employability figure are many, the first being poor communication skills, said Dr. K.A. Zacharia. Director.

The Centre will focus on improving the employability and skills of the students according to the current needs of industry, according to Dr. K. A. Zakkariya, Syndicate Member and Associate Professor at School of Management Studies who is the Director of the Centre.

The Centre's activities are expected to commence within three months. In addition to students, it is proposed to provide training to employees of Cusat and staff from other universities, public/ private enterprises and unemployed youth in the state. The training will cover all areas from communication and behavioural skills to job interviews. Since they come from various states of the country, the students at Cusat are heterogeneous in character, and by providing them training in soft skills, be uniformly they can elevated to a higher level. Empowerment of teaching and non-teaching staff in the advanced technologies is also envisioned. Short-term weekend courses. programmes and workshops as well as activities in cooperation with other government agencies are being planned. The Centre will function using the available infrastructure initially and at a later stage it will be provided its own building, he added.

#### National Conference on Current Trends in Chemistry

The Department of Applied Chemistry, Cochin University of Science and Technology organized a two day National Seminar on Current Trends in Chemistry - 'CTriC 2013' during 22-23 March. Cusat Vice Chancellor Dr. Ramachandran Thekkedath inaugurated the

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Seminar on 22 March at the Applied Chemistry Auditorium, Cusat. Dr. A. P. Singh, NCL, Pune delivered the keynote address. Dr. Godfrey Louis, Pro-Vice Chancellor, Dr. A. Ramachandran, Registrar and Dr. K. R. Muraleedharan Nair, Dean, Faculty of Science of-

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fered felicitations. The Seminar focused on the latest developments in different areas of chemistry in the form of invited talks as well as oral and poster presentations. Around 150 participants from different parts of the country attended the seminar.

#### DST - PURSE Programme: Cusat excels

Cochin University of Science and Technology has performed excellently in implementing the DST-PURSE programme of the Union Government.

At a progress monitoring committee meeting of the University Promotion for Research and Scientific Excellence (PURSE) programme promoted by the Department of Science and Technology, (DST), Govt. of India, it was seen that among the eighteen universities that had participated, Cochin University of Science and Technology was the only University that had fully utilized the funds for the first two years. Dr. Kishan Lal, President, Indian National Science Academy, New Delhi and former Director, National Physical Laboratory headed the committee which had five other members from various premier institutions in India. Dr. K. Vasudevan. Professor Department of Electronics and Co-ordinator. PURSE programme represented Cusat in the meeting.

The research output from University the was also extremely good with the number of research publications in peerreviewed journals from science and technology departments alone exceeding 350 during 2012-13. The h-index which decides the amount of grant for Universities had risen from 34 in 2009 to 50 in 2012, making Cochin University of Science and Technology eligible for Rs. 30 crores instead of Rs. 9 crores as assistance for the programme.

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A view of the audience at the inaugural function of KM Mani Centre for Budget Studies: Cusat Syndicate members are also seen

(continuation from page 1)

is a timely and relevant initiative to fill an existing gap in the scientific and technical understanding of budget accounting and analysis, he added.

Sri. Oommen Chandy, Hon'ble Chief Minister of Kerala presided over the function which was held at the Legislative Assembly Hall of the old Secretariat Building. The Cheif Minister warned that the state may have to withdraw from all sectors if the government fails to mobilize enough resources for economic growth. Highlighting the need to redefine the budgeting exercise and transform it into a participatory effort focusing on social welfare, Mr. Chandy said the mismatch between revenue income and capital

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investment since the first State budget in 1957 had left Kerala struggling to meet its development needs and welfare obligations.

Sri. K. M. Mani, Finance Minister, Govt. of Kerala, Sri. V. S. Achuthanandan. Leader of **Opposition**, Kerala Legislative Assembly Dr. Shashi Tharoor, Union Minister of State for HRD, Govt. of India and Dr. M. Govinda Rao, Member, Finance Commission spoke on the occasion. Cusat Vice Chancellor Dr. Ramachandran Thekkedath welcomed the gathering and Ramachandran, Dr. A. Registrar proposed the vote of thanks. Dr. M. A. Oommen, Honorary Director, K M Mani Centre for Budget Studies gave an introduction of the proposed activities at the Centre.



