



SRM
INSTITUTE OF SCIENCE & TECHNOLOGY
(Deemed to be University u/s 3 of UGC Act, 1956)

SPECTRUM

The Newspaper of SRMIST

For private circulation only

Volume 11 Number 5

Research and Science Day '18



The Chief Guest, Professor V.Ramgopal Rao, Director of IIT, Delhi receiving a memento from the Founder Chancellor with SRMIST'S New Vice Chancellor Dr.Sandeep Sancheti looking on.

Mr. Ian Mercer Visit

STAFF WRITER

SRM Institute of Science and Technology, Vadapalani Campus renewed the contract of the Institution of Engineering and Technology (IET) Academic Affiliation. Mr. Ian Mercer, Head of International Operations and Mr. S. Raghavan, Regional Head (South & West), IET India represented the IET and handed over the Academic Affiliate Certificate to Dr. K. Duraivelu, Dean who signed the contract in the presence of Dr. C. Gomathy (HOD / ECE), Dr. S. Prasanna Devi (HOD / CSE), Dr. Karthikeyan (HOD / Mechanical), Mr. Kesavan (HOD / MBA) and Mr. S. Prasanna Bharathi (AP / ECE) and IET Faculty Advisor. Mr. Ian Mercer spoke about the IET Faraday

programme which is one of the pioneer initiatives of the IET in the field of education in Schools in remote places. IET Faraday India Programme aims to create an ecosystem which encourages curiosity, questioning of the status-quo among both students and teachers to fuel passion for Science, Technology, Engineering and Mathematics (STEM). The IET Faraday project intends to provide teaching resources along with teacher enrichment programs to the school teachers. Mr. Raghavan spoke about various Placement opportunities available in the Industry Partners of IET. The contract signing concluded with the interaction with the Student Office Bearers of the IET On Campus Groups of SRM IST.



Winners of QUEST'18 receiving the prizes from the Chief Guest, Mr. John Xavier Thangaraj

Responsibilities of an entrepreneur, after becoming one

STAFF WRITER

"Power of the mind is the power of the man", began Mr. Vijay Kapoor, Managing Director of Derby jeans Community at Quest'18, a national level management meet held at SRM Institute of Science and Technology, Ramapuram. He elaborated and emphasized three critical points which inspired the gathering with an anecdote. He accentuated that 'Transformation' is an essential part of life, which would enable to strive better. Secondly, he enumerated on how one should attempt to go beyond the imaginary finishing line and gain motivation through advancement. His most stimulative quote was, "Be the 21 year old that other 21 olds will look up to". He inspired young aspirants not to be one among the crowd and to be the one above the crowd. To reach such a footing, one must come out of the box and perceive not what one wants but on what one can. He then concluded by saying "to deviate from negativity, one should always talk positively at any uncertain situation, which would certainly change the attitude towards the day".

Mr. K.S. Debasis Sarkar, CEO of National Thermal Power Corporation Limited, who inaugurated QUEST'18, quoted Albert Einstein, "Concern for man himself and his fate must always form the chief interest of all technical endeavours. Never forget this in the midst of your diagrams and equations". He



Mr. Vijay Kapoor (Managing Director-Derby jeans Community) addressing the gathering

first congratulated the students of SRM, for their initiative and leadership in organizing Quest'18. He then spoke in detail about the company- NTPC, which Showed and a work-friendly environment. He enumerated the importance of having hard skills which are knowledge based and more importantly soft skills such as emotional intelligence, positive attitude and most importantly customer focus. He also explained how in the long run, a positive attitude would exude happiness and the right attitude will assist in solving problems and reach the peak of one's ambitions. The third aspect, customer focus, he said, that the customer is happier not only when his problems are solved, but also when it is solved quickly and hassle free. He then went on to explain his views on Leadership and how according to the current trend

a Leader is required at every level of the organisation.

An entire gamut of activities was organized in Quest'18 to unleash the talent that exudes from the budding student managers. Promoting a vibrant campus experience through organizing innumerable activities such as Best Manager, Business Quiz, IPL Bidding, Ad-Zap and Corporate Walk bringing people from all walks, interests, and ethnicity come together in ways that to stimulate lifelong learning, and community interaction.

The Dean Mr. P.Sekar addressed the students on the importance of skills development to meet the corporate world and to disregard the fatalistic segment which would otherwise never let one outdo. Also he insisted that by possessing the skills, one cannot become a pioneer, but are established only when the skills are put to test.

Dr. C. Sundar, Head of the Department and Vice Principal, greeted the gathering and cherished the labour of the Students and Faculty who took up the initiative to organize and coordinate this amazing event.

The prizes were distributed to the winners and runners by Mr. John Xavier Thangaraj, Correspondent and senior Principal of Little Flowers Matric School, who is also the President of Tamilnadu Private School Association. Dr. R. Punniyamoorthy, Faculty Coordinator of Quest'18 proposed the vote of thanks.

Finance and Career Opportunities

STAFF WRITER

The SRM Ramapuram B - School had invited an alumni as speaker to deliver a career talk to students recently. The speaker was Ms. Tanuja - Assistant Manager (Finance) - ITC Hotels, Coimbatore (Batch 2014-2016). She engaged the students in various aspects involving careers opportunities available in the job market. The session concentrated on the requirements for choosing a profession and to seize every opportunity that come one's way. She shared her experiences in ways that the students could relate with. She stressed on the technical skills

which makes things happen in the corporate world. Students were informed about the technological growth in Finance and other streams that have taken place over the years. Finance being a backbone and a main driving force of every organization, she informed various tactics that helps in getting it right every time. She also informed the students about the various courses which helps one to create and develop their skills and make use of the job opportunities in the relevant field. The students were given a chance to clarify their doubts and queries on various aspects of career growth.





The Founder Chancellor inaugurating the new high tech research facility building. Also seen in the picture are the President, the Director of Research and the Director of Engineering and Technology.

