# bitscan

Hyderabad Campus





## **Distinguished Visitors to our Campus**

Shri Lakshmi Narayana - CBI Ex Joint Director



Dr Srinath Reddy - President, Public Health Foundation India



Shri Anjan Gosh - Intel Lab



Shri Avinash Chander - Scientific Advisor, Secretary Defence R&D, DRDO and Dr Satish Reddy





Prof Dave Irvine Halliday - Founder, Light Up The World Foundation



Role of Youth in National Building





Prof Robert C Wolcott Kellogg -





Shri J Satyanarayana - Secretary,



Shri Rajanna - Vice President & Regional Head, TCS



Dr Ayanna Howard -Georgia Institute of Technology







Shri Jayesh Ranjan - Virasaat

Idea Carnival 3

Idea Carnival



Prof Faizan Mustafa - VC, Nalsar - GD Birla Memorial Talk



Sri J A Choudhary





Graduands F<mark>arwell S</mark>hri Ramachandraiah Naidu Galla, Chairman - Amarraja Group







## BITS Connect, 10 January 2013

BITS Pilani being a multi-campus university felt a need to integrate all the campuses for teaching, learning, research collaboration and administration through effective deployment of technology. A year back, BITS Alumni along with the institute took a lead to translate this dream into reality by initiating a major project 'BITS Connect 2.0'.

BITS Pilani together with BITSAA, its global alumni association, recently launched a multi-million dollar cross-campus technology initiative, the first-of-its-kind, named BITS Connect 2.0. This University-Alumni initiative was inaugurated simultaneously at Pilani, Goa and Hyderabad campuses, along with Cisco's offices in San Jose and Boston, jointly by Prof. Bijendra Nath Jain, Vice Chancellor, Raju Reddy, Chairman, BITSAA, in the presence of His Excellency the Governor of Goa, Shri Bharat Vir Wanchoo, and Shri J. Satyanarayana, Secretary, Department of IT, Government of India.





BITS Connect 2.0 enables high quality face-to-face interaction between faculty members and students across its campuses using Cisco's TelePresence network

technology. With networking of TelePresence-enabled classrooms, conference rooms and executive desktops at each of these campuses, it will be possible for faculty, students and administrators to share faculty and infrastructure resources and thereby collaborate in teaching and research, as also facilitate planning, administration, faculty recruitment and student placements.

## Winter Institute in Global Health 3-12 January 2013

Department of Biological Sciences, BITS Pilani, Hyderabad Campus in collaboration with Centre for Public Health, Albert Einstein College of Medicine, Yeshiva University, USA conducted the Winter Institute in Global Health from 3 to 12 January 2013.

The objectives of the workshop were to promote (i) enhanced awareness of the challenges to health due to globalization including cultural, ethical, practical challenges of conducting global health research, (ii) increased understanding of the interplay of biological, social, psychological factors in research methodology that combines these factors and (iii) sound knowledge about the interplay of local and global factors influencing health & health disparities across nations.

This unique seminar offered the participants an exciting opportunity to explore the intimate link between culture and health, along with colleagues from the US. Around 20 participants from India and US participated in this workshop. Participants earned 3 credits towards the 12-credit certificate program offered by Albert Einstein College of Medicine, USA. Enrolled students are required to undertake a project (3 credits) in India and complete coursework (6 credits, 1 sem) in New York for award of Certificate in Global Health.

Prof. Suman Kapur coordinated the workshop and Dr. P. Sankar Ganesh was the co-convenor. The Summer event was conducted in Goa Campus.

#### National Conference on Sustainable Water Resources: Planning, Management and Impact of Climate Change, 5-6 April 2013.

Centre of Excellence in Water Resources Management, Department of Civil Engineering, organized a two-day



National Conference on 'Sustainable Water Resources: Planning, Management and Impact of Climate Change'. The objective of the conference was to identify ways to reduce the gap between research and action and bring the stakeholders together, to share their experience and expertise.

The chief guest, Prof. V. Malakonda Reddy, the Founder Secretary and Principal, CBIT Hyderabad, Executive Secretary, Mediciti Hospitals, emphasized the importance of knowledge and appreciated the academic atmosphere at BITS Pilani, Hyderabad Campus. The workshop focused on the following themes: sustainable water resources, planning and management, impacts of climate change on water resources management, systems approach to hydrologic problems and modeling, prediction in ungauged basins, water quality, wastewater treatment and management, groundwater issues, remediation and modeling, urban hydrology including storm water management, coastal hydraulics, geographical information systems and remote

sensing in water resources management, applications of ANN, fuzzy logic, evolutionary algorithms to water resources planning and management, rain water harvesting, artificial recharge, and water conservation measures, and emerging technologies in water resources management.