Another view of the audience at the inaugural function of KM Mani Centre for Budget Studies: Cusat Syndicate members are also seen among other dignitaries

#### National Workshop on Science Journalism at Cusat

It is only through establishing scientific temper among the people that social development can be ensured, according to Cusat Vice Chancellor Dr.Ramachandran Thekkedath. This is possible only if each development in science is introduced to the common man in the simplest language.

He was delivering the inaugural address at the Three-Day National Workshop on Science Communication and Science Journalism jointly organized by the Directorate of Public Relations & Publications



Cusat Vice Chancellor Dr. Ramachandran Thekkedath inaugurates the National Workshop on Science Communication and Science Journalism organized by the Directorate of Public Relations & Publications and Centre for Science Communication. Dr. A. Ramachandran, Dr. A. Mohamuda Beegum, Dr. K. Girish Kumar, Sri. M. Sherif, Smt. Leela Menon, Dr. S. Anil Kumar and Sri. M. Ramachandran, are also seen.

## Establishing scientific temper among the people for social development: Cusat VC

and Centre for Science Communication, Cochin University of Science and Technology on 5 February 2013. Traditional media can also be used for science popularization, he said.

Shri. M. Sheriff, Additional Secretary, Higher Education Dept., Dr. A. Mohamuda Beegum (Syndicate Members),

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Shri. Cusat. Μ. Ramachandran. Director. Institute of Journalism, Kerala Press Academy, Dr. A. Ramachandran. Registrar, Cusat and Dr. K. Girish Kumar, Professor, Department of Applied Chemistry offered felicitations. Dr. S. Anil Kumar, Director. Public Relations and Publications welcomed the



Smt. Leela Menon, veteran Journalist releases the book "Media Science Handbook", by handing over a copy to Dr. A. Mohamuda Beegum, Syndicate Member. Dr. K. Girish Kumar, Dr. A. Ramachandran, Cusat Vice Chancellor Dr. Ramachandran Thekkedath, Sri. M. Sherif, Sri. M. Ramachandran and Dr. S. Anil Kumar are looking on.

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gathering and Sri. Suresh Kumar G., Section Officer, proposed the vote of thanks.

"Media Science Handbook". a book jointly published by the Directorate of Public Relations & Publications and Centre for Science Communication was released during the function by Smt. Leela Menon, Senior Journalist by handing over a copy to Dr. A. Mohamuda Beegum, Syndicate Member, Cusat. Dr. Beegum gave a brief introduction of the book and its utility to the media personnel. Later Dr. V. Ajit Prabhu, Joint Director, Kerala State Council for Science, Technology and Environment delivered the key-note address. The Workshop sponsored by Kerala State Council for Science. Technology and Environment was concluded on 07 February.

#### **Union Budget**

#### Panel Discussion Organised

A good budget analysis should be based on the responses from people in the different classes of society and such responses should be received by the authorities with an open mind, according to Cusat Vice-chancellor Dr. Ramachandran Thekkedath. He was inaugurating a panel discussion on the Union Budget conducted by the K. M. Mani Centre for Budget Studies of Cochin University of Science and Technology in



Cusat Vice Chancellor Dr. Ramachandran Thekkedath, delivers the inaugural address at the panel discussion on Union Budget 2013-14 organized by the K.M. Mani Centre for Budget Studies. Dr. Jose Sebastian, Dr. Nirmala Padmanabhan, Dr. M. A. Oommen, Prof. Praveen Jha, Dr. Mohan, Mr. C. J. George, Dr. K. K.George and Dr. Subrat Das are on the dais.

## A good budget analysis should be based on the responses from people in the different classes of society and such responses should be received by the authorities with an open mind - Vice Chancellor

association with the Centre for Budget and Governance Accountability, New Delhi on 08 March, 2013.

Dr. K. K.George, Chairman, Centre for Socio-Economic and Environmental Studies in his presidential address focused on the need for outcome budget rather than outlay budget.

