



ITIHAS

(IT Is Happening At SASTRA)

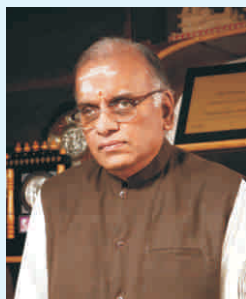


Newsletter from SASTRA University

Vol. 11

IV Quarter

2011



Message from VICE - CHANCELLOR

SASTRA is delighted at the national recognition given to Srinivasa Ramanujan, the great mathematical genius, who spent his formative years in Kumbakonam. Inaugurating the 125th

Birth Anniversary function in Chennai, our Hon'ble Prime Minister declared December 22, (Ramanujan's birth day), as National Mathematics Day and 2012 as the National Mathematics Year.

SASTRA University in its own way venerates the great genius and perpetuates his memory. We have named our Kumbakonam Centre after Srinivasa Ramanujan and have built in it a museum of his works. We have also purchased his house at Kumbakonam and maintaining it as a monument. The University holds an International Conference on Number Theory – the area of Ramanujan's special interest – every year on the eve of his birthday. The SASTRA-Ramanujan Award is an annual award for valuable contribution in Number Theory. The award comprises a citation and a prize of USD 10,000. This year's awardee is Dr. Roman Holowinsky of Ohio State University, USA. Dr. Holowinsky received the award in the 125th birth anniversary function held at Srinivasa Ramanujan Centre, Kumbakonam.

The School of Chemical and Biotechnology, SASTRA has been ranked first among private Biotechnology Schools in the BioSpectrum Biotech School Survey 2011. SASTRA's infrastructure, quality of faculty, industry interactions and placement records are the reasons for this honour. The award was handed over to SASTRA on December 16, 2011 at a function held in Bangalore.

To cater to the energy requirements of the hostels of the university, an 80 KW Biogas Plant of 600m³ capacity has been set up in the campus. The plant was inaugurated on December 16, 2011.

During December 2011, seven Faculty Development Programmes were organized by various schools of SASTRA in different disciplines. Nearly 300 faculty members of Engineering and Science Colleges of the neighbouring districts were benefitted by these free programmes. Two other FDPs were organized for the junior faculty members of SASTRA.

A girl NCC Cadet of SASTRA attended the Youth Exchange Programme in Singapore held in December 2011.

The present number of ITIHAS comes to your hands with many more details.

Wish you a Happy and Prosperous New Year 2012.

Prof. R. Sethuraman
Vice-Chancellor

125th BIRTH ANNIVERSARY CELEBRATIONS OF SRINIVASA RAMANUJAN

The 125th Birth Anniversary of Srinivasa Ramanujan was held at Srinivasa Ramanujan Centre, SASTRA University, Kumbakonam on December 22, 2011. Dr. R. Kannan, I.A.S., Principal Secretary of Higher Education, Government of Tamilnadu, who inaugurated the celebrations and an International Conference on Number Theory, Ergodic Theory and Dynamics said: "Srinivasa Ramanujan has remained and will continue to remain a source of inspiration for researchers all over the world." He complimented SASTRA's efforts in propagating the works of Srinivasa Ramanujan and encouraged the youth to draw inspiration from the works of Ramanujan. He also interacted with various foreign speakers of the international conference.

SASTRA-Ramanujan Award

Dr. Kannan handed over the SASTRA-Ramanujan Award for the year 2011 to Prof. Roman Holowinsky of the Ohio State University, U.S.A. The award was presented for his spectacular work in analytic number theory and the theory of modular forms – contributions that have significant implications in a broad range of areas in mathematics and even in physics. This award carries a cash prize of USD 10,000 and a citation.

Dr. Holowinsky pursued some connection of Quantum Unique Ergodicity (QUE) conjecture with mathematics and physics. The award recognises Holowinsky's



Dr. R. Kannan presents the SASTRA Ramanujan Award to Dr. Holowinsky



seminal paper with Prof. Kannan Soundarajan in the Annals of Mathematics in 2010, which resolved the QUE Conjecture of Zeev Rudnick and Peter Sarnak in the important case of holomorphic forms.

Dr. Krishnaswamy Alladi, Chairman of the SASTRA-Ramanujan Award Committee and Professor at University of Florida, who read the award citation said the SASTRA-Ramanujan award has become one of the prestigious mathematics prizes in the world.

Dr. S. Vaidhyasubramanian, Dean, Planning and Development, SASTRA University, said the SASTRA-Ramanujan award was established in 2005 to honour outstanding contributions by very young mathematicians to areas influenced by the genius Srinivasa Ramanujan. The age limit has been set at 32 because Ramanujan achieved so much in his brief life of 32 years. Prof. R. Sethuraman, Vice-Chancellor, SASTRA was also present.

International Conference on Number Theory, Ergodic Theory and Dynamics

In the International Conference on Number Theory, Ergodic Theory and Dynamics organized on the occasion, Prof. Eknath Gate, TIFR, Mumbai, Prof. Krishnasamy Alladi, University of Florida, USA, Dr. Herald Helfgott, University Walk, UK, Dr. Paul Nelson, Ecole Polytechnique, Switzerland and Shri. Subburam, Research Scholar, SASTRA presented papers on various topics related to Number Theory, Ergodic Theory and Dynamics.



Dr. Holowinsky delivering the Srinivasa Ramanujan Commemorative lecture

Srinivasa Ramanujan Commemorative Lecture

Dr. Roman Holowinsky of Ohio State University, the winner of SASTRA Ramanujan Award for the year 2011, delivered the Srinivasa Ramanujan commemorative lecture.

Special Schemes

SASTRA University has announced on the occasion of the 125th Srinivasa Ramanujan Birthday Celebrations, schemes to encourage researchers and young students to embark on a career in Mathematics which include research scholarships, SASTRA-Ramanujan Lecture Series and SASTRA-Ramanujan Whiz Quiz. All these schemes are in addition to the existing SASTRA-Ramanujan Award instituted in the year 2005. Prof.R.Sethuraman, Vice-Chancellor presided over the function.