HRTEM at SRM

STAFF WRITER

SRM Institute of Science and Technology (SRMIST) has recently established sophisticated instrumentation facilities to carry out cutting edge translational researches at new Research Building. The new building was inaugurated by Dr. T. R. Paarivendhar, the Founder Chancellor of SRMIST along with Dr. P. Sathyanarayanan, President-SRMIST, Prof. D. Narayana Rao, Director Research-SRMIST, and Prof. C. Muthamizhchelvan, Director-Eng. & Tech., SRMIST. The new research building hosts sophisticated equipments like High-Resolution Transmission Electron Microscope (HRTEM, JEOL, Japan), low- & wide-angle X-ray diffractometer (XRD, Bruker, Germany), Micro-Raman Spectrometer (HORIBA, LABRAM HR Evolution), and High-Resolution Mass Spectrometry (HRMS, Agilent, USA).

The HRTEM is powerful tool to provide morphological, compositional, crystallographic, and surface structural information. At a maximum magnification of 2-3 Å, TEM produce high-resolution, two-dimensional images allowing a wide range of applications catered for both academia and Industries. TEM allows researchers to view samples on a molecular level, making it possible to analyze structure and textures in diverse fields including nanotechnology, material science, metallurgy, life science, forensic analysis etc. to obtain information on surface features, crystalline /

amorphous nature, identifying any flaws, fractures or damages to micro / nano objects. This research facility can be utilized not only by researchers at SRM University but also researchers from other Universities and Industries can also avail through online booking.

Powder X-ray diffractometer (XRD, Bruker, Germany) is an indispensable equipment for material characterization and quality control and has numerous applications that cater to industrial and academic research. The equipment has many features including high-sensitivity, reliability, depth profiling (glancing incident angle), low-angle & wide-angle features, automated user friendly system, effective resolution and all these features make qualitative and quantitative measurements with high precision. Researchers can explore the equipment to study the crystallinity, identify the crystalline phases, spacing between lattice places, preferential order, epitaxial growth of crystallites can be studied. The equipment also useful to study nanoscale matters such as mesoporous, micelles, vesicles-based mesostructures, scaffolds etc. The equipment can be used to study polymorphs and its interconversion, crystallinity, crystallite size, crystal structure determination from powder diffraction data, size and strain broadening and it can be effectively utilized to maximize the scientific outputs.

Raman Spectroscopy is a powerful nondestructive characterization tool to understand

the vibration properties and hence key information like chemical composition and material structure can be obtained. Raman spectrometer coupled with optical microscope called as "Micro-Raman Spectrometer" can be used for both micro and macro measurements and offer advanced confocal imaging capabilities in 2D and 3D. This multidisciplinary versatile equipment can be used by researchers in life sciences, pharmaceuticals, materials science, nanoscience and nanotechnology, and semiconductor physics for studying standard Raman scattering, which is finger-print of materials, and spectroscopic imaging and photoluminescence properties.

High Resolution Mass spectrometry is a powerful analytical technique used to identify the molecular masses and structure of unknown compounds within a sample. The complete process involves the conversion of the sample into gaseous ions, with or without fragmentation, which are then characterized by their mass to charge ratios (m/z) and relative abundances. Mass spectrometry is useful in numerous fields from analyzing single organic molecules to complex mixtures of metabolites and other biomolecules. It can be used to characterize proteins, glycans and also for the pharmacokinetic analysis of drugs. At SRMIST this instrument would be used for the development of new synthetic methodologies for the synthesis of small molecules relevant for the pharmaceutical and fine chemical industries.



SRMIST's New Vice Chancellor

STAFF WRITER

Dr. Sandeep Sancheti recently took over as the Vice Chancellor of SRM Institute of Science and Technology. Prior to this, he was President of Manipal University Jaipur, Director National Institute of Technology Delhi (NITD) and Director NITK Surathkal. He has also served as Director In-charge, NIT Tiruchirappalli, NIT Calicut, School of Planning & Architecture (SPA) Delhi and Mentor Director, NIT Goa, NIT Puducherry and NIT Sikkim.

Known as Institution Builder, Dr. Sancheti holds a PhD from Queens University of Belfast UK, after obtaining a B.Tech (ECE) from Regional Engineering College, Warangal (now NITW) and M.Sc (Engg) from Delhi College of Engineering (now DTU) in 1982 and 1985 respectively.

Dr Sancheti began his professional career at MBM Engineering College, Jodhpur, as Assistant Professor in the Department of ECE in 1984 and moved to Malaviya Regional Engineering College, Jaipur (now MNIT) as Associate Professor in 1990 and subsequently rose to become Professor, Head of the Department, Co-ordinator and Dean till Nov. 2006.

He is a recipient of the Commonwealth Scholarship & Fellowship under Colombo Plan from 1992-95. He

has also been awarded the SERC Fellowship by DST, Government of India in 1998 and UKISTRF Award by the British Council in 1999-2000. He was on Faculty Secondment of Asian Institute of Technology (AIT) Bangkok for a semester in 2005.

He is a Life Fellow of Institution of Electronics & Tele communication Engineers (FIETE), Institution of Engineers (India) (FIE), Broadcast Engineering Society (BES), Indian Society for Technical Education (FISTE) and a Member of Institution of Electrical and Electronics Engineers (MIEEE), USA. He has published more than 75 research papers in national & international journals and conferences.

He was the Principal Coordinator of QIP (Poly) program of AICTE (2005), Chairman of NIMCET an all India MCA Entrance Test (2008), Chairman of Central Counseling Board (CCB-2011) and Chairman, Direct Admission of Students from Abroad (DASA 2010-12) scheme of MHRD, Govt of India. He was also the member of Microsoft India Academic Advisory Board, Member of Kakodkar Committee for review of NITs, Member (Visitor's nominee) on Distance Education Council (DEC) and currently is the Vice President of Association of Indian Universities (AIU) New Delhi.