## Cusat Students Union inaugurated

The Cochin University of Science and Technology Union 2012-'13 was inaugurated by **Kureepuzha** noted poet Sreekumar at the Cusat auditorium on 18 February 2013. Cine Artist Aparna Nair was the special guest of the function. Cusat Vice-Chancellor Dr.Ramachandran Thekkedath, Dr. Godfrey Louis, Pro-Vice Chancellor, Cochin

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Dr.M.A.Oommen, Director, K.M.Mani Centre for Budget Studies welcomed the gathering.

Dr.Mohan, IRS, Commissioner of Income Tax (Kerala Circle) spoke on the scope of resource mobilization as a better alternative for fiscal consolidation rather than curtailing expenditure.

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Prof. Praveen Jha, Jawaharlal Nehru University Centre for Economic Studies and Planning, Dr. Nirmala Padmanabhan, Associate Prof., St. Teresas College and Mr. C. J. George, MD, BNP Paribas spoke on the occasion. Dr. Subrat Das, Director, CBGA conveyed the vote of thanks.



Sri. Kureepuzha Sreekumar, Poet, inaugurating the University Union 2012-13. Dr. M. Bhasi, Dr. A. Ramachandran, Cusat Vice Chancellor Dr. Ramachandran Thekkedath, Dr. Godfrey Louis, Ms. Aparna Nair, Sri. Mansoor Ali, Chairman, Nidheesh Joseph, Nithin S, General Secretary and Shiju. N are looking on. University, Dr. A Ramachandran, Member, Syndicate, Cusat Registrar Cusat, Dr. M. Bhasi, offered felicitations.

## **Prof. M. V. Pylee Award Presented**

Prof. M. V. Pyee Award for the year 2012, instituted in Cochin University of Science Technology for and the Distinguished Academician of India was given to Dr. Lalji Vice Singh, Chancellor, Banaras Hindu University, on February 2013 at 7 the International School of Photonics Auditorium. The prize money and the memento were presented by Prof. M. V. Pylee, former Vice Chancellor of Cusat. Cusat Vice Chancellor Dr. Ramachandran Thekkedath, presided over the function. Dr. Godfrey Louis, Pro Vice-Chancellor, Dr. K. G. Nair, Director, Centre for Society. Science in Prof. Harikumar. Prof. Nedumudi K. Sajan, Members of the **Syndicate** and Dr. A.



Prof. M. V. Pylee former Vice Chancellor, Cusat handing over the Prof. M. V. Pylee Award to Dr. Lalji Singh, Vice Chancellor of Banaras Hindu University. Dr. K. Sajan, Prof. Nedumudi Harikumar (Syndicate Members), Cusat Vice Chancellor Dr. Ramachandran Thekkedath, Dr. Godfrey Louis, Pro-Vice Chancellor, Dr. K. G. Nair, Director, C-SiS and Dr. A. Ramachandran, Registrar are looking on.

Ramachandran, Registrar spoke in the occasion.

The previous recipients of the prestigious award were Prof M. N. Srinivas (Internationally reputed Sociologist), Prof. Jayant V. Narlikar (Reputed A s t r o p h y s i c i s t ), Padmabhushan Dr. M. S. Valiathan (well-known Educationalist), Dr. K. Venkatasubramanian (former member, Planning Commission of India), Dr. V. N. Rajasekharan Pillai (Vice-Chancellor, Indira Gandhi Open University, New Delhi) and Dr. K. L. Sebastian (AmruthMody Chair Professor in Chemistry, IISc).



Dr. Godfrey Louis, Pro-Vice Chancellor hoists the flag at the Sports meet during the Track & Field and Games Meet 2012-13. Dr. K. Ajith Mohan, Asst. Director, Dept. of Physical Education and Dr. A. Ramachandran, Registrar are also seen.

## **SOE dazzles at Cusat Sports Meet**

The 30th Inter-Collegiate Track & Field and Games Meet 2012-13 valedictory function conducted from 2-16 February 2013 was inaugurated by Dr.Godfrey Louis, Pro-Vice Chancellor at the University

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ground in the presence of the Syndicate members and Registrar with march-past of athletes. The Meet was successfully organized with the active participation of 2500 students from 27 affiliated colleges and

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various departments. Over all championship for Athletics as well as Games was bagged by the School of Engineering, Cusat.