#### Dly: Engineering the Eye, 7-13 July 2013



An intense seven-day workshop – 'Dly: Engineering the Eye' – was organized by the Centre for Innovation, Incubation & Entrepreneurship in collaboration with Media Labs at Massachusetts Institute of Technology, Tata Center for Technology and Design at MIT, LV Prasad Eye Institute and Perkins School for Blind from 7 to 13 July 2013. A group of 100 students from science, engineering, medicine and design was selected from all over India, out of an applicant pool of about 350, to participate in it. This workshop represented a great learning experience for the student-participants about problem identification, idea validation, structured mentoring and prototyping.

## Rethinking the Role of Humanities in Technical Education: Pedagogies & Possibilities, 18-19 October 2013.

The Department of Languages & Humanities conducted a 2-day National Conference – Rethinking the Role of Humanities in Technical Education: Pedagogies and Possibilities – on 18 and 19 October 2013. Over 100 academicians from premier institutions across the country participated in this conference and deliberated on the challenges in teaching language skills, the role of art and spirituality, the impact of new media on communication and pedagogy and other related themes.

Also the Department, in association with Centre for International Programmes, Osmania University, organised a special interactive session titled 'Technology and Literature - A Walking Tour - Photography, the Phonograph and the Typewriter' by Micheal Wutz, Brady Distinguished Professor, Weber State University, USA, on 16 November 2013.





The Department conducted a workshop on research methods for First Degree and Higher Degree Thesis students and research scholars on 14 September 2013. The workshop introduced students to research methods, practices and effective techniques of thesis writing.

## Innovations in Chemical Engineering, 15-16 November 2013

The Department of Chemical Engineering, BITS-Pilani, Hyderabad Campus, organized its first National Conference – 'Innovations in Chemical Engineering – ICE 2013' – on 15-16 November 2013. Dr. Vijay Kumar Saraswat, a former Director General of DRDO and a recipient of Padma Bhushan (2013) in the field of Defence Research, was the chief guest for the inaugural function. Mr. K. Murali, Ex-Director, HPCL, Dr. Ranjan Patnaik, DuPont Knowledge Centre, Hyderabad and Prof. K. Kesava Rao, IISc Bangalore, delivered the keynote lectures. Around 20 speakers from HPCL, CSIR-IICT, DuPont, NFCL, IIT, Dr. Reddy's Laboratories

Ltd., ARCI, Ramky Enviro Engineers Ltd., IISC Bangalore, NCCCM (BARC), NFTDC, University of Hyderabad and Directorate of Sorghum Research were invited to share their industrial and research experiences. The conference was sponsored by 24 companies including CSIR, Indian Oil, Dr. Reddy's, Agilent Technologies, Shell, India Cements and AP Pollution Control Board.

The chief guest, Mr Saraswat, spoke about integration of chemical engineering into various DRDO organizations in producing chemicals for propulsion, etc. He spoke on the need for innovation in energy industry putting emphasis on environment-friendly, safe and cost-effective processes.

The first key note address was delivered by Dr. Ranjan Patnaik, who spoke on Enabling Industrial Biotechnology using Metabolic Engineering. He spoke about the role of DuPont in paving the way for technological innovation on a global level.



The second key note lecture was delivered by Prof. K. Kesava Rao on Engineering Aspects of Living Systems. He started his lecture by pointing out the similarities among different living organisms, which have been mentioned in the book 'On Growth and Form' by Darcy Thompson (1917). He went on to explain the 'hidden science' in everyday life and how things like lifespan, diet, heartbeat are related to the body mass and the size of the organism.

Mr. K. Murali delivered the final key note of the conference on Process Intensification – the future Innovation arena in Chemical Engineering. He commenced his lecture by showing changes in the production trends from 'how much/how big' to 'how efficient' and went on to highlight the difficulties involved in scaling up the process to commercial scale.

## Securing Networks, Devices and Applications - 15-16 November 2013

The Department of Computer Science and Information Systems, BITS Pilani, Hyderabad Campus, organized a symposium on information security on the theme 'Securing Networks, Devices and Applications' during 15-16 November 2013.