SRM IST welcomes a High Level Delegation from Germany

German Delegation visits SRMIST

SYED ABSAR HUSSAIN
SHREYA CHAUDHARY

To strengthen relationships and create a partnership which benefits both India and Germany, a high-level delegation consisting of nine members hailing from Baden-Württemberg, Germany visited India. The team was headed by Ms. Petra Olschowsk, who is the State Secretary in the Ministry of Science, Research and the Arts. Some

other members from notable universities also visited SRM IST as part of the delegation.

Baden-Württemberg is known for being highly specialized in the manufacture of machinery and equipment as well as manufacture of motor vehicles, trailers, and semi-trailers. It is due to the good international reputation of SRM IST that it was selected by the delegation for this program.

Programmes such as

Mechanical Engineering, Aerospace Engineering and Automobile Engineering are offered in SRM with Mechanical Engineering having an A+ accreditation from NAAC. These programmes match the strength of Germany who is the world leader in automobile and mechanical industry in the world and thus this increases the chance of further collaboration. German is also one of the five international languages being

taught to the students of SRM.

The delegation was welcomed by Dr. T.R. Paarivendhar, Chancellor of SRM IST, and in his welcome speech he emphasized the importance of the collaboration and commended the German guests for their hard work. Exposure is the most important element while getting a professional degree and for mechanical and automobile engineering, Germany is the

best place to be in the world. The IGCHE (Indo German Centre for higher education) is a program that helps students a dual degree programme where they study 3 years in SRM and then transfer to Germany in the 4th year to get two degrees. It helps those students to build a career in Germany. This program benefits the students of SRM IST to achieve their goals and strengthens the bond between the two countries.

Reporting for Spectrum

- Contributing reports should be confined to a maximum of 250 words and must be written by students only.
 - Accompanying pictures must have captions. Pictures without caption will not be published
 - Request for coverage in **Spectrum** by its editorial team must be made well in advance with an accompanying note and the invitation to sridhar.k@ktr.srmuniv.ac.in
 - Coverage of a certain event or receipt of an article does not guarantee publication.
- Editor

Team 1.618 races their way to

SAAHIL SIDDIQUI

Team 1.618 (the official Hybrid Vehicle Racing Team of SRM Institute of Science & Technology) recently participated in the Hybrid Vehicle Challenge-2018 (HVC) which took place during 17th - 21st of January 2018 at the Buddh International Circuit, Greater Noida.

Hybrid Vehicle Challenge is Asia's largest Hybrid Vehicle Racing Competition and is organized by the Imperial Society of Innovative Engineers. It is an opportunity for the budding engineers to use all the classroom knowledge alongside their creative and innovative ideas into designing and fabricating a formula type race car according to the international standards. Out of the 103 teams, Team 1.618 emerged victorious and clinched the Championship title alongside the Best Hybrid Vehicle Award and the Virtual



Team 1.618 with the winning trophies

Round Winners Award. The team captain said this post-victory, "We've worked so hard for these achievements for the past few years. We've done what we set out to achieve. It really is going to take some time to sink that we are there. I thank the team so very much for the amazing

contribution to our successes".

The team principal expressed his joy saying, "Winning the championship means a great deal to the team, and the payoff is sure to help the team attract sponsors and help the team partner with leading automotive

manufacturers to make their dream designs". Other achievements include second place in best design, best business plan & cost, innovation and weight test respectively. The team hopes to continue their dream run in the years to come and leave a mark on the national level.



Souvenir released by the Chief Guest and dignitaries

Empower the differently abled... Chancellor

STAFF WRITER

A Four day International Conference on 'Challenging Exclusion' (ICCE 2018), was conducted by the SRM Institute of Science and Technology, jointly with NIEPMD (National Institute for Empowerment of Persons with Multiple Disabilities) and Northampton University, UK.

Theme of the conference: Persons with disabilities feel left out and get excluded from the mainstream society. The focus of this conference was to identify such exclusions, challenge them and find solutions. This task was accomplished by addressing three themes viz. Health, Education and Employment.

The program was inaugurated by our Hon. Chancellor Dr T R Paari Vendhar. In his presidential address, he recounted the abiding contribution of SRM, by way of imparting skills in the fields of Speech therapy, Occupational therapy and Physiotherapy, at the postgraduate level and research levels. He stressed that this conference is very special one, dear to his heart. He exhorted the professionals to empower the differently-abled, by providing opportunities to them. Notably, SRM group has given employment to a significant number of differently-abled persons. Dr. Himangshu Das, Director of NIEPMD, Chennai noted the contribution of SRM IST, by way of scientific content, sponsorship and logistics. Prof.

Richard Rose, the Head of Special Education in the University of Northampton, UK, in his key note address, described the common challenges and indicated how we can conquer them. The Chief Guest, Ms. Shakunthala Doley Gamlin, Secretary of the department of Social Justice and Empowerment, Govt of India, emphasized the need for implementation of skill development programmes through vertical intervention approach. Ms. Dolly Chakrabarthi, the Joint Secretary DEPwD, Govt of India, stressed the challenges, among persons with disabilities such as dropout rates in schools. Prof. N. Chandrababha, the Director of the Faculty of Medicine & Health Sciences, described the commendable role of SRM IST,

in delivering holistic services to disabled persons. The inaugural function ended with the Vote of thanks by Prof. D. Balakrishnan HOD, Department of Audiology and Speech, SRM IST.

The conference was held for four days. 64 Learned persons from across the globe were the resource persons. The conference was a mammoth one, with 549 delegates from Bangladesh, Bhutan, Nepal, Cambodia, Indonesia, Srilanka, Colombia and Nigeria.

Eminent professionals like Prof. Jayachandran, Prof. Jayanthi Narayanan, Dr. Mary Doveston, Mr. Akhil Paul, Dr. Rubina Lal, Dr. J.P Singh, Dr. Bhoomi Kumar Jaganathan, Dr. S. K. Prasad, Dr. Ruma Banerjee, Dr. Anbu Durai, Mr. Bishnoi, Dr.

...recounted the abiding contribution of SRM, by way of imparting skills in the fields of Speech therapy, Occupational therapy and Physiotherapy, at the postgraduate level and research levels.