The individual championship for men was won by Mohammed Rafi, College of Engineering, Kidangoor and that for women was won by Sheryl Thomas of College of Engineering.

Prize distribution was done by Cusat Vice Chancellor Dr. Ramachandran Thekkedath in the presence of Dr. Job Kuruvila, Director, TocH Institute of Science and Technology, Dr. Sreejith P. S, Principal, School of Engineering, and Nithin S, General Secretary, Students Union on 16 February.

## Inter-University Youth Festival: Cusat Truimphs

The National Inter-University Youth Festival conducted at Kalyani University, West Bengal witnessed the Cusat team claiming the overall crown in theatre section and emerging runners-up in the literary section. The team had competed in six items including classical vocal solo, light vocal solo, mimicry, mime, debate and western group song at the youth festival. Akhiljith A. from Dept. of Instrumentation came in first for mimicry, while the team comprising of Aruna A, Kavya G (Legal Studies), Fahad P. Zaheer (Polymer Science), Isahaq Rahman, Gokulakrishnan, Nikhil P. N. (SOE) and Hena Titus (Toc H) came toppers for mime. The second prize for western group song was won by Justin Chacko Mohan, Jerish John, Midhu S. Valsan, Aswathi P.S, Ayyap-

pathejus (SOE), Charles Binnv (CUCEK). Arun Naik and Kalesh V (Toc H). Amrita Rai and Joy Andrews secured the second place for debate. The second prize for light vocal solo went to Kalesh V while Arun-Naik (Toc H) earned second prize for classical vocal solo as well as third prize for light vocal solo. The winning team was led by Dr. P. K. Baby, Director, Youth Welfare.

## **Creativity in the Era of Globalization: Seminar held**

It is man's opposition to the invasion by globalization into creativity that prompts him to search for his roots, according to Prof. M. Thomas Mathew, renowned Malayalam literary critic. Today man has been reduced to a mere trader in the global market and the search for his origins can goad him into creativity.

Prof. Thomas Mathew was delivering the key-note address at the UGC sponsored National Seminar on "Creativity in the era of Globalization" organized by the Department of English and Foreign Languages, Cochin University of Science and Technology on 13 March 2013. Man does not become complete through theoretical dialogue. The loss of child-like innocence and its creative fantasies is the biggest problem faced by mankind today. The communication revolution has with the help of globalization trans-

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formed the whole world into a virtual village and the media have devised methods to rein in human thoughts, he added.

Cusat Vice Chancellor Dr. Ramachandran Thekkedath who inaugurated the seminar opined that creativity is essential in science and technology too. Dr. A. Ramachandran, Registrar, Dr.

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N. Mohanan, Head, Dept. of Hindi, Dr. Sarita G Bhat, Head, Dept. of Biotechnology, Smt. Brinda Bala Sreenivasan, Head, Dept. of English and Foreign Languages and Sri. A. Achutha Menon, former Head, addressed the gathering. Around fifty research papers were presented during the two day seminar which came to close on 14 March.



Cusat Vice Chancellor Dr. Ramachandran Thekkedath inaugurates the UGC National Seminar. Dr. Sarita G. Bhatt, Head, Department of Biotechnology, Smt. Brinda Bala Sreenivasan, Head, Department of English and Foreign Languages, Prof. M. Thomas Mathew, noted critic, Dr. A. Ramachandran, Registrar and Dr. N. Mohanan, Head, Department of Hindi are also seen.



Dr. Jose Manuel Pina Gutierrez, Rector, Autonomous University of Tabasco (UJAT), Mexico and Cusat Vice Chancellor Dr. Ramachandran Thekkedath sign documents after discussions on exchange of technology for freshwater shrimp breeding. Dr. Godfrey Louis, Pro -Vice Chancellor, Sri. K. V. Mohanan, Assistant Registrar, Dr. A. Ramachandran, Registrar, Sri. K.M. Ibrahim, Assistant Registrar, Dr. S. David Peter, Director, IRAA, and Ms. M. C. Rosa Martha Padron Lopez are looking on.