## Distinguished Lectures and Guest Lecture Series

SI No	Presenter	Details of the Talk	Department	Date
1	Prof Venkata Krishnan, Assoc Prof., University of Illinois, Chicago	Technical TALK	CS&IS	10-Jan-13
2	Prof (Ms) Magda; UC Irvine	Talk on Game Technology	CS&IS	18-Jan-13
3	Prof Jukka K Nurminen, Professor of Computer Science, Aalto University, Finland	Energy efficient distributed computation on mobile	CS&IS	9-Feb-13
4	Mr ES Chakravarthy and Mr MS Reddy, Tata Consultancy Services	Technology/Market/Future IT	CS&IS	11-Feb-13
5	Dr Anu Puri, National Cancer Institute, Maryland, USA	Development of Lipid- Based Nanoparticles for Targeted Delivery of Cancer Therapeutics	Pharmacy	19-Mar-13
6	Dr V Vijaybhaskar, Sr Scientist, (Centre for Cellular and Molecular Biology, Hyderabad	Isolation and Characterization of Tissue / Cell type specific and Conditional Promoters from Arabidopsis thaliana	Biology	20-Mar-13
7	Prof Ram Mohan, Full Bright Professor from Department of Chemistry, Illinois Wesleyan University, Bloomington, Illinois, USA	Environmentally Friendly Organic Synthesis Using Bismuth(III)and Iron Compounds.	Chemistry	25-Mar-13
8	Prof Ram Mohan, Full Bright Professor from Department of Chemistry, Illinois Wesleyan University, Bloomington, Illinois, USA	Better living through Green Chemistry.	Chemistry	25-Mar-13
9	Dr Subhrakanti Chakrabarti, Shantha Biotechnics Ltd., Hyderabad	Development, scale-up, validation and manufacturing of recombinant human erythropoietin	Pharmacy	13-Apr-13
10	Vaishali Sadaphal, Scientist, TRDDC Pune	Performance & capacity management in Data centers using data mining.	CS&IS	13-Apr-13
11	Prof BP Chandrashekar, Retd Professor, NIT Warangal	Pradhan mantra Gram Sadak Yojana and its implementation	Civil	22-Apr-13
12	Prof PT Manoharan, Indian Institute of Technology, Chennai.	ESR Spectroscopy	Chemistry	13-Aug-13

SI No	Presenter	Details of the Talk	Department	Date
13	Prof B Pitchumani, Particle Science and Technology, Department of Chemical Engineering, Indian Institute of Technology (IIT), Delhi	Application of Chemical Engineering to Cement and Pharmaceutical Industries	Chemical	19-Sep-13
14	Dr Undurti N Das, Director, KIMS Foundation and Research Centre	Is type 2 diabetes mellitus a disorder of the brain?	Pharmacy	27-Sep-13
15	Dr Usha Raman, Head, Department of Communication, University of Hyderabad	Tools and techniques of technical communication	Pharmacy	1-0ct-13
16	Dr BLV Prasad, Scientist, Physical Chemistry Division, National Chemical laboratories (NCL-CSIR), Pune	Who is Nano	Chemistry	11-Oct-13
17	Prof LR Ram Mohan, Worchester Polytechnic Institute, USA	The Aharonov - Bohm effect with a twist: Quantum mechanics on a Mobius Ring	Physics	11-Oct-13
18	Sri Sakshi Rupananda, Chinmaya Mission	Srimad Bhagavad Gita	HSS	18-0ct-13
19	Sri Sakshi Rupananda, Chinmaya Mission	Srimad Bhagavad Gita	HSS	21-Oct-13
20	Mr Ramakrishnam Raju, Convenor National Alliance for People's Movement	Democracy and The Right to Information	HSS	24-0ct-13
21	Prof Lazar Mathew, Advisor, Medical Sciences, Engineering & Technology, PSG Institute of Advanced Studies, Coimbatore	Microsystems for Medical Applications	Biology	25-0ct-13
22	Prof Sharath Ananthamurthy, Bangalore University - Department of Physics	Red blood cell biomechanical dynamics and colloidal particle interactions in an optical field	Physics	1-Nov-13
23	Prof KPN Murthy, School of Physics, University of Hyderabad	Work Fluctuations and the Second Law of Thermodynamics	Physics	1-Nov-13
24	Prof H Krishna Murthy, Chief Research Scientist, SERC, IISc. Bangluru	Security in Distributed Systems	CS&IS	15-Nov-13
25	Prof Ranjan Bose, Microsoft Chair Professor, IIT Delhi	Wireless Security	CS&IS	15-Nov-13