SASTRA UNIVERSITY

SRINIVASA RAMANUJAN CENTRE

KUMBAKONAM, TAMIL NADU, INDIA



SASTRA – RAMANUJAN AWARD 2011

Citation

Roman Holowinsky is awarded the 2011 SASTRA–Ramanujan Award for his spectacular work in analytic number theory and the theory of modular forms – contributions that have significant implications in a broad range of areas in mathematics and even in physics. The QUE Conjecture was motivated by investigations in physics on quantum correspondence in chaotic systems and the recognizes his research as a fine example of great mathematical work of lasting value inspired by a problem in physics. The QUE Conjecture has connections with several important areas within mathematics – the Generalized Riemann Hypothesis, Poincare series, Maass forms, cusp forms, the Sato–Tate conjecture – to name a few. Dr. Holowinsky has been pursuing some of these connections in depth.

Along with Prof. Kannan Soundararajan of Stanford University (winner of the SASTRA-Ramanujan Award in 2005), Dr. Holowinsky solved an important case of the famous Quantum Unique Ergodicity (QUE) Conjecture in 2008, which is a spectacular achievement. The joint work of Holowinsky and Soundararajan appeared in the Annals of Mathematics (2010), and the two papers of Holowinsky on “A sieve method for shifted convolution sums” and “Sieving for mass equidistribution” appeared in the Duke Mathematical Journal (2009), and Annals of Mathematics (2010), respectively.

Dr. Roman Holowinsky has made very significant contributions to areas which are at the interface of analytic number theory and the theory of modular forms. The Award recognizes his seminal paper with Prof. Kannan Soundararajan in the Annals of Mathematics in 2010, which resolved the well known Quantum Unique Ergodicity (QUE) Conjecture of Zeev Rudnick and Peter Sarnak in the important case of holomorphic modular forms. His paper on sieve methods and shifted convolution sums in the Duke Mathematical Journal in 2009 was crucial to the final resolution of the QUE Conjecture in the holomorphic case. The Award notes that the origins of his work go back to his 2006 Ph. D. thesis on shifted convolutions sums and Quantum Unique Ergodicity.

Roman Holowinsky was born on July 26, 1979. He obtained a Bachelors' in Science from Rutgers University in 2001 and continued at Rutgers to do his doctorate and received his Ph. D. in 2006 under the direction of Prof. Henryk Iwaniec. He held postdoctoral visiting positions at the Institute for Advanced Study, Princeton (2006–07 and 2009–10), the Fields Institute, Toronto (2008), and the University of Toronto (2007–09), before joining the permanent faculty at Ohio State University. At the young age of 32, Dr. Holowinsky is a major figure in the fields of analytic number theory and the theory of modular forms. In recognition of his spectacular contributions, he was awarded the prestigious Alfred P. Sloan Foundation Fellowship in 2011.

Roman Holowinsky was the unanimous choice of the SASTRA-Ramanujan Award Committee to receive the award this year. The international panel of experts who formed the 2011 Committee were: Chair – Krishnaswami Alladi (University of Florida), Frits Beukers (University of Utrecht), Benedict Gross (Harvard University), Christian Krattenthaler (University of Vienna), Ken Ono (Emory University), Robert Vaughan (The Pennsylvania State University), and Akshay Venkatesh (Stanford University). Previous winners of the SASTRA-Ramanujan Award were Manjul Bhargava and Kannan Soundararajan in 2005 (two full prizes), Terence Tao in 2006, Ben Green in 2007, Akshay Venkatesh in 2008, Kathrin Bringmann in 2009, and Wei Zhang in 2010. Thus Roman Holowinsky joins this impressive list of brilliant mathematicians who have made monumental contributions at a very young age.

Place : Kumbakonam

Date : December 22, 2011


Prof. R. SETHURAMAN
 VICE-CHANCELLOR

SASTRA REMEMBERS RAMANUJAN

SASTRA FELT

SASTRA DID

SASTRA WILL DO

WHAT SASTRA FELT?

SASTRA University felt the need to perpetuate the works of legendary maths genius Srinivasa Ramanujan who spent most of his formative years in Kumbakonam.

WHAT SASTRA DID?

- ✍ Purchased the house of Srinivasa Ramanujan in Kumbakonam in 2000 and maintaining it as a monument
- ✍ Established the Srinivasa Ramanujan Centre in Kumbakonam in 2000 and conducted free coaching classes in Maths for high school students
- ✍ Srinivasa Ramanujan Centre was inaugurated by the then President Dr. APJ. Abdul Kalam during 2003 and MHRD recognised it as an off-campus centre of SASTRA, Thanjavur
- ✍ DST established two Chair Professorships in Discrete Maths & Number Theory which were successfully completed by producing Ph.D. graduates and quality publications. Awaiting extension for another term
- ✍ From 2003, organising Annual International Conferences in Number Theory & an area influenced by Ramanujan during December 21 & 22 with the participation of renowned scientists from all over the world
- ✍ Instituted the SASTRA-Ramanujan Award in the year 2005 with an International Award Selection Committee. The award carries a citation and cash prize of USD 10,000. This award is given to outstanding work in areas influenced by Ramanujan by any young mathematician under the age of 33. Recipients of this award so far have been from Harvard, Stanford, Cambridge, Princeton, UCLA, Ohio State, University of Michigan and Cologne
- ✍ Established the "House of Ramanujan Mathematics" (A museum on Ramanujan) inside its Campus

WHAT SASTRA WILL DO?