## **Mexican team visits Cusat**

A team of academicians from the Autonomous University of Tabasco (UJAT), Mexico visited Cochin University of Science and Technology on 01 April 2013. The team consisting of Dr. Jose Manuel Pina Gutierrez, Rector, Ms. M.C. Rosa Martha Padron Lopez, Dr. Jeane Rimber Indy and Dr. Martha Pererra Garcia was received by Dr. A. Registrar. Ramachandran, They had detailed discussions with Cusat Vice Chan-

cellor Dr. Ramachandran Thekkedath, Dr. Godfrey Louis, Pro-Vice Chancellor, Dr. David Peter, Director, IRAA and other officers regarding technology for breeding fresh water shrimps of the Macrobrachium rosenbergii species. The Mexican team accompanied by Dr. A. Ramachandran, Registrar and Director. School of Industrial Fisheries visited several shrimp farms in the state to study the fresh water shrimp cultivation.

#### Office Automation Tools: TEQIP training programme held

The Division of Information Technology, School of Engineering, Cochin University of Science and Technology organized a Short Term Training Programme (STTP) on Office Automation Tools and Practices from February 25 to March 1, 2013.

The programme under TEQIP phase II was aimed at the University administrative staff

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as well as teachers and nonteachers from recognized engineering colleges and polytechnics, with the objective of empowering them with the usage of the latest office automation tools. Resource persons included members of the University faculty, experts from various industries and practising professionals in the subject areas.

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## National award for Cusat VC

The National Unity Conference. New Delhi has bestowed prestigious the "Maulana Azad Puraskar for Educational Upliftment 2012" upon Cusat Vice Chancellor Dr. Ramachandran Thekkedath. The announcement was made by Dr. G.V.G. Krishnamurthy, President (former Election Commissioner of India) and Gurindar Singh (Member, Press Council of India) of NUC. The award was presented on 11 November 2012, the National Education Day.

## Open Source Tools in IT: Workshop held

A five-day short term training programme on Innovation & Open Source Tools in IT, organized by the IT Division of School of Engineering, Cusat, was held from 4-8 March. K.C. Chandrasekharan Nair, Managing Director, TBI inaugurated the workshop.

"Kerala is on IT boom and in the next five years, the growth of IT would be beyond predictions", he said.

Dr. Godfrey Louis, Pro-Vice Chancellor, Dr. A Ramachandran, Registrar, Dr. P.S. Sreejith, Principal, SOE, Dr. Philip Samuel, Head, Division of IT, Dr. G Madhu, TEQIP Co-ordinator, Dr. Varghese Paul, Associate Professor and Santosh Kumar M.B., Co-ordinator, STTP were present. The workshop was organized with an objective to create awareness on how innovation and open source tools work in IT.

## Quality & Employability in Engineering Education: Workshop held



Sri. K. M. Chandrasekhar, Vice Chairman, Kerala State Planning Board, Govt. of Kerala lights the ceremonial lamp. Dr. P Sivanandan, Dr. A. Ramachandran, Registrar, Sri. T.P. Sreenivasan, Vice Chairman, State Higher Education Council and Cusat Vice Chancellor Dr. Ramachandan Thekkedath are also seen.

Improvement of basic infrastructure. use of technology, training to teachers, industry-academia interaction and autonomy in engineering sector must be ensured to achieve excellence according to Sri T.P. Sreenivasan. Vice Chairman, Kerala State Higher Education Council. He also released a booklet published by and inaugurated its EOC website.

The inaugural function was presided over by Cusat Vice Chancellor Dr. Ramachandran Thekkedath where Sri C.P. John, Member, Kerala State

Research focused on technology is highly essential for attaining excellence in engineering education, according to Sri. K.M. Chandrasekhar, Vice Chairman, Kerala State Planning Board.