SI No	Presenter	Details of the Talk	Department	Date
26	Prof Manoj S Gaur, MNIT Jaipur	Android Malware Analysis	CS&IS	15-Nov-13
27	Prof Ponnurangam Kumaraguru, Hemant Bharat Ram Faculty Research Fellow, IIIT Delhi	Security & Privacy in On-line Social media	CS&IS	15-Nov-13
28	Prof Alwyn Roshan Pais, NIT Surathkal	Throttling DDoS Attacks	CS&IS	15-Nov-13
29	Mr Sitaram Chamarty, Principal Consultant, TCS Innovation Labs, TCS, Hyderabad	Securing the application development process with Gitolite	CS&IS	15-Nov-13
30	Prof GP Sahoo, Law School, Banaras Hindu University, Varanasi	Cyber crime and privacy protection: legal and policing challenges in India	CS&IS	15-Nov-13
31	Padmabushan, Dr Vijay Kumar Saraswat, Ex-Director General DRDO	Recent Innovations in Chemical Engineering	Chemical	15-Nov-13
32	Prof Vijay Lakshmi, MNIT, Jaipur	Browser Vulnerabilities and Attack Scenarios	CS&IS	16-Nov-13
33	Mr MR Muralidharan, Principal Research Scientist, IISc, Bangalore	Principle and Practice of Intrusion Detection Systems	CS&IS	16-Nov-13
34	Mr Prafulla Kumar, Director, DeitY, Govt. of India	Cyber Security: Govt. perspective	CS&IS	16-Nov-13
35	Mr Prasad Gorja, Principal Staff Systems, Freescale India	Security challenges and approaches for an effective Unified Threat Management	CS&IS	16-Nov-13
36	Mr Krishna Nadh Manepalli, Sr Principal Engineer, McAfee, India.	Nextgen Endpoint Firewall	CS&IS	16-Nov-13
37	Dr PRK Murti, Ex Professor, Dept. of Computer Science (University of Hyderabad).	IT (Amendment) Act, 2008 and Legal Issues of Encrypted Document	CS&IS	16-Nov-13
38	Dr J Narashima Murthy, Kakatiya University	Peptide amphiphiles as building blocks for bio- nanomaterials	Pharmacy	21-Nov-13
39	Mr Sameer, Territory Technical Service Manager, Ultratech	Smart materials for construction	Civil	28-Nov-13
40	Prof DRK Reddy, Former Professor, Applied Mathematics, Andhra University.	Cosmological modeling of the Universe	Maths	16-Dec-13

## International Visits

Prof D Sriram from the Department of Pharmacy visited KwaZuluNatal University, Durban, South Africa for collaborative research and K-RITH, as invited speaker in February 2013.

Prof Yogeeswari from the Department of Pharmacy delivered a guest lecture on 'Structure-based Drug Design Approach for the Identification of Small Molecule Inhibitor of Various HIV Enzymes' at K-RITH (KwaZulu-Natal-Research Institute for TB and HIV), Durban, South Africa on 25 February 2013.

Prof D Sriram from the Department of Pharmacy visited Bogomoletz Institute of Physiology and Institute of Organic Chemistry Kiev, Ukraine for a collaborative research visit in May 2013.

Prof P Yogeeswari delivered a research lecture on Drug Design Strategies for Therapeutic Intervention of Neurological Disorders at Bogomoletz Institute of Physiology, Kiev, Ukraine on 24 May 2013.

Prof P Yogeeswari from the Department of Pharmacy presented a research paper on Neuropathic Pain Research in the 5<sup>th</sup> Association of South-East Asian Pain Societies Conference, Singapore in May 2013.

Prof VS Rao, Director visited Princeton University wherein he has addressed post doctoral and graduating students in June 2013. Prof Rao visited MIT Media Labs to hold discussions on MIT Dly: Engineering the Eye workshop in June 2013.

Prof Souri Banerjee from the Department of Physics visited Central Research Laboratory, Hitachi, Tokyo, Japan in June 2013 for research collaboration.

Prof D Sriram from the Department of Pharmacy visited Karolinska Institute for Indo-Swedish Research Project (DBT – VINNOVA), Stockholm, Sweden in June 2013.

Dr Amit Nag from the Department of Chemistry visited Ludwig Maximilian University of Munich, Germany, under the scheme 'Bilateral Collaborative Exchange Programme by INSA' for 2 months June-July in 2013.

Dr Subhas Ghosal from the Department of Chemistry visited University of Kassel, Germany, under the scheme 'Bilateral Collaborative Exchange Programme by INSA' for 2 months – June-July – in 2013.

Dr Rahul Nigam was invited for a talk to Wilfred Laurier University, Waterloo, Canada, from 26-30 August 2013 [Association of Commonwealth Universities Travel Fellowship]

A paper – 'Insight into Innate Immune Response: Role for Asn40Asp Allele of OPRM1 Gene' – by Anuradha Pal and Suman Kapur was accepted for presentation at the 15<sup>th</sup> International Congress of Immunology held in Milan, Italy from 22-27 August 2013.