Santhanam, Dr. Thomas, Prof. Amitav Mishra had made this event knowledgeable by sharing their valuable experiences and inputs.

The conference included seven plenary sessions and ten parallel sessions under four themes viz. Exclusionary factors in Education, Exclusionary factors in Health, Exclusionary factors in Empowerment and Employment and Multidisciplinary perspectives. 127 research papers and 35 posters were presented. Over 74 eminent professionals chaired the scientific sessions. The best entries among the oral presentations and posters were given Special awards.

The Honourable Minister of State of social justice and empowerment, Sri. Ramdas Athawale, graced the proceedings of the Second day of the conference. He appreciated the efforts of SRM IST and of NIEPMD in empowering the persons with Multiple Disabilities. He congratulated the joint effort of NIEPMD, SRM and University of Northampton, in organizing such a massive

international conference with wide publicity and participation of the delegates from around the world. He expressed support the Government of India for such efforts.

At the end of the conference deliberations, the proceedings and abstracts were compiled in the form of a souvenir and released. The experts, also, presented a consensus of recommendations to the Government of India, for implementation of inclusion.

On both the evenings of the conference, cultural events were held. This cultural feast coincided with the theme of the conference namely, inclusion of the differently abled persons. 185 children with special needs, from various special schools performed folk dances and skits. This was a telling evidence of their inclusion. This was followed by a stellar performance on the cultural diversity of our country, by 62 students of SRMIST, hailing from various countries. The classical, traditional and fusion dance events by SRMIST students were appreciated by everyone.



Dr. Rao with a prize winning faculty member. Also seen in the picture (from Left) are the Vice Chancellor, Chancellor, President and Director of Research

Universities must become idea factories... - Prof. Ramgopal Rao

STAFF WRITER

Maintaining that India is doing well in the realm of science and technology and that by 2030 the country will be in the third place globally, it is imperative to make research more commercially viable. “Ninety per cent of research equipments comes from the United States, Germany, Japan and South Korea” remarked Professor Ramgopal Rao, Director of the Indian Institute of Technology, Delhi. Dr. Rao was at SRM Institute of Science and Technology as the Chief Guest for the seventh edition of Research and Science Day celebrations, organized by the Directorate of Research, SRMIST.

India needs more funding for science research, Dr. Rao said, making the point that

the total outlay for about 120 central and state institutes is around US\$ 2.7 billions. “The lack of facility is reflected in the papers we publish” he said. There were many aspects to a successful scientific temper and environment, the chief ones being a healthy relationship between academia and industry, multi-disciplinary research, protecting intellectual property and setting up proper high tech development platforms, the renowned scientist said.

“Universities must become idea factories. They will have to bring people of different cultures, different attitudes and different disciplinary training”, Dr. Rao said.

Stressing that Research Day is a very important event at SRMIST, the Chancellor, Dr. T.R. Paarivendhar said that ranking of institutions cannot be achieved

by the Management alone, rather that it is a common responsibility. “What is required in research? Interest and commitment. There is enough potential, but there has to be commitment”, the Chancellor said going on to make the point that researchers should not be dejected by initial failures. Dr. Paarivendhar also called on the faculty and students to get involved in cross-disciplinary research.

The President of SRMIST,

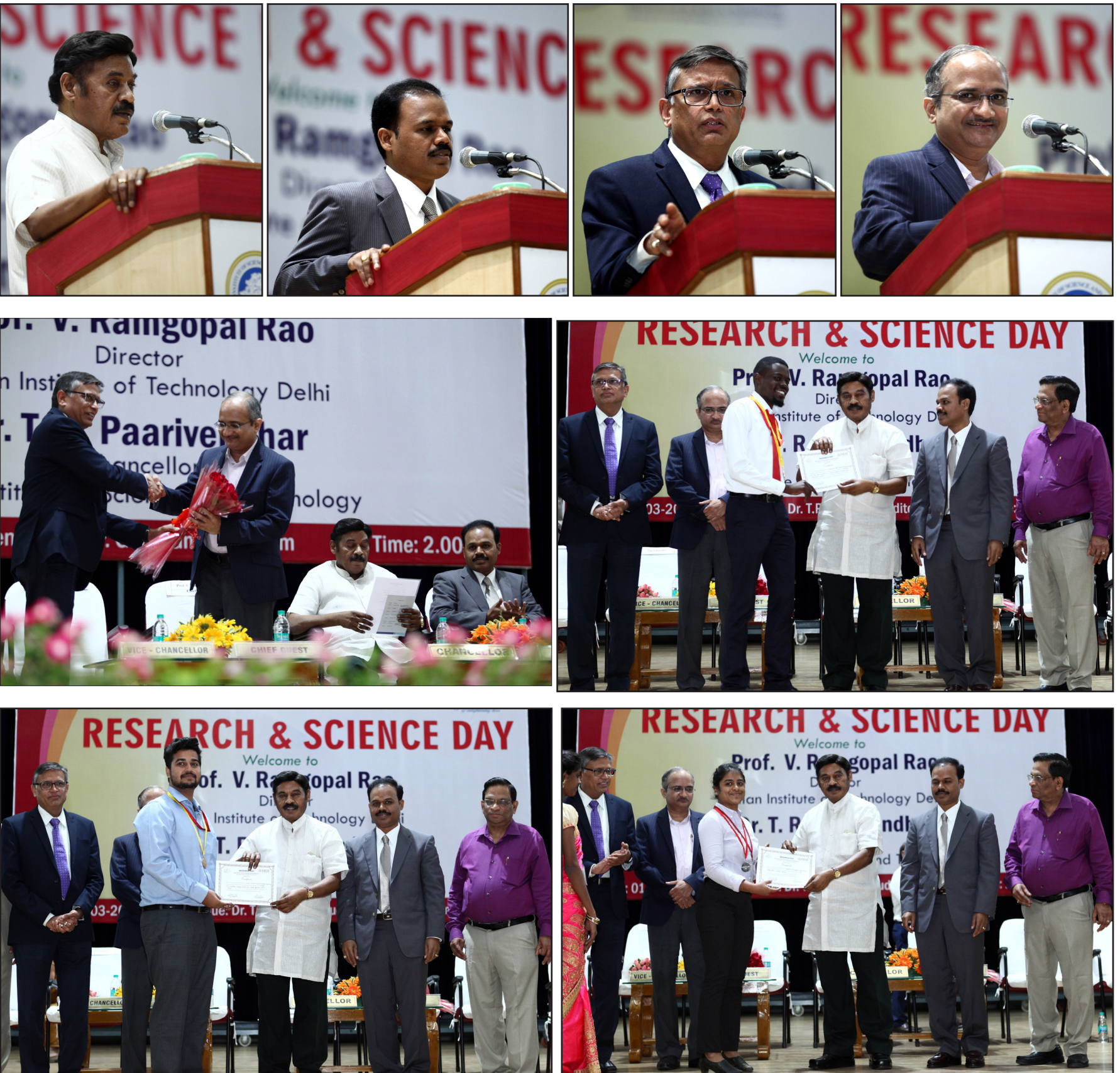
Dr. R.P. Sathyanarayanan also touched upon the need for inter-disciplinary research. “We have all pervasive research here at SRM, but how far is it inter-disciplinary? SRM should focus on inter-disciplinary research”, he said. The President made a point that a group of SRM students in 2011 launched a satellite with the help of ISRO which is still being tracked, but there has been a long gap since then. “We cannot rest on our laurels... we need to compete