- ✍ Establish the SASTRA-Ramanujan Research Scholarship to encourage researchers and young students to embark on a career in Mathematics. 10 post-graduates will pursue Ph.D. in any area influenced by Ramanujan. The Ph.D. scholar will be awarded a monthly stipend from Rs.12,000 to Rs. 16,000 for four years
- ✍ Eminent researchers from all over the country will visit SASTRA as part of the SASTRA-Ramanujan Lecture Series
- ✍ The SASTRA-Ramanujan Whiz Quiz carrying a cash award of Rs.1,00,000 for the winning team in the National Level Quiz on Ramanujan & Mathematics for school students
- ✍ "Maths Matters", a school level project design contest to enthuse application based mathematics
- ✍ A grand valediction on December 22, 2012 which comprise International Conference, Awards, Scholarships, etc.
- ✍ Modernize the Srinivasa Ramanujan Museum.



LECTURE ON “RESEARCH OPPORTUNITIES IN TN

Dr.R.Kannan IAS., Principal Secretary, of Higher Education, Government of Tamilnadu, delivered a special lecture on “Research Opportunities in Tamilnadu” on December 23, 2011. In his lecture, he mentioned that the Honourable Chief Minister of Tamilnadu had assured, in the policy note of the state government that necessary support would be given for research in frontier areas like Bio-Technology and Nano Technology. Further, he said that in spite of having all the required wisdom for a very long period, India is looking towards the West. But time has come that India should reassert its old position in knowledge leadership. India is emerging as a knowledge creator than knowledge user. Emergence of Tamilnadu as an automobile hub of the world is a testimony to it. Besides, scope for research in traditional Indian medicine and many other areas is very high in Tamilnadu, said Dr. Kannan.

Industry Institute Interaction Meet

Earlier, Dr. Kannan inaugurated the Industry-Institute Interaction Meet. Dr.Vasantha Muthusamy, Former Senior Deputy Director General of Indian Council for Medical Research (ICMR) and the Chair Person, Steering Committee, National Facility for Herbo-Mineral Toxicity at SASTRA highlighted the importance of Industry-Academia interaction. She said that the safety and efficacy of Indian herbal formulations had been frequently questioned by the West. However, the whole world is looking at India and China for curing the incurable diseases using their traditional system of medicine. She appreciated SASTRA for making significant contribution to the world of research by promoting various research programmes in the campus. Both proposed and existing research facilities funded by various government agencies are being well utilized



by the researchers and Industries to benefit the society at large. She further added that though various government agencies are ready to fund good research projects, very few institutions like SASTRA that possess the required capabilities are availing it.

In the Industry-Institute meet held at SASTRA, heads of R& D departments and organizations and executives from 32 pharma and other industries participated and deliberated the scope for promoting industry-academia partnership through research. Prof.R.Sethuraman, Vice Chancellor, SASTRA presided over the function. He said the proposed “National Facility for Herbo-Metalic preparation of Ayurvedha, Siddha, Unani” was a joint venture between the Department of Science and Technology and SASTRA. The facility will be set up at a cost of Rs.12 crore in which the DST is contributing 70% and SASTRA is contributing 30% of the total project cost. Dr.S.Swaminathan, Dean, Sponsored Research, SASTRA University explained the various ongoing research projects and the research facilities available at SASTRA to the guests.

Dr.M.Vijayalakshmi, Associate Dean, School of Chemical and Bio-Technology welcomed the gathering and Dr.V.Badrinath, Dean, School of Management and Director, Training & Placement proposed a vote of thanks.

SASTRA SEALS TOP SPOT IN BIOTECH EDUCATION

School of Chemical and Biotechnology, SASTRA University, has been ranked first among private biotechnology schools in India in the BioSpectrum Biotech School Survey 2011. The university was ranked the top biotech school during 2007-08 and 2008-09 also.

Evaluation by BioSpectrum is based on excellence in infrastructure, quality of faculty, industry interactions and placement records. This year, SASTRA University emerged first with top scores in faculty, placement and infrastructure. The university's curriculum is industry-relevant with emphasis on cutting-edge research and experiential learning.



Dr. S. Swaminathan receives the award

The merit-based admissions, state-of-the art facilities, global visibility through collaborations with renowned universities such as Harvard-MIT, Johns Hopkins, Leicester and Windsor, and multi-national companies such as Siemens, and Larsen & Tubro, have enabled SASTRA to retain the top spot in India's biotechnology education.

The university has filed five Indian and five international patents in the past three years. The school has continuously been launching research initiatives in thrust areas, including pharmaceutical technology, medical nanotechnology, drug design and the Indian systems of medicine in order to respond to the emerging scientific challenges.

Dr. S. Swaminathan, Dean, Sponsored Research & Director, Centre for Nanotechnology & Advanced Biomaterials (CeNTAB), received the award in Bangalore from Dr. Lalji Singh, Former Director, Centre for Cellular & Molecular Biology (CCMB), Hyderabad, and presently Vice Chancellor, Banaras Hindu University, on December 16, 2011.



Mr. P.R. Muralidharan inaugurates the Biogas Plant

power plants have necessitated the development of multiple networks of renewable energy installations. He highlighted the advantages of renewable energy and urged everyone to focus on improving the efficiency and reducing the cost of renewable energy.

Dr. K. Uma Maheswari, Associate Dean, welcomed the gathering and Dr. P. Meera, Convenor, proposed a vote of thanks.

SASTRA DONATES 100 COTS TO THANJAVUR MEDICAL COLLEGE HOSPITAL

SASTRA University, as part of SASTRA's Community OutREach (SCORE) activity, has donated 100 cots and mattresses to the Thanjavur Medical College Hospital. This additional facility is for the benefit of the inpatients admitted to this renowned hospital. The estimated cost of the cots and mattresses is Rs.7.00 lakhs and was handed over by Dr. S. Vaidhyasubramaniam, Dean – Planning & Development, SASTRA University, to Dr. T. B. Uma Devi, Dean, Thanjavur Medical College Hospital, on 3rd January 2012.

It is also noteworthy to point out that the students and faculty members of SASTRA University, through their NSS Units, have participated in numerous blood donation camps and have the distinction of being the largest donor to the Blood Bank at Thanjavur Medical College.