Prof K Sumithra from the Department of Chemistry visited Frankfurt Institute for Advanced Studies (FIAS), Frankfurt am Main, Germany in 3-6 September 2013 for attending International Conference on Computational Modelling of Nanostructured Materials (ICCMNM 2013) and delivering an invited talk on 'Doped Carbon Nanotubes as Sensors for Oxygen and Ammonia'.

Dr. Manish Kumar, Faculty, Department of Mathematics, organized a symposium entitled 'First Symposium on Pure and Applied Mathematics (2013)' in Greece. It was a part of 11<sup>th</sup> International Conference of Numerical Analysis and Pure and Applied Mathematics (ICNAAM 2013) during 21-27 September 2013 Rodos Place Hotel, Rhodes, Greece.

Prof D Sriram from the Department of Pharmacy visited Russian Academy of Science Moscow, Russia for Biochemistry, under INSA International visiting fellowship in September 2013.

Dr Manish Kumar was Invited by Prof Stefano Marmi, the Director of the Centro De Giorgi, Pisa, Italy, to participate in a school – Multi-scale and Multi-field Representations of Condensed Matter Behavior – during 25-29 November 2013. He accepted the invitation and attended the school.

## **Invited Lectures by Faculty**

Name of the faculty member	Title of the lecture (L)/ workshop (W) and occasion (if any)	Institution in which it was delivered/conducted	Duration/date (month date (-date), year)
Prof KS Raju	Fuzzy Cluster Analysis and Decision Making (L)	Department of Civil and Water Management Engineering, Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded	21-25 January 2013
Dr V Vamsi Krishna Venuganti	Transdermal Drug Delivery Systems	Siddartha College of Pharmacy, Vijayawada	4 February 2013
Dr KVS Chaitanya	Advances in quantum theory	University of Hyderabad	25-27 February 2013
Dr V Vamsi Krishna Venuganti	Enhancing Science and Technology Inputs in Legal Education	NALSAR, Hyderabad	28 February 2013
Dr K Sumithra	Computational Modeling with Density Functional Theory	School of Chemical Sciences, Mahatma Gandhi University, Kottayam	6-7 February 2013
Prof N Rajesh	Interesting Aspects of Interaction between Biopolymers and Heavy Metals	Department of Chemistry, Madurai College, Madurai	February, 2013

Name of the faculty member	Title of the lecture (L)/ workshop (W) and occasion (if any)	Institution in which it was delivered/conducted	Duration/date (month date (-date), year)
Dr Chittaranjan Hota	Security Trends, Challenges, and Solutions in Peer-to-Peer Networks	Security and Privacy Symposium 2013 (SPS 2013. Prabhu Goel Research Centre for Computer and Internet Security, Indian Institute of Technology ( IIT ), Kanpur	28 February - 2 March 2013
Dr Sarmistha Banik	Equation of State for Core Collapse Supernova Simulation and Neutron Star Core	Saha Institute of Nuclear Physics, Kolkata	4 March 2013
Dr V Vamsi Krishna Venuganti	Nanocarriers for gene delivery, Pharma Apotheosis on Nanocarriers and DOE	CES College of Pharmacy, Kurnool	1 March 2013
Dr Chittaranjan Hota	File systems for Cloud Computing	Department of Post-graduate Studies in Computer Science, Utkal University, VaniVihar, Bhubaneswar.	16 March 2013
Dr Chittaranjan Hota	Cyber Security Research Landscape in India	RCUK/ DST, Cyber Security Research Challenges at IIIT, Delhi	24-26 March 2013
Dr Chittaranjan Hota	Big-data and cyber-physical systems for smart healthcare	India-France (CEFIPRA) Workshop on Challenges in Overcoming Complexity from Big Data to Cyber- physical Systems, Indian Institute of Technology (IIT), Delhi	4-5 April 2013
Dr Sankar Ganesh	Analyzing Water Quality Data, Identifying & Categorizing Polluting Industries at Jeedimetla Industrial Area and Planning the Strategies to Prevent Illegal Discharge of Industrial Pollutants Into Hussain Sagarlake	Hyderabad Metropolitan Development Authority	9 May 2013
Dr Geethakumari	Cloud Computing Security	University of Hyderabad	3 June 2013
Prof Suman Kapur and Blesson Abraham	Empowering young women in developing countries through ICT: A public health approach	International Conference on Empowering Women in Developing Countries through Information & Communication Technologies, JUIT, Waknaghat, Solan, HP	1-3 June 2013