Promotion of students based on their clearing supplementary exams and maintaining strong relationship between industry and educational institutions are

## <u>'Samakaleen</u> <u>Hindi Upanyas':</u> <u>Book released</u>

'Samakaleen Hindi Upanyas' written by Dr. N Mohanan, Professor, Department of Hindi published by Vani Prakashan, New Delhi has been released by Cusat Vice Chancellor Dr. Ramachandran Thekkedath on 7 February 2013 at Hindi Auditorium. Eminent Hindi critic Prof. Sivakumar Mishra received the book. Dr. A Ramachandran, Registrar presided while Dr. K. A. Zakkariya, Member, Syndicate, R Sasidharan. Dr. Head.

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#### Improvement of basic infrastructure, use of technology, training to teachers, industry-academia interaction and autonomy in engineering sector must be ensured to achieve excellence

also quite necessary, he said, while delivering the inaugural address at the workshop on Quality and Employability issues in Engineering Education at Cusat on 26 April 2013. The workshop was organized jointly by the Equal Opportunity Cell (EOC), Cusat and Institute for Societal Advancement. Planning Board and Dr. Sasi Gopalan, Co-ordinator, EOC spoke. Dr. A Ramachandran, Registrar welcomed the gathering and Dr. P Sivanandan, Governing Body Member, ISA proposed the vote of thanks. Justice K Sukumaran, Chairman, ISA also attended the function.



Cusat Vice Chancellor Dr. Ramachandran Thekkedath and Prof. Sivakumar Mishra hold up copies of the book "Samakaleen Hindi Upanyas" after its release. Dr. R. Sasidharan, Head, Dept. of Hindi, Smt. Brinda Bala Sreenivasan, Head, Department of English and Foreign Languages, Dr. N. Mohanan, Professor and author of the book, Dr. A. Ramachandran, Registrar, and Dr. K. A. Zakkariya, Syndicate member are on the dais.

Department of Hindi &Dean, Faculty of Humanities, Dr. P. V. Vijayan, former head of the Department and Smt. Brinda Bala Sreenivasan, Head, Dept. of English and Foreign

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Languages, delivered felicitations. Dr. K Vanaja, Coordinator welcomed the gathering and Dr. N. Mohanan, Professor, Department of Hindi delivered the vote of thanks.

## Book on Sardar K M Panikkar Released

Sardar K.M. Panikkar. Eminent statesman and wellknown historian was a reputed diplomat who played significant role in deciding the country's destiny before and after its independence, said Thiruvanchoor Sri. Radhakrishnan. Hon'ble Minister for Home. Govt. of Kerala. The Minister was speaking after releasing a book 'Sardar K M Panikkar' authored by Dr. Anil Kumar Vadavathoor. Director. Public Relations and Publications, Cochin University of Science & Technology on 11 May 2013.

The Home Minister said people in the state have forgotten the great leader who acted as a representative of Mahatma Gandhi and



Sardar K. M. Panikkar, the 33rd book authored by Dr. Anil Kumar Vadavathoor is being released by Hon'ble Home Minister Sri. Thiruvanchoor Radhakrishnan & Padmavibhushan Kavalam Narayana Panikkar on 11 May 2013. Sri. Ajith K Sreedhar, Secretary, SPCS, Sri. Ezhacherry Ramachandran, noted poet, Sri. R. Gopalakrishnan, Secretary, Kerala Sahitya Academy ,Sri. Robin Thomas, Secretary, Kottayam Press Club and Dr. Anil Kumar Vadavathoor, Director, PR&P, Cusat are also seen.

Jawaharlal Nehru during the critical moments of the country's independence struggle.

Kavalam Narayana Panikkar, nephew of Sardar K M Panikkar, received the first copy of the book, which was published by Sahithya Pravarthaka Co-operative Society (NBS), Kottayam. Sri. Ezhacheri Ramachandran presided over the function. R. Gopalakrishnan, Secretary, Kerala Sahitya Academy, Robin Thomas, Joint Secretary, Press Club. Kottayam and Β. Sasikumar, Chairman, Publication Committee, SPCS, delivered felicitations. Dr. Anilkumar Vadavathoor welcomed the gathering and Ajit K Sreedhar, Secretary, SPCS proposed the vote of thanks.