80 KW BIOGAS PLANT COMMISSIONED AT SASTRA

Mr. P. R. Muralidharan, Deputy General Manager, Tamil Nadu Energy Development Agency (TEDA) inaugurated the 80 KW Biogas Plant of 600 m³ capacity at SASTRA University, Thanjavur, on December 16, 2011. The plant utilizes human and animal waste to produce power and will cater to the energy requirements of the hostels. He lauded the efforts of SASTRA in promoting R&D in photovoltaics, wind energy and biomass conversion.

Mr. Muralidharan who also inaugurated the 2-day Symposium on New and Renewable Energy (SYNERGY 2011), said that 'Tamil Nadu leads the country in harnessing renewable energy sources'. The Symposium aimed at bringing experts and budding young researchers from academia and industry to discuss the current energy scenario of the country and explore the feasibility of various renewable energy options with respect to socio-economic considerations. Mr. Muralidharan emphasized the need to identify, develop and nurture alternate energy sources. He pointed out that nearly 65% of India's energy requirements are dependent on thermal power and only 11% of our energy demand is met by renewable energy sources. Out of India's renewable energy installations, 42% are based in Tamil Nadu. However, the fast dwindling fossil fuel reserves coupled with the high transmission & distribution losses involved in thermal

SASTRA'S ASSISTANCE TO GOVT. SCHOOLS



Owing to the Children's day celebrations on November 14, 2011, SASTRA University donated 33 steel cupboards to the Municipal Middle and Elementary Schools, managed by the Thanjavur Municipality and Kumbakonam Municipality. These steel cupboards, worth Rs.2.25 lakhs, have been provided at their request so as to keep the library books in safe custody. This will be useful to the children studying in these schools. These cupboards have been donated at a function held in the Office of the District Elementary Education Officer, Sivangai Park, Thanjavur and Srinivasa Ramanujan Centre, SASTRA University, Kumbakonam, on 14.11.2011.

For the higher secondary schools, 360 students from 15 higher secondary schools in Thanjavur and Tiruchirapalli Districts have been given training on "Personality & Career Counselling Test", with the help of M/s. Besant Raj International Ltd., Chennai. This online test helped the students to understand the strengths and weaknesses in their personality, level of their reasoning skills, identify the areas for improvement and choose the kind of career suitable for their personality.

Further, SASTRA University has decided to offer an incentive of Rs.10,000/- each to the teacher-student, who scores overall highest marks with Tamil, English, Mathematics, Science and Social Studies in B. Ed. (Distance Mode) examination, conducted by SASTRA University. Apart from this, each school from which the teacher, who has got overall first mark in the University Examination, will have the benefit of Rs.20,000/- towards the purchase of books, laboratory equipment and sports material. This financial assistance is intended to improve the middle and elementary schools in villages. Hence, this assistance is restricted to teachers hailing from the middle and elementary schools. This assistance is being offered to the teacher-student from the batch of 2010.

SASTRA TEAM WINS TCS BEST STUDENT PROJECT AWARD

The Best Student Project Award 2011, instituted by TATA Consultancy Services (TCS), has been given to three students of SASTRA University this year.

The award was presented by Dr. K. Kesavasamy, Global Head of TCS Academic Interface Programme and Head of TCS, Thiruvananthapuram, at a function held at SASTRA University on 14th October, 2011. The award carrying a gold medal each and a sum of Rs.20,000/- was given to the team consisting of Sow. N. Indumathi, Chi. S. Irfan Basha and Sow. Mandadi Siva Sowmya for their project "Secure Classification and Transfer of E-mails." Cloud computing is being increasingly used across the globe for cost effective computational services. The work is related to improving the security of transactions of Email servers present on a cloud.

Dr. Kesavasamy said that SASTRA is a special partner with TCS and both institutions collaborated on teaching-learning, research and students projects. With respect to research, TCS had taken up a huge research project for four years in biotechnology with SASTRA. This year, a record number of 1,755 students had been placed with TCS from SASTRA, he said.

Dr. K. Kesavasamy also gave a cheque of Rs.1.50 lakhs, sanctioned by the Vice-Chancellor, SASTRA University, to Sow. R. Aparna, a final year B.Tech. student, who won the bronze medal in Commonwealth Chess Championship, that concluded in South Africa recently.



FACULTY DEVELOPMENT PROGRAMMES

Seven Faculty Development Programmes (FDPs) were organised by various Schools of SASTRA on December 19 & 20, 2011, in different areas of expertise. The FDPs were organised with a view to contribute to the very essential need for improving the quality of teaching for faculty belonging to Engineering and Science Colleges. All these programmes were offered free of cost and free board and lodging were provided to participants. In each of the programmes, 30-50 faculty members from Engineering and Science colleges from Trichy, Thanjavur, Tiruvarur, Nagapattinam, Pudukkottai, Perambalur and other districts participated.

COMPETENCY UPDATION IN CLASSROOM COMMUNICATION

The FDP on 'Competency Updation in Classroom Communication' was organized by the Department of English. Dr. P. Prema, Dean, Faculty of Education, Alagappa University, Karaikudi who inaugurated the programme exhorted the participants to make earnest efforts to learn and update their knowledge and skills in teaching. Dull methods of teaching will not motivate the students hence the teachers should innovate their teaching methodology, said Dr. Prema. She also handled two sessions on 'Deciding, Defining and Designing a Research Investigation.'

Sessions on Transforming Student Learning with Classroom Communication, Pedagogical Skills, Communicative Competence for Effective Curriculum Transaction, Classroom Management and Multi-Disciplinary Approach in Higher Education were handled by senior faculty members of the Department.