Name of the faculty member	Title of the lecture (L)/ workshop (W) and occasion (if any)	Institution in which it was delivered/conducted	Duration/date (month date (-date), year)
Dr A Vasan	Optimization Using Differential Evolution and Firefly Algorithm	Workshop on Soft Computing Tools and its Applications in Engineering (SOCTAPE-2013) organized by Department of Civil Engineering, Government College of Engineering Aurangabad	5 June 2013
Prof KS Raju	Fuzzy and Decision Making - Soft Computing Tools and its Applications in Engineering	SOCTAPE-2013, Government College of Engineering, Aurangabad	3-7 June 2013
Dr Sarmistha Banik	Equation of State for Core Collapse Supernova Simulation	Interface of Numerical Relativity with gravitational-wave Astronomy, Neutrino Physics and High-Energy Astrophysics, at ICTS, TIFR, IISc Campus, Bengaluru	27 June 2013
Dr K Naga Mohan	Role of CNVs in Common Disorders	Summer Institute of Global Health, BITS Goa.	24 June – 6 July 2013
Dr Amit K Gupta	Constitutive Modeling of High Strength Alloys	Faculty Development Program on 'Material testing and forming of alloys at elevated temperatures at GRIET, Hyderabad	2 July 2013
Dr B Mishra	Some cosmological model of the universe in alternative theories of gravitation	First International Conference on Mathematical Modeling and Optimization Techniques in Science and Engineering (MMOTSE 2013), held at SSBT's College of Engineering and Technology, Jalgaon	26-27 July 2013
Dr Asma ahmed	Upstream Process: Navigating the Roadblocks to Process Robustness	Future Biotech India 2013	July, 2013
Dr Chittaranjan Hota	P2P Security Threats and their Countermeasures	Workshop on Cyber Security, Bharti School of Telecommunication, Technology, and Management, Indian Institute of Technology (IIT), Delhi	3-4 August 2013
Dr Meenakshi Viswanathan	Need for Concept Oriented Physics Teaching in Engineering Colleges	Vignan Jyothi Insitute of Technology, Hyderabad	August, 2013
Dr MG Prasuna	Presentation and Public Speaking Skills	Centre for International Programmes, Osmania University	24 August 2013

Name of the faculty member	Title of the lecture (L)/ workshop (W) and occasion (if any)	Institution in which it was delivered/conducted	Duration/date (month date (-date), year)
Prof KS Raju	Multi-criterion Decision Making and Climate Modeling during the National Workshop on Impact of Climate Change on River Basin Management	Department of Civil Engineering, Aurangabad, Maharashtra	16-17 August 2013
Dr B Mishra	Some Aspects of Graph theory	Workshop on Applications of Mathematics in Various Engineering Branches and Bio-sciences, CBIT, Hyderabad	13-14 August 2013
Dr Chittaranjan Hota	Security Issues and Challenges in a Connected Worl	National E-Governance Seminar on ICT & Open Source Software: Issues and Challenges, held at Hidayatullah National Law University, Raipur.	22 September 2013
Dr Sounak Roy	Environmental Catalysis: From Mechanism and Materials Properties	Shiv Nadar University, Noida	10-12 September 2013
Prof KS Raju	Decision Making In Multi- criterion Perspective: An Overview	Sustainable Water Resources Development and Management – held at the Department of Civil Engineering, Govt. College of Engineering, Aurangabad, Maharashtra	30 September - 1 October 2013
Prof P Yogeeswari	Computational tools to develop chemical libraries for Drug Discovery	National Conference on Frontiers of Chemical Research, Department of Chemistry, JNTU, Hyderabad	25-26 October 2013
Dr Kannan Ramaswamy	Nano Plasmonics: a Route to Ultrasensitive Bio-Sensing	SPECTRA, Vignan Jyothi Institute of Technology, Hyderabad	25 November 2013
Dr T Ray	Introduction to Graph and Geometric Algorithms	NIT Warangal	23-25 November 2013
B Mishra	Cosmological Model with Wet Dark Fluid in Alternative theories of Gravitation	National Conference on Pure and Applied Mathematics (NCPAM-2013), held at College of Engineering, Pune	17-19 December 2013
Dr Rahul Nigam	Death of Dyonic Black Holes	Seminar at Raman Research Institute, Bengaluru	17 December 2013

#### Accolades

Prof D Sriram received UGC Researcher award for his outstanding contribution in pharmaceutical research.

Dr Amitkumar Gupta received UGC Researcher Award for his contribution to mechanical engineering.