with ourselves”, he said.

Dr. Sathyanarayanan spoke of the need to bring in hundreds (of teaching and research faculty) to the SRM family for excellence in research, both in terms of quality and quantity. “But quantity will not be at the cost of quality. India cannot be a super power without scientific research”, he said.

“Science is full of history... by continuing to fail, you succeed. Failure and success go hand-in-

“Universities must become idea factories. They will have to bring people of different cultures, different attitudes and different disciplinary training”, Dr. Rao said.



Snapshots of Research Day, March 1, 2018

hand and any new knowledge is research” said the Vice Chancellor of SRMIST, Dr. Sandeep Sancheti. “Research cannot be done if it is in a unitary set up. It has to be multi-disciplinary, inter or cross disciplinary” he said making the point that research will have to have a societal connect without which it would not be satisfying. Industry needs a lot of support and the process is under way to have industrial labs inside SRM, software and hardware, the Vice Chancellor said.

Dr. Sancheti argued that the

momentum of 2011 (the launch of SRM nano satellite) has to be carried forward and the bottom line for any research was commitment. “Research is development leading to innovation and newer opportunities”, he said.

In his welcome address on the occasion of Research and Science Day, the Director of Research, Dr. Narayana Rao said that Universities need to trigger the thought process by focusing on the quality of research and that there would have to be a high degree of industry-institution

cooperation. “Unless there is high risk, there will not be high gain. India is falling behind in innovation... we have to move away from being a net consumer of knowledge to a net producer of knowledge. India has to be technologically independent”, the director, research said.

Rapid strides have been made in the last five or six decades by way of world class communication satellites, navigational systems, Mars orbiter mission and the recent launch of 104 satellites by ISRO, Dr. Narayana Rao

pointed out. “But not all is right. There is chronic under funding and chronic under staffing... But our time has come”, the Director of Research said.

SRM is research intensive, Dr. Rao said, pointing to the fact that some 109 crores of funding has come for 207 projects from external research funding agencies and that in the last five years there have been 11,000 publications by faculty members and research scholars. For the 2018 Research Day as many as 923 abstracts were

received. The SRM satellite that was launched in 2011 has so far made more than 30,000 orbits and now SRM students have set their eyes on the Moon. Most recently SRMIST along with SRM University, AP at Amaravati have signed a Memorandum of Understanding with the Integral Coach Factory (ICF) to create a fuel-cell based train prototype.

Dr. S.V. Kasmir Raja, Dean of Research proposed the vote of thanks.

Brand Building Programme at Sindhi College of Arts & Science

STAFF WRITER

SRM Ramapuram B-School organized Business Quiz'18- A brand building programme at Sindhi college of Arts and Science recently. More than 120 final year students of B.Com and BBA actively participated in the quiz competition. Business quiz consist of business questions related to general marketing, advertising, finance, current affairs, human resources etc.,

The programme started with an orientation by our team about various S&H programmes offered in the Ramapuram campus, highlights of the MBA programme in the campus, business quiz competition, etc. Our team members addressed all the queries raised by students regarding our university and programmes offered

Followed by quiz competition prize and certificate distribution to winners was done by Dr.P.Sekar, Dean (Science&Humanities), Dr.C.Sundar, HOD-MBA&Vice Principal(S&H-Academic), Dr.P.Jyothi, Programme coordinator and Dr.Muthuraman, Head- Commerce & principal of Sindhi college.



Best Hotel Management Institute award - 4th time in a row

STAFF WRITER

SRM Institute of Hotel Management has received

the "Best Hotel Management Institute" Award conferred by Dr. Satyapal Singh, Honourable Minister of State for Human

Resource Development (Higher Education) Govt. of India during 11th National Higher Education Summit & Excellence Awards at New Delhi. SRM's IHM has been receiving this award for the fourth time in a row.

This Education Summit was organized to honour those who have contributed significantly in the field of improving the quality in Education, delivery mechanism with emphasis on world class research and innovations. It will be worthy of mentioning here that SRM IHM is the only institute to have received this award in Hospitality sector four times in a row



A new mark on the sky

NIKHIL GAUR
SHUBHENDU
OJAS TEWARY

"That thing took off."- the CEO of SpaceX, Elon Musk, cheered with pride as his company successfully launched the first Falcon Heavy Rocket into space. The mega rocket carrying a dummy payload of TESLA's cherry coloured Roadster with the "Starman" dummy driver cruising on it, took off on 6th February 2018 from NASA's Kennedy Space Centre, USA. Falcon Heavy is the most powerful operational rocket of the world leading ahead of its companions like Proton M, Delta Iv Heavy etc.