MATHEMATICAL TOOLS FOR ENGINEERING RESEARCH

The Department of Mathematics, conducted an FDP on Mathematical Tools for Engineering Research. The main thrust of the FDP was using Mathematics as a modeling tool for investigating physical phenomena and analyzing problems and situations that engineers face in the course of their projects and research. Dr. K. Thaygarajan, Dean (Research), SASTRA, who inaugurated the programme spoke on the importance of Mathematics in Engineering applications and challenges.



On the first day, sessions were handled on the interplay of mathematical insights into probabilistic neural network followed by an overview of the utility of Operations Research, Graph Theory and Number Theory for Engineering Applications. The applicability of Number Theory to Image Processing, Probability, Artificial Neural Networks, Support Vector Machines, Graph Theory and Summability Theory were the topics handled by the professors of the department on the second day.

WORLD CLASS MANUFACTURING

The FDP on 'World Class Manufacturing' was organized by the School of Mechanical Engineering. The programme presented the various cutting edge



technological aspects of world class manufacturing and the challenges & opportunities in modern manufacturing. Different perspectives of World Class Manufacturing such as Robotics & Intelligent Automation, Challenges faced by Indian Manufacturing Industry today and Optimization Techniques in Manufacturing were discussed. The participants also visited the Shanmugha Precision Forging, an industrial unit attached to SASTRA, which houses world class manufacturing and inspection facilities.

FUNCTIONAL NANOMATERIALS - SYNTHESIS & CHARACTERIZATION

The School of Chemical & Biotechnology, organized an FDP on Functional Nanomaterials - Synthesis & Characterization

Sessions were held on Synthesis of Functional Nanomaterials, Nanosensors & Devices, Nanofluids, Characterization of Nanomaterials by Microscopy, Characterization of Nanomaterials by Spectroscopy, Nanobio technology, Energy Materials and Optoelectronic materials. Laboratory sessions were also conducted on Synthesis and characterization of nanomaterials.



CHALLENGES ON CAMPUS NETWORKING

The FDP on “Challenges on Campus Networking” was organized by School of Computing. Dr. P. Swaminathan, Dean, School of Computing inaugurated the workshop and spoke on “Needs of Internet Technologies”. Mr. Sudhakar Murugasen, Assistant Consultant, Tata



Consultancy Services, Chennai handled sessions on: (i). Components and Architecture of Internet,(ii). Features of Sub-Netting and Super-Netting, and (iii). Design Models for Servers Integration & Internet Security Issues. Practical sessions were conducted on: Firewall Configurations, Network Topology, Wired and Wireless Design Models and Servers Integration Policies.

OFFICE AUTOMATION TOOLS

Department of Computer Applications, School of Computing organized an FDP on 'Office Automation Tools.' The programme provided an excellent platform for the participants to learn Basics of Computers, MS-Word, MS-Excel, MS-Power Point and Internet Basics. They were exposed to unique professional learning and on-hand experience that presented them with knowledge and skills to create and support innovative e-administration.



APPLICATIONS OF SMART SYSTEMS IN ELECTRICAL SCIENCES

School of EEE organized an FDP on “Applications of Smart Systems in Electrical Sciences.”

Each topic was covered with a brief introduction and more on applications. The topics covered included Smart grid power quality and its diagnostics using Neural Networks, Machine vision, Embedded processor selection, Smart instrumentation techniques and R I S C processors, and E m b e d d e d Security. There was a demo on U n i f i e d Learning Kits .



FACULTY INDUCTION PROGRAMME

A Faculty Induction Programme was organized by the Department of Training and Placement to the newly joined faculty members of SASTRA on 19th and 20th December 2011. 22 staff members attended the programme. Dr.V. Badrinath, Director, Department of Training and Placement spoke on 'SASTRA -A Right Destination.' Dr.V. Selvavinayagam, Professor, DDE spoke on the topic 'Be a Role Model.' Dr.S. Pugazhenth, Dean, School of Mechanical Engineering elaborated on Service Rules, Dr.N. Seshadri, Director DDE, handled a session on 'Student Psychology and Classroom Management.' Dr. K.S.Rajan, Associate Dean, SCBT spoke on 'Modern Teaching Methods' and Mr. Aadhi Sundararajan, Joint Librarian facilitated the gathering on Library resources at SASTRA.



FDP ON EFFECTIVE CLASSROOM COMMUNICATION

Department of English, SRC, SASTRA University conducted a Faculty Development Programme for the teaching Staff of Commerce, Science and Technology Departments of SRC, SASTRA Kumbakonam on 19th and 20th December 2011. Fr. Dr. Peter Francis, Former Principal of Loyola College, Chennai, Dr. C.N. Srinivasan, Former Professor of English, Sultan Qaboos University, Muscat, Dr. D.E. Benet, Associate Professor of English, National College, Tiruchirapalli were the external resource persons. Major A. Balasubramanian, Principal, School of Education, SRC, Dr. B. Krishnamurthy and Dr. R. V. Ram of the Department of English, SRC, were the internal resource persons. In



eight sessions, they dealt with Classroom Strategies, Cognitive Development, Strategies in Communication, Neutral Accent, Lateral Thinking, "Translating' Textbooks in the Classroom, Grammar and Fluency in Classroom. 87 participants attended the programme. 40 M.A. (English) B. Ed. students also attended the programme. The programme succeeded in promoting among the participants an awareness about what, how and why of communicative competence and lateral thinking.

GANAKOTSAV'11

Ganakotsav'11, an intercollegiate technical festival was organized by the Department of Computer Applications on October 13 & 14, 2011. Dr. Sunderasan Krishnan Iyer, Group Leader-Education & Research Infosys Technologies Limited, Mysore inaugurated the programme.

Students from 27 institutions participated in a host of technical events like: Web Designing, Virus Mania, Network Gaming, Hardware Assembly, Mobile Application Development, Ad Zap, Treasure Hunt and Perfect Professional.