## Seminar on Maritime Labour Convention held

The number of Indian seafarers in the international shipping industry is quite low according Gautham to Chatterjee, IAS. Director General-Shipping. Once regarded as a seafaring nation India's representation in the global shipping industry has come down to 6% today, which has to be increased to at least 10 per cent. He was delivering the Special Address at the Seminar on Maritime Labour Convention 2006 organized by the K M School

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of Marine Engineering, Cochin University of Science and Technology on 7 May 2013.

Maritime Labour Convention 2006 which is being strongly pursued by the International Labour Organization on a global basis is expected to bring about uniformity in the operational procedures of all countries. He added that schemes aimed at improving the skills of the personnel in shipping industry are currently being developed by the Directorate General-Shipping. In this connection,

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reputed institutions like K M School of Marine Engineering are being encouraged in their academic activities through positive measures like enhancement of number of seats from 40 to 80.

The seminar was inaugurated by Cusat Vice Chancellor Dr. Ramachandran Thekkedath. S. K. Sinha. Principal Officer, Mercantile Marine Dept., Dr. K. A. Simon, Director, K. M. School of Marine Engineering, Dr. Ρ. V. Sasikumar. Seminar Coordinator Prof. M.G. Nair, Course-in-charge and Roy V. Paul, Associate Professor spoke on the occasion.

## Ph. D Awardees

**Neson Varghese** Studies on transport and magnetic properties of nano particledoped Mg B2 super conductor for technological applications (Dr V Shyamaprasad)

**Raghul Subin S** Characterisation of polyhydroxyalkanoates accumalating vibrios from marine benthic enviornments and production studiesof polyhydroxyalkanoates by vibrio sp BTKB 33 (Dr Saritha G Bhatt)

**Anitha M** Neuronal Degeneration in streptozotocin induced dybaticrats effects of a egle marmelose and pyridoxine in pancreatic b cellsprolife ration and neuronal survival (Dr C S Poulose)

**Thankachan T Pullon** Development of a system of concurrent product and process design for a machine tool factory (Dr M Bhasi)

**Sreenivasan C** Queueing Models with vacations and working vacations (Dr A Krishnamoorthy)

**Praveen R P** Design analysis and realization of zero cogging permanent magnet brushess dc motor for space craft applications (Dr Jagathy Raj V P)

**Bindhumol I** Studies on exopolysaccharide production by probiotic lactic acid bacteria (Dr K Madhavan)

**Resmi E A** Sudden stratospheric warming and its influence on the tropical atmosphere (Dr K Mohan Kumar)

**Suresh M** Grain refinement studies on Mg ANO Mg AI based alloys (Dr U T S Pillai)

**Preetha S** Accountability of corporate managers role of criminal sanctions (Dr A M Varkey)

**Saisy K Esthappan** Polypropylene metal oxide nanocompasitesfiber spinning and evaluation (Dr Rani K Joseph)

**Kiran Kumar V B** Spectral analysis of bounded self adjoint operators a linear algebraic approach(Dr. M.N. Narayanan Namboodiri)

**Rajesh Menon M R** Fabrication and characterisation of polymer hetro junction solar cells using sprayed indium sulfide electron selective layer (Dr K P Vijayakumar)

**Leena R** Chemically modified glassy carbon electrode as sensors for various pharmaceuticals (Dr K Girish Kumar)

**Sumangala K N** Hydrogeochemical quality assessment of ground water.A genaral perspective (Dr C H Sujatha)

**Mohammed Ismail Mujahid Hilal** A STUDY on iternational marketing stratesy for Srilankan Tea (Dr G Antony)

**Vivek M** Probing the active galactic nuclei using optical spectroscopy (Dr V C Kuriakose)

**Nijo Varghese** Studies on quasi normal modes and late time tails in black hole space times (Dr V C Kuriakose)

**Jeena Augustine** Physico chemical and molecular characterization of bacteriophases SP-1 and SP-3 specific for pathagenic salmonella and evaluation of their potential as biocontral agent (Dr Saritha G Bhatt)

**Laila D** Development and investigations of mobile antennas for less radation hazards (Dr P Mohanan)

**Sunil Kumar K** Service quality and reliability assessment of

mobile communication infrastructure (Dr Sreejith P S)