With the ability to lift into orbit nearly 64 metric tons - a mass greater than a fully loaded 737 jetliner - Falcon Heavy can lift more than twice the payload of the next closest operational vehicle, the Delta IV Heavy, at one-third the cost. The Falcon's

first stage is composed of three Falcon 9 (the older variant of falcon family) nine-engine cores whose 27 Merlin Engines together generate more than 5 million pounds of thrust at lift-off which is equal to approximately eighteen 747 aircrafts! Other than the features stated above, the reusability of orbital launch system of the SpaceX Falcon turns a new chapter in the field of space exploration programmes.

The Falcon successfully landed the two giant side boosters, but the middle booster ended up with a big splash into the waters of the Atlantic Ocean just 300 feet away from the deployed drone ship. The Falcon has not only opened a gate for more economical and technologically advanced space programmes, but also has impregnated the quest of settling the human race to "MARS". So, that day is not so far when you will be driving your way from Earth to Mars and somehow managed to click a pose like the "Starman" did!



The last crucial step of Falcon Heavy's inaugural test flight after successfully launching Elon Musk's Tesla Roadster out of Earth's orbit, on a trajectory into deep space. "Starman" showcasing his cruising skills in the universe!

...that day is not so far when you will be driving your way from Earth to Mars and somehow managed to click a pose like the "Starman" did!

நாட்டுப்புறவியல் பற்றி 2 நாள் தேசியக் கருத்தரங்கு !

SRM அறிவியல் மற்றும் தொழில்நுட்பக் கல்விநிறுவனத்தின் தமிழ்ப்பேராயம், தென்னிந்திய மொழிகளின் நாட்டுப்புறவியல் கழகத்துடன் (FOSSILS) இணைந்து, “உலகமயமாக்கல் காலக்கட்டத்தில் நாட்டுப்புறவியல் ஆய்வுகளின் தொடர்பு (Relevance of Folklore study in the Globalization Era)” என்னும் தலைப்பில் கருத்தரங்கை 23.01.2018 மற்றும் 24.01.2018 ஆகிய நாட்களில் SRM காட்டாங்குளத்தூர் வளாகத்தில் நடத்தியது.

கருத்தரங்கை SRM நிறுவனர் – வேந்தர் மாண்பமை டாக்டர் தா.இரா. பாரிவேந்தர் அவர்கள் தொடங்கிவைத்தார். அவர் தனது உரையில் நாட்டுப்புறவியலின் சிறப்புகளை எடுத்துரைத்ததுடன் இந்தத் துறை ஊக்கம் அளிக்கப்பட்டு, வளர்த்துக்காக்கப்பட வேண்டியதன் தேவையைவலியுறுத்தினார். அந்த வகையில், நாட்டுப்புறவியல் தொடர்பான படிப்பு, SRM –ல் தொடங்கப்படும் என்றும் தமிழ்ப்பேராயம் ஆண்டுதோறும் 22 இலட்சம் ரூபாயில் தமிழ்வளர்ச்சிக்கென வழங்கும் விருதுகளுடன் நாட்டுப்புறவியல் தொடர்பாகவும் விருது வழங்கப்படும் என்றும் தெரிவித்தார்.

இந்த விழாவில் தென்னிந்திய மொழிகளின் நாட்டுப்புறவியல் கழகத்தின் (FOSSILS) தலைவர் பேரா. கி. நாச்சிமுத்து, பொதுச்செயலர் பேரா. எச்.எம்.மகேசுவரய்யா, செயலர்-தாளாளர் பேரா. இராகவன் பப்பநாடு, இந்திய நாட்டுப்புறவியல் நிறுவனத்தின் இயக்குநர் பேரா. என். பக்தவத்சலரெட்டி ஆகியோர் உரையாற்றினர்.

தமிழ்ப்பேராயத் தலைவர் டாக்டர். தி.பொ. கணேசன் (இணைத் துணைவேந்தர்) தலைமையில் நடந்த இந்த விழாவில் தமிழ்ப்பேராயச் செயலர் பேரா. கரு.நாகராசன் வரவேற்புரை வழங்க, தமிழ்ப்பேராயத்தின் சிறப்பு நிலைப் பேராசிரியரும், கருத்தரங்க ஒருங்கிணைப்பாளருமான

பேரா. ம. செ. இரபிசிங் நன்றி நவின்னார். முன்னதாக, மாணவர்களின் கலைநிகழ்ச்சிகள் நடைபெற்றன. மாணவர்களும், பேராசிரியர்களும் பங்கேற்றனர்.

கருத்தரங்க நிறைவு விழா நிகழ்ச்சி, எஸ்.ஆர்.எம். அறிவியல் மற்றும் தொழில்நுட்பக் கல்வி நிறுவனம் பதிவாளர் பேரா. நா. சேதுராமன் அவர்கள் தலைமையில் நடைபெற்றது. எஸ்.ஆர்.எம். குழு நிர்வாகத்தின் இயக்குநர் திரு.சே. சந்திரகுமார் இ.ஆ.ப., அவர்கள் நிறைவு விழா சொற்பொழிவு நிகழ்த்தினார். தென்னிந்திய மொழிகளின் நாட்டுப்புறவியல் கழகத் (FOSSILS) துணைத் தலைவர் பேரா.அ. செல்லப் பெருமாள் அவர்களும், பொருளாளர் பேரா. ப. நசிம்தீன் அவர்களும் வாழ்த்துரை வழங்கினர்.



Role of Folklore in social life

STAFF WRITER

The Tamilperayam of SRM Institute of Science and Technology in collaboration with FOSSILS organized a two day National Seminar on “Relavance of Floklore Study in the Globalization Era” recently at MBA seminar Hall, SRM Kattankulathur.

Founder Chancellor Hon’ble Dr. T.R. Paarivendhar inaugurated the seminar.