Experts from Industry presented technical talks on emerging areas. Dr. Narendra Kumar, Deputy Manager, Education & Research, Hexaware Technologies, Chennai, spoke on 'Reliability of Web-based Information on Research' and Dr. K. Kesavasamy, Global Head, TCS Academic Interface Programme, Tirvandrum spoke on 'What it takes to be a good solution provider?'. Ms. S. Kiruthika, Director, Training and Development, DreamsPlus Consulting and Services Pvt. Ltd, Chennai gave a talk on 'Four P's of Information Technology.'

Noted Quiz Master Professor G. Balakrishnan, formerly of St. Joseph's College, Trichy conducted a stress interview as part of the 'Perfect Professional' programme.



Dr.K.Kesavasamy Global Head, TCS Academic Interface Programme, Trivandrum who was the chief guest of the valedictory function, released 'GEEK' the souvenir of the symposium and distributed the prizes.

PRAKRIYA

PRAKRIYA, a two-day National level Technical Symposium was organized by the Chemical Engineering Association (SCHEMA) of School of Chemical and Biotechnology (SCBT) organized on the 8th and 9th of October, 2011. Dr. S. Swaminathan, Director CeNTAB and Dean, Sponsored Research, SASTRA University, inaugurated the event and addressed the gathering by highlighting the significance and relevance of chemical engineering discipline. Dr.Swaminathan briefed the audience with the global challenges faced by the human community and enumerated how chemical engineers can contribute to overcome them.

The guest lectures by Mr. N. Lakshmanan, Production Manager, Dalmia Cements, on “Cement Manufacturing Process” and by Dr.Tasneem Abbasi, Assistant Professor, Centre for Pollution Control and Environmental Engineering, Pondicherry University, on “Safety and Hazard Engineering” enthralled the symposium participants.

The working model events, D'solver and Enercone, provided a great opportunity for the participants to showcase their mastery over the subject and their expertise in translating the theoretical knowledge into working models. Other events included Technical Quiz, Technicolor (technical short-film making) and online events (Photography and Science Fiction writing).

ITC Limited and Dalmia Cements were the chief sponsors of Prakriya. 28 papers and 18 posters were presented. Students from 25 colleges participated in the event.



ANUBHAVA – 1

The Student's Association of the Department of Electronics & Communication Engineering, SPACE organised a Technical Festival, ANUBHAVA-1 on October 11 – 20, 2011. It was a cluster of seven events that spanned around two weeks and encompassed both technical events like E i C, Open Hardware,C/C++ Coding, Tech plans & Robotics and non-technical events like Debate & Open Quiz.

Over 300 students participated in these events. The framing of events ensured that everyone had something to contribute at ANUBHAVA-1. All the seven events faced stiff competition. Cash prizes were given away to the winning teams.



WINDOWS PHONE APPLICATION DEVELOPMENT WORKSHOP

Windows Phone Application Development Workshop was organized by the School of Computing on December 27, 2011. Mr.Aditya Mohan of Microsoft Corporation, India inaugurated the workshop. Mr.Karthik Ragupathy, an authorized trainer of Microsoft Corporation, conducted the workshop.

He provided students with comprehensive guidelines and techniques for developing applications for windows phone 7 and gave hands on training in Windows Phone Application Development. The students were asked to upload their applications in Market Place site on or before January 6, 2012. Dr.P.Swaminathan, Dean, School of Computing also spoke.



SASTRA NCC CADET ATTENDS YOUTH EXCHANGE PROGRAMME IN SINGAPORE

Cdt N. Janani, a final year B. Tech. student of SASTRA, belonging to 4(TN) Girls Bn, NCC represented India in Singapore in the Youth Exchange Programme (YEP) held from December 4 -13, 2011. Cdt Janani was selected as one amongst 10 students from India and is the only one from Tamil Nadu to take part in the programme. She participated as a member of Tamil Nadu, Puducherry and Andaman and Nicobar NCC Directorate contingent. Her selection was made during the Republic Day Camp in New Delhi, which she attended in January 2011. In the selection process hundreds of cadets competed, which involved written test, drill test, GD and an interview with the Director General of NCC.

Before leaving for Singapore she had a brief meeting in Chennai with the Deputy Director General of TN Directorate, Commodore Sartaj Iman. She then attended a 10 day preparation camp in Delhi from 24th November to 3rd December 2011 where she was thoroughly groomed for the programme. She also had the privilege to meet the Director General of NCC Lt. General P.S. Bhalla.



The YEP called ICEP Inbound is an annual exchange programme that aims to foster goodwill and camaraderie amongst affiliated NCC organizations. This year a total of 67 cadets from India, USA, Brunei, New Zealand, Thailand, Sri Lanka, Bangladesh, Singapore and Maldives participated. Cdt Janani had the opportunity to interact with cadets of all these countries. Singapore NCC organized a plethora of activities during the 10-day camp, including visits to Army Museum, Air Force Museum and the Naval Diving Unit. The cadets also participated in various adventure activities like kayaking, scuba diving, archery and shooting.

MOOT COURT COMPETITION

Students of III year B.A., LL.B. Mr. Puneeth Gowda, Ms. Radhika Vasudevan and Ms. Akshaya P Sachin won the 33rd All India Moot Court Competition, held from October 20-22, 2011 at Dr. Ambedkar Government Law College, Pondicherry.



SASTRA TEAM WINS TGMC 2010 PROJECT COMPETITION BY IBM

Chi. A.N. Alagappan, Chi. S. Mukund, Chi. V.S. Gowtham, IV B.Tech students of School of Computing SASTRA have won the top 20 position in TGMC 2010 projects competition conducted by IBM. Shri K.R.Sekar, AP, School of Computing was the mentor of the team. The Winning team won a Kodak digital camera from IBM.



SPECIAL LECTURES

Dr.K.D.Nayak, Chief Controller R&D(MED&MIST), DRDO, New Delhi delivered a special lecture on “Recent Advancements in Computing” at the School of Computing, SASTRA on 14th October, 2011. Dr. Nayak talked about the evolution of processors, multicore and parallel architectures. He also discussed network processors and network security. His view is that no computer is safe as soon as it is wired to the internet. Dr.Nayak gave some idea on Trojans and how they get realized in hardware. He also compared the number of hackers in India with that of China, saying while India has less than 100 qualified hackers, the number is approaching a million in China. So urgent attention is to be given on the area of network security, said the speaker.