Prof VS Rao, the Director, was honoured by TANA (Telugu Association of North America) as a Guest of Honour in May 2013 and felicitated for his great contribution in the areas of education and institution building.

Prof P Yogeeswari was the recipient of Indian Council of Medical Research award 'Shakuntala Amir Chand Prize 2010' for her excellent biomedical research in August 2013.

Prof Suman Kapur developed a point-of-care device for measuring blood glucose sensing. The device is based on a finger prick with a micro-needle, after which red blood cells from the blood are trapped in a specially designed plug and the plasma is allowed to pass through. The end product is development of a color corresponding to plasma glucose levels. The major advancement is on ease of use without any loss in sensitivity.

Dr Ramakrishnan Ganesan was selected for the IUSSTF fellowship to work for three months at Rensselaer Polytechnic Institute, Troy, New York, U.S.A.

Prof S Swaminathan was Invited to serve as a member of the Scientific Advisory Group of the Centre for Bio-design & Diagnostics, Translational Health Science and Technology Institute (THSTI), Ministry of Science & Technology, Government of India (August 2013).

Prof SumanKapur was promoted as Senior Professor at BITS (2013).

Dr Sankar Ganesh was nominated as Member, Working Core Group for Clean Hussain Sagar Initiative by the Metropolitan Commissioner, Hyderabad Metropolitan Development Authority (HMDA).

Prof KS Raju was appointed as Advisory Committee Member, National Conference on Sustainable Water Resources Development and Water Management, (SWARDAM-2013), Department of Civil Engineering, Government College of Engineering, Aurangabad (30 September - 1 Ocotber 2013).

Prof VS Rao was felicitated with 'Eminent Educationist Award' by Indus Foundation during their Indo-global Education Summit held at Hyderabad, in November 2013.

Mr. Rahul Vats received DST International Travel Support for presenting poster in the 3<sup>rd</sup> Nano Today Conference, Singapore.

Prof KS Raju was appointed as the Associate Editor, ISH Journal of Hydraulic Engineering, Taylor & Francis, U.K.

Prof KS Raju was appointed as Scientific Committee Member, HYDRO 2013 International, IIT Chennai, 4-6 December 2013.

Dr I Sreedhar was selected as a Member of Academic Council, Osmania University in 2013.

Dr I Sreedhar was selected as a Member, Board of Studies, Jawaharlal Nehru Technological University, Hyderabad.

Dr Ramesh Babu Adusumalli was selected as a Member, Board of Studies, Chaitanya Bharathi Institute of Technology (CBIT), Gandipet, Hyderabad.

The award for the second best paper was given to Padmavathi DV and Suman Kapur for 'Sarcosine as a Biomarker for Extra-capsular Prostatic Disease', presented at the 'International Conference on Emerging Trends in Biomarker Research: Prospects and Challenges' held at Hyderabad, India, 13-14 September 2013.

Raja Shekar Varma, a Ph.D. student working under the supervision of Prof Ramakrishna Vadrevu, was selected for participating in the School on 'Advanced NMR Spectroscopy' held in the School of Chemistry, University of Hyderabad, from 12-24 August 2013.

U Ramyasri (Ph.D. student) and Dr. Jayati Ray Dutta got the best poster award in the International Conference on Advances in Chemical Engineering (ICACE, 2013), NIT, Raipur, Chhattisgarh, India. Mr Praveen Kumar Mandapalli, a Ph.D. student working under the supervision of Dr. Vamsi Krishna Venuganti, received Formulation and Drug Delivery Section Travel Award for his poster presentation at AAPS Annual Meeting, San Antonio, USA.

Rupak Raman, a Ph.D. student working under the supervision of Prof. Suman Kapur, was selected to participate in the Science Conclave, 2013, Indian Institute of Information Technology, Allahabad, held during 8-14 December 2013.

Mr Nikunj Dudani, student from Department of Chemical Engineering was selected to pursue First Degree Thesis (August - December 2013) on 'Design, Implementation and Evaluation of a Cryogenci Stage for Combined Cryofixation and Optical Microscopy of Biological Samples' at Max Plank Institute for Biophysical Chemistry, Goettingen, Germany.

## Other Achievements

A point-of-care device for testing antibiotic sensitivity of pathogens found in human urinary tract: The developed device offers a) Ease of operation and analysis of results, rapid results at the bedside or in doctors chambers/lab in less than two hours, reliability comparable to conventional disc assay for antibiotic sensitivity of pathogens, and at affordable low cost per test.