During his inaugural address, he explained the role played by Folklore in the social life and emphasized the necessity for promoting the Folklore. In order to enrich the art, he declared that a course on Folklore study would be started at SRM Institute of Science and Technology and a prestigious award would be given to a folklorist on behalf

of the Tamil perayam of SRM.

The inaugural function was presided over by Prof.T.P.Ganesan, President Tamil Perayam and Pro-Vice Chancellor of SRM. Prof. H.M. Maheswaraiah, Vice-Chancellor of Central University of Karnataka and General Secretary, FOSSILS, Prof. N. Bhakthavathsala Reddy, Director, FOSSILS, and Prof. Raghavan Payyanad, secretary, FOSSILS felicitated introduction speech was delivered by Prof.K.Nachimuthu, President FOSSILS.

Entertainment programmes on Folklore were conducted by SRM students.

The secretary, Tamil Perayam Prof. Karu.Nagarajan welcomed the gathering and the Co-ordinator of the Seminar, Prof.M.J.Rabi Singh expressed the vote of thanks.

Research Scholars on Folklore studies Prof. B. Raja, Dr.Shanmugasundaram, Prof. Saraswathy Venugopal, Prof. Rajashree, Prof.P.Subbachary, Prof.K.M.Bharathan, Prof. Unnikrishnan, Prof. Jolly Pyuthuseery, Prof.M.V.Venkatesh, Prof.O. Muthaiah from Tamil Nadu, Puducherry, Kerala, Karnataka, Andhra Pradesh and Telungana participated in the two-day seminar and presented scholarly papers.

The valedictory function Prof.N.Sethuraman, Registrar, SRMIST presided over the function. Thiru.J. Chandra Kumar I.A.S., Director, Administration, SRM Group, delivered the valedictory address. The felicitations were given by Prof. A. Chellaperumal, Vice-president FOSSILS and Prof. P.Nazeemdeen, Tresurer, FOSSILS.



XION'18 and OUTREACH

STAFF WRITER

The Robotics club of SRM IST, Vadapalani Campus in association with the Department of ECE conducted a two day National Level Robotic TechFest XION'18 and SRM OUTREACH'18. The techFest aimed at imparting technical knowledge to Engineering College students and school students in the field of Robotics.

Mr. Chandrasekaran Vasudevan, Director and Head, Ericsson, inaugurated the event and delivered a presentation on 5G controlled Robotics. Col.K.S. Chakravarthi, Vice Chairman, IPE, Chennai delivered the special address and Dr. K. Duraivelu, Dean E&T addressed the gathering. Dr. C. Gomathy, HOD-ECE spoke about SRM Outreach and Mrs. J. Anita Christaline, Staff Coordinator explained about Xion. The events

conducted were Quadcopter workshop, Animation workshop and robotics competitions like Robo Soccer, Robo War, Pick and Place robots and Robo-E-Junk.

390 Students from 22 different Engineering colleges participated in the events. 105 schools students from 8 different schools benefitted from the workshops and live shows like Augmented Reality, Gaming software, Hologram and Quiz.

Conspiracy Theories: Myth or Fact?

SAMADRITA SAHA

Did Neil Armstrong really set foot on the moon? Did the Titanic really sink or was it the Olympic that sunk to the bottom of the North Atlantic Ocean? Who actually wrote William Shakespeare's plays? Are the remnants of UFOs really stored in the clandestine Area 51? These are questions that have given rise to the phenomenon that is conspiracy theories.

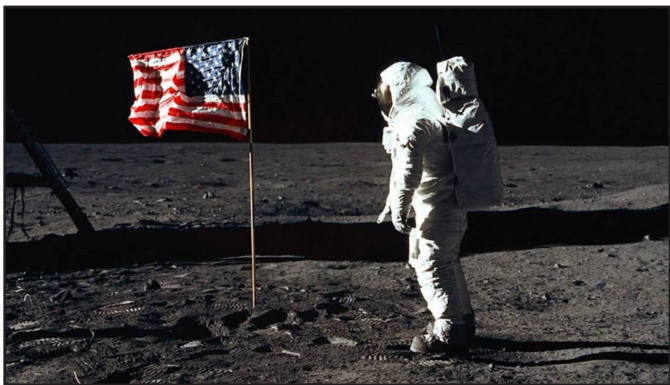
A theory suggests that the lunar landing of 1969 which was "a giant leap for mankind" never happened at all. It is believed that the entire event was faked to gain an upper hand in the space race that had caught the world in all its frenzy. The theory has its origin in the movement of the flag that Buzz Aldrin planted on the surface of the moon. Its movement indicates to the presence of wind, something which should have been impossible in the vacuum.

Some people believe that the Titanic was switched with its sister ship, the Olympic, before its maiden voyage in a ploy hatched by its owners as part of an insurance scam. Conspiracy theorists have cited several proofs, including stark resemblance between the two ships that would make them indistinguishable and the conspicuous absenteeism of the ship's owners on the journey.

Questions over the authorship of William Shakespeare's works have been doing the rounds for centuries. The eminent Mark Twain said, "So far as anybody actually knows and can prove, Shakespeare of Stratford-on-Avon never wrote a play in his life."

Area 51, tucked away in southern Nevada, United States, has been the subject of innumerable conspiracy theories with its ex-employees claiming that the covert base is used to store UFOs and experiment on aliens.

Ultimately, it is our belief that separates fact from myth and it is for us to decide what is true.



Moon landing



Area 51

Rural Special Mega Cardiac Camp

STAFF WRITER

The Department of Cardiothoracic Surgery from SRM Hospital and Research Centre, Potheri, conducted a Free Special Mega Cardiac Camp at Moongilthuraipattu, Near Thiruvannamalai recently. About 650 Patients were screened and benefitted. About Rs. 3,00,000/- worth of investigations and treatment were given there. Test like ECG, Heart Scan, Blood Sugar, HBA1C, Lipid profile, Blood Pressure were done. Free general and cardiac drugs were given. About sixty (60) patients were referred to our hospital for higher investigation like Angiogram, MRI and further super specialist treatment.