Shri C.SIVATHANU PILLAI, Associate Director, Civil Engineering Group, IGCAR Spoke on “Civil Engineering in Nuclear Power Plants” on 8th October, 2011. Shri C.Sivathanu Pillai who talked about the energy scenario in India, dwelt on the energy potential, stages of nuclear

power programme, engineering processes for nuclear power reactor, difference between nuclear structures and conventional structures, analysis and design inputs for design of nuclear reactor, evaluation of seismic parameters, design basis for earthquake, design basis for wind speed, geotechnical investigation, codes and standards to be followed for the design of nuclear power plant.

The School of Management's Philip Kotler Club (Marketing club) organized a special lecture on October 6, 2011. The Chief Guest, Mr. R.Anbarasan, Technical Program manager, GE –India, Renewable Energy, addressed on the topic "Techno Marketing". Mr. Anbarasan briefed on the emerging requirement and opportunities for renewal energy. He referred to the Industry growth cycle encountered in other developed and EU countries which would be the learning lessons to look forward to in a naive market like India. The marketing challenges and the growth map for renewal energy in India was well explained.



Shri. R.N. Elangovan HR Manager, TITAN, delivered a lecture on “Employee Engagement” for the students of MBA on 22nd December 2011. He briefed on the level of commitment and involvement of employees and the universal statistics on how employees are

actively engaged, not engaged and disengaged.

School of Management organized a special lecture by Shri S.Viswanathan, Editor and Publisher, Industrial Economist on December 26, 2011. The Chief Guest who spoke on the topic “Tamilnadu Economy –



Why this Deceleration,” briefed on the Growth of Tamilnadu and the economy's concern for agriculture, power, finances and employability. The challenges faced are shrinking land area, steep increase in land prices, heavy subsidy on food, massive switch of employment to the services and industry sectors. The challenges and the growth of Tamilnadu was very well explained.

Er. Vijayarajeswaran, Managing Director, Vi Microsystems Private Limited, Chennai delivered a lecture on “Cloud Computing” on 18th October 2011. He highlighted the needs and potential applications of cloud computing.

Er. S.Madhan, Director-Technical, Embedded Plus Solutions, Trichy delivered a lecture on “Industrial Applications and Opportunities in Embedded Systems” on 28th December 2011. He spoke on the need for microcontrollers, digital signal processing and VLSI and their practical applications and various opportunities on the same areas.

DEPARTMENT OF ORIENTAL STUDIES AND RESEARCH INAUGURATED

The inaugural function of the Department of Oriental Studies and Research was held on October 21, 2011. Vedsri Dr. P.V.N.Murthy, Founder-Chairman and Managing Trustee of Vedic Science Research Institute, Hosur was the Chief Guest and Dr.S.N.Srivastava, Registrar, SASTRA University presided over the function. The chief guest introduced his new theory Lingua-Maths on that occasion.



SOCIAL SERVICE CAMP FOR THE B.Ed. STUDENTS

A four-day Social Service Camp was organized by the school of education for the students of B.Ed. and M.Sc B.Ed. Programme from December 28 to December 31, 2011. On the first day of the camp Dr.S.Manjula MD DGO, a leading gynecologist in Kumbakonam delivered a lecture on The Problems of the Adolescents with special reference to girls. In her lecture, she discussed various physical, emotional, sociological and psychological pressures that an adolescent girl will have to cope with. She also explained to the student-teachers how as Counselors they could render effective services to the adolescents if they understand the scientific dimensions of the problems of the adolescents. Prof.K.G.Raghunathan, Dean, SRC inaugurated the camp in the presence of Major A.Balasubramanian, Principal, School of Education, SRC.

A Blood Donation and Blood Grouping Camp was organized by the School of Education in collaboration with the NSS units at SRC as part of the Social Service Camp, on December 28 2011. 75 units of blood were donated to Kaalli Blood Bank. Shri C. Hariharan, Manager, Kaalli Blood Bank delivered a lecture on Life Fluid on 29 Dec 2011.

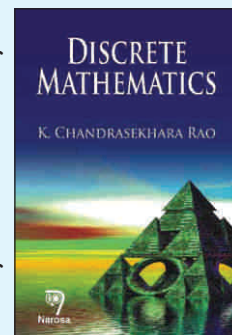
Prof.Krishnamoorthy from the Temple of Consciousness, Kumbakonam conducted a Lecture cum Demonstration on Yoga, on the 30th of December 2011. Shri.J.Basker, Dist.Secretary of Bharath Scouts and Guides, Kumbakonam Educational District delivered a lecture on History and Principles of Scouts and Guides on 30 December 2011. The students of B.Ed and M.Sc B.Ed programme who participated in the Social service camp carried out cleaning work at Lakshmi Narayana Perumal kovil, Uthamadapuram on the last day of the camp and also visited UV. Swaminatha Iyer Memorial House and Library.



BOOK PUBLICATION BY SASTRA PROFESSOR

Dr.K.Chandrasekhara Rao, Professor and Head, Department of Mathematics SRC has authored a book on “Discrete Mathematics.”

The book has been published by Alpha Science, Oxford and Narosa Publishing House, New Delhi. The book caters to the needs of undergraduate and post graduate students of Mathematics, Computer Science and Engineering. The coverage includes algebraic structures, mathematical logic, graph theory, recurrence relations and recursion.