**Rose Philo K J** Study on catalysis by mesoporous ceriamodified with transition metals (Dr S Sugunan)

**Dhanya P R** Effect of spice oleoresins in micribialde contamination and their potential application inquality stabilisation of tuna ceuthynnusaffinis during store (Dr Saleena Mathew)

**Vinesh Kumar B** Reliability concepts in quantile based analysis of life time data (Dr N Unnikrishnan Nair)

**B** Sreelakshmi Molecular approaches for characterisation and determination of pathogenicity of vibros with special reference to vibrio harveyi from penaeus monodonlar val production systems (Dr I S Bright Singh)

**Joyni Jacob M** Fish drivenbioturbation as a viable aquaculture technology for increasing production and improving ecological systainability of giant tiger shrimp penaeus m o n o d o n (f a b r i c i u s) (Dr Madhusoodanakurup)

**K Jayakumar** An Insight in to transition metal complexes of N4 substituted thiosemicarbazones derived from 2benzoylpyridine spectral studies and crystal structures (Dr. M.R Prathapachandrakurup)

**Jaya Latha Gopalakrishnan G** Short nylon-6 fibre/rubber toughened polystyrene composites (Dr Sunil K Narayanankutty)

**Praveen S S** Numerical modelling of Tsnami propogation in the south east arabian seas and inundation along the Kerala coast (Dr N P Kurian)



Campus Notes

#### Cochin University Union Office bearers





Vice Chairman

Monsoor Ali Chairman



Nithin S. Gen. Secretary

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Shiju N. Secretary

The new office bearers of the University Union were administered the Oath of Office by Cusat Vice-Chancellor Dr. Ramachandran Thekkedath on 18 January 2013 at the Syndicate Hall. Dr. Godfrev Louis, Pro-Vice Chancellor and Sebastian Ouseph, Finance officer in-charge of Registrar, Cusat felicitated the new Office bearers. Dr. D Mayoothu. Treasurer, Cochin University Union presided over the function.

The new office-bearers are Chairman - Mansoor Ali, BBA LLB (Hons.) VI Sem., School of Legal Studies, Vice-Chairman -Nidheesh Joseph, IV Sem., M.A Economics, Department of Applied Economics, General Secretary - Nithin S, LLM II Sem., School of Legal Studies, Secretary - Shiju. N, B.Tech. Electronics & Communications, VI Sem., School of Engineering, Cochin University of Science and Technology.

#### Cusat international rating Chess tournament held

The 24th Cusat International Rating Chess Tournament was conducted jointly by Cusat Chess Club, Department of Youth Welfare, Department of Physical Education and Cochin University Union. Sri. K. Babu, Hon'ble Minister for Fisheries and Excise, Govt. of Kerala inaugurated the Tournament on 10 May 2013.

Cusat Vice Chancellor Dr. Ramachandran Thekkedath presided over the inaugural function while Dr. P. K. Baby, Director, Students Welfare welcomed the gathering. Dr. Godfrey Louis, Pro-Vice Chancellor, Cusat, Dr. K. A. Zakkariya, Syndicate Member, Cusat, Dr. A. Ramachandran, Registrar and M. Kannan, President, Ernakulam Chess Association offered felicitations. Dr. P. G. Sankaran, Chairman, Organizing Committee proposed the vote of thanks.

Syed Anwar Shazuli won the tournament by a one-point margin on 13th May. The experienced ICF player finished with 8 wins and 2 draws to top the table with 9 points, while the second and third placed R. A. Pradeep Kumar and FM Srinivasa Rao could only manage 8 points each.

The Cusat chess club has been conducting the chess tournament consistantly for 24 years and chess enthusiasts from allover the country had participated the programme.

#### **Conference on Software Engineering**

NCSOFT 13 is the fourth conference in this series. The event will be composed of keynote lectures, invited presentations, research presentations and tutorials. NCSOFT invites researchers, practitioners and educators to present and discuss the innovations, trends, experiences and concerns in the field of software engineering. Details can be had from http://ncsoft.cusat.ac.in & Prof. K. Poulose Jacob at ncsoft@cusat.ac.in

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#### **Tejus Editorial Advisory Board**

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#### **Glimpses of the Hon'ble Vice President's Programme**



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