Form follows f(x)

AMRUTHA

“A peek into a realm where mathematics, technology, and design intersect.”

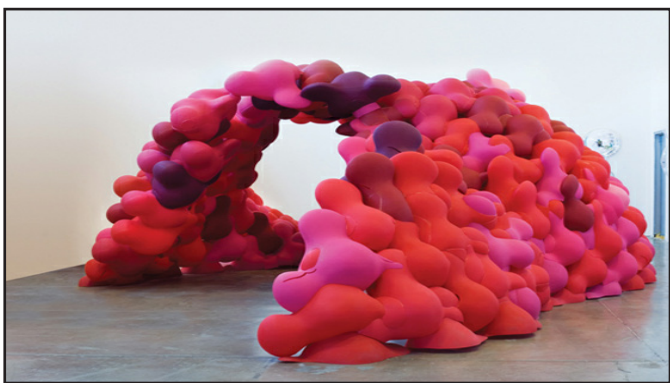
We live in an era governed by innovations, spending most of our formative years in the lap of technology. We're engulfed by machines, so much so that the creative fields are also feeling the impact. Ever since the advent of computer-aided design, the architecture and design industry has been seeing a dramatic leap in the visualization of design possibilities. Software like AutoCAD, Photoshop have become a designer's bread and butter. But the design industry is now seeing the rise of a new phenomenon - parametric design.

As the name suggests, parametric design is a realm wherein a design response is generated by tweaking a set of basic parameters (or constraints) required to fully realize the design intent. This tweaking not only maximizes unique design outcomes exponentially but minimizes the amount of effort required to generate these unique outcomes.

Interestingly, parametric design and architecture have quite a history. Before the term 'parametricism' was even coined, revolutionary Catalan architect Antoni Gaudí used parametric elements such as helicoid, hyperbolic paraboloids, catenary forms in his works. One of the finest examples of catenary forms used in built space is the Sagrada Familia in Barcelona, Spain designed by, you guess it - Antoni Gaudí.

A more contemporary interpretation of parametricism can be discovered in the works of architect Greg Lynn. Well known for coining the term 'blobitecture', Lynn's designs are entirely computer generated through software like Rhinoceros V5 and are famed for their integration of extremely organic, fluidic, blob-like forms.

The future of interdisciplinary design seems brighter than ever now, all courtesy of the advent of parametricism - ushering in an era of design brilliance.



Blurring the lines between design and technology: SCI-Arc Blobwall Pavillion, Greg Lynn form, 2008



Elektra '18 – celebrating electrical enthusiasm

AMRUTHA
SHREYA CHAUDHARY

The third edition of the annual techno-management-sports fest Elektra 2018, was organized and hosted by the EEE Association, Department of Electrical and Electronic Engineering, SRMIST from 13th to 15th of February, 2018.

Started in the year 2016 as an intra-departmental event by the EEE association, the fest was a way of expressing the “for the students, by the students” philosophy.

The fest was inaugurated by Dr. K. Vijayakumar, HOD, Department of Electrical and Electronic Engineering, SRMIST. With over 25 events categorized under technical, management,

sports, creative and cultural, the fest celebrated the true meaning of what it feels to be an engineer.

The technical events included project exhibition and scavenger hunt to name a few. The project exhibition was exclusively aimed at the EEE students to bring forth their working projects and initiate an exchange of intellect and ideas amongst the students. The highlight of the tech event, however, was the presentation on ‘Open-loop and Feedback Control of Blood flow in the Heart: A Systems Approach’ done by Dr. Ranjan Pradhan, Research Investigator, Molecular and Integrative Physiology, Department of Medicine, University of Michigan.

But all work and no play makes an engineer a dull engineer. So, apart from technical events,

sports, creative and cultural competitions were conducted as well. Online competitions like FIFA 18, CS Go, Mini Militia and Clash Royale proved to be a great crowd puller while the ‘Octaves’ and ‘Turn down for What’, the music and dance competitions remained all-time favorites. Market kshetra and Mad Ad gave a glimpse of the management side of the department. Energetic performances by the students in badminton and cricket tournaments brought out their sporting talents and enlivened the audience.

Elektra'18 saw a footfall of more than a thousand students implying its raging success and proving the mettle of the EEE Association yet again.

Like a battery is to a circuit: The backbone of Elektra'18 - EEE Association.

Punjabi Dhamaka

AMEESHA SHRIVASTAV
DRISHTI PARWANDA

SRM has a wide diversity of people from various religions, beliefs and cultures yet all of them stand together to enjoy all festivities with ultimate enthusiasm and fun. Lohri is a Punjabi folk festival celebrated majorly by Sikhs and Hindus all over India. It marks the end of winter season and is a traditional indicator of longer,

warmer days. It falls in the month of Paush and is set by the solar part of the lunisolar Punjabi calendar. Almost every year, it falls on 13th January of the Gregorian calendar.

The students of SRM IST poured their hearts out while celebrating the sacred Punjabi festival. The celebration took place at the Auditorium ground on 2nd February 2018. The event was organized by Directorate

of Student Affairs (DSA). It commenced at 6:00 pm in the evening. The festival of Lohri signifies the harvesting of Rabi crops. Harvested fields and front yards are lit up with flames of bonfire around which people gather and sing folk songs. Similar to the tradition, the Lohri celebration in SRM began with a bonfire in the center surrounded by a beautiful Rangoli pattern. Students gathered around with friends showing their love for the culture by wearing beautiful traditional dresses.

The event was brightened

by the presence of Dr (Col) CP Ramchandani, Director, Students and Campus Life who lit the holy fire along with his wife and marked the beginning of the special evening. Students sang various Punjabi songs

and danced joyfully making the event a big success while SRM maintained the legacy of having a diverse population of people standing and enjoying together as one representing the spirit of secularism!



Students dancing on Punjabi folk songs