COMBINED ANNUAL TRAINING CAMP

Twenty six NCC cadets with one ANO from SRC participated in Combined Annual Training Camp held at Government Arts College, Kumbakonam from 1st October 2011 to 10th October 2011. Cadets underwent training in both Military and Non Military subjects like Weapon training, 0.22 Rifle firing, Obstacle crossing, Map reading, Field and battle crafts. SRC NCC unit bagged 8 Gold medals and 7 Silver medals in the various events like Classical dance, Flag area briefing, Rifle shooting Solo Dance, Yoga demonstration and Volley ball. Cdt. T. Rajkumar of I ECS & Cdt. S. Priyanka of I CSE were chosen as the best cadets. Lt. T. Senthilnathan, NCC officer, SRC, won gold medal in “Best Officer Firing”



NCC DAY CELEBRATIONS

8(TN) BN NCC, Kumbakonam celebrated NCC Day on 25th November 2011 at SRC. Lt Col S. Nagaraja, Administrative Officer, 8 (TN) BN



NCC presided over the function. Smt. Ratna Sekar, Chairman, Kumbakonam Municipality, Shri Raja Natarajan, Vice-Chairman, Kumbakonam Municipality, Prof K.G.Raghunathan, Dean SRC and Major A.Balasubramanian Principal, School of Education, SRC felicitated. Shri Siva Baskaran, Deputy Superintendent of Police flagged off the NCC Awareness Rally organized by SRC NCC wing. The rally started from Mahamaham tank and ended at SRC campus.

NCC NATIONAL INTEGRATION CAMP

SGT. C.S.Sivagami of II B.SC CCS and CPL. Vamsi Krishna of II B.Tech. ECE represented SRC, SASTRA at the Special National Integration Camp, organized by 7 Raj Battalion NCC of Rajasthan Directorate from 8th December to 19th December at BadaBagh, Jaisalmer in Rajasthan. Three hundred cadets from seventeen Directorates participated in the camp. The 2 cadets from SASTRA were part of the 20 cadets that represented Tamil Nadu. SGT. C.S.Sivagami won medal in games.



NSS AWARENESS PROGRAMMES

A Road Safety Awareness workshop was organized on 17th November 2011 by the NSS wings at SRC. The camp was inaugurated by Smt. Rathna Sekar, Municipal Chair Person, Kumbakonam in presence of Shri S.Basker Deputy Superintendent of Police, Kumbakonam. A Rally from Mahamaham tank to SRC Campus was also organized to create awareness among

the general public. Shri D. Illangovan, Deputy Superintendent of Police flagged off the Rally.

The NSS units at SRC organized a voter awareness programme on 15th October 2011 for the local body election. Pamphlets, insisting on their rights and responsibilities, were distributed to the general public.



During the Deepavali festival a special programme was organized by the NSS wings on 21st October to create awareness among the students and the general public on the safe bursting of crackers. Pamphlets giving tips to handle crackers were distributed.

An Adolescents Awareness workshop was organized on 21st October especially for the girls at SRC. Dr. S.Manjula MD, DGO gave a lecture on Polycystic Ovarian Syndrome. Around 150 girls attended the programme.

Around 75 volunteers were deputed on Crowd Regulation Duty from 21st October 2011 to 23rd October 2011 for the Diwali festival. During Navratri Festival, 84 volunteers were deputed to help the police officials in crowd control. 54 NSS volunteers were deputed at Swamimalai on crowd regulation service during Karthigai festival.



SRC NSS programme officers Shri M. Sundararaman and Shri S.A. Harish Rajaraman attended a week long orientation programme at NSS Empanelled Training Institution, Madras School of Social Work from December 12 to 17, 2011. The programme was organised by the State NSS Unit, Tamil Nadu.

BLOOD DONATION

A Blood Donation camp was conducted at Shanmugha Polytechnic college on December 27, 2011. Prof. B.M.Venkataramani, Principal, inaugurated the camp. Dr. Radhika Michael, Blood Bank, Thanjavur Medical College Hospital and team of doctors collected blood from the donors. About 100 NSS volunteers donated blood.

LAURELS IN ORATORICAL CONTEST



Kum. R.S. Sunandha II year Diploma in Computer Science Engineering, Shanmugha Polytechnic College won the first prize in the Oratorical Competition held as part of the founder's Birthday celebration at Padmabhushan Sri N. Ramaswami Ayyar Memorial Polytechnic College for Girls, Trichy on September 24, 2011. Mrs. Padmavathy Krishnamoorthy, Chairman, Amalgam Private limited, Chennai, distributed the prizes.

UPCOMING EVENTS

International Conference on Intelligent Manufacturing Systems
17th and 18th February 2012

National Conference on Vedas- The Treasure House of Mathematics (VTHM2012)
17th and 18th February 2012

International Conference on Regulatory Network Architecture in Bacteria
09-11 March, 2012

International Conference on Thin Films & Applications
15th - 17th March, 2012

National Conference on Mimamsa Rules of Interpretation applied to Law and Vedanta
2nd & 3rd April 2012

International Conference on Image Processing Techniques and Applications
6th - 7th April, 2012

National Conference on Information Security
June 14-15, 2012

For Details: www.sastra.edu

Book-Post



SASTRA UNIVERSITY

(A University under section 3 of the UGC Act, 1956)

THANJAVUR - 613 401.

TAMIL NADU

EDITORIAL BOARD

Dr. S. Vaidhyasubramaniam	Dean, Planning & Development
Dr. S. Swaminathan	Dean, (SR) & Director (CeNTAB)
Dr. M. Vijayalakshmi	Associate Dean, SCBT
Dr. G. Venkatraman	Associate Professor, Dept. of English
Dr. R. Ravi	Asst. Professor, Dept. of English, SRC

ITIHAS can also be viewed at www.sastra.edu

A Quarterly Newsletter published by SASTRA University, Thanjavur - 613 401, Tamil Nadu

Ph: +91 4362 264101 - 108, 304000 - 29, Fax:+ 91 4362 264120, URL: www.sastra.edu.

Printed at : PGK ARTS, No.21, Kasiviswanathar East Street, Kumbakonam - 612 001. Ph : 0435 2420323.