A point-of-care device for measuring blood glucose sensing: The device is based on a finger prick with a micro-needle, after which red blood cells from the blood are trapped in a specially designed plug and the plasma is allowed to pass through. The end product is development of a color corresponding to plasma glucose levels

## In Print – Books Published

- Srikanta Dinda, Epoxidation of Vegetable Oil, LAP LAMBERT Academic Publishing, 2013, ISBN: 978-3-659-31622-7.
- Srikanta Dinda, Karthik Chethan V., Vikranth K Surasani, Ramesh Adusumalli, Balaji Krishnamurthy, Asma Ahmed, D Purnima, Lakshmi Sirisha, Innovations in Chemical
- Engineering edited by BS Publications, 2013, ISBN: 978-81-7800-329-0.
- Sandip S Deshmukh, A book chapter on 'Renewable Energy Technologies' in Encyclopedia of Environmetrics 2e published by John Wiley & Sons Ltd, UK (ISBN: 978-0-470-97388-2)

## Patents Published / Issued

- Process and Composition of a Catalyst/Additive for Reducing Fuel Gas Yield in Fluid Catalytic Cracking (FCC) Process, S Dinda, PK Chinthala, A Gohel, A Yadav, S Mandal, G Ravichandran and AK Das, International Patent, (2013), Pat. No: WO 2013005225 A1.
- FCC catalyst additive and a method for its preparation, G. Ravichandran, PK Chinthala, T Doshi, A Gohel, A Arusu, S Mandal, AK Das, S Dinda and A Parekh, International Patent, (2013), Pat. No: WO 2013011517.
- Process and composition of a new catalyst/additive for reducing fuel gas yield in fluid catalytic cracking (FCC) process, S Dinda, PK Chinthala, A Gohel, A Yadav, S Mandal, G Ravichandran and AK Das, Indian Patent, (2013), Pat. No: IN 2011MUM1955 A 20130111.
- FCC catalyst additive and a method for its preparation,
   G Ravichandran, PK Chinthala, T Doshi, A Gohel, A Arusu,

- S. Mandal, AK Das, S Dinda and A Parekh, US patent, (2013), Pat. No: US 20130023710A1.
- FCC catalyst additive and a method for its preparation, G Ravichandran, PK Chinthala, T Doshi, A Gohel, A Arusu, S Mandal, AK Das, S Dinda and A Parekh, European patent, (2013), Pat. No: EP 2548644A1.

## Joining Hands (MOU)

- The Department of Pharmacy signed an MoU with M/S Vigi Med Safe to conduct certificate programme in Pharmacovigilance.
- The department of Biology has signed two MOUs with:
   a) Celestial Bio labs, Hyderabad and b) Zenotech Labs (subsidiary of Ranbaxy Res. Labs), Hyderabad.

## **Sponsored Research Projects**

SI. No.	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration
1	Role of adipose in ethanol- induced tissue injury	Dr Palash Mandal	DST	Biological Sciences	25,00,000	3 years
2	Development of Indigenous POC device micro channel / fluidic device for estimation of lipid profile in human plasma / serum	Prof Suman Kapur	NPMASS	Biological Science	46,66,700	2 years
3	Application of Micro-Environment Property Descriptor to Study Free Energy Changes in Amyloidogenic Protein Aggregation	Dr Debashree Bandyopadhyay	UGC	Biological Science	5,40,000	2 years
4	Delineating the impact growth promoting rhizobacteria on plant polyamine metabolism: novel insights in to plant –PGPR interactions	Dr Sridev Mohapatra	DST	Biological Sciences	25,00,000	3 years
5	Novel Biomarker responses to validate acute toxicity of engineered nanoparticles and their physicochemical interactions in earthworm as a model bioindicator of nano (eco) toxicology.	Dr Shankar Ganesh	DBT (RGYI)	Biological Sciences	14,07,800	3 years

SI. No.	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration
6	Development of a cost - effective membrane and DNA chip- based methods for detection of mutations associated with Multiple Drug Resistant- Tuberculosis	Dr Nagamohan	DST	Biological Sciences	69,16,000	2 years
7	Elucidating signaling mechanisms in plant responses to drought stress mitigation by beneficial soil bacteria	Dr Sridev Mohpatra	Seed grant	Biology	13,70,000	2 years
8	Development of personalized DNA markers in breast cancer patients for early diagnosis and prognosis using a non-invasive method.	Dr K Naga Mohan	Seed grant	Biology	13,50,000	2 years
9	Development of Synthetic Resin Product	Dr Srikanta Dinda	DST-FT	Chemical Engg.	22,00,000	3 years
10	Extractive the fermentation with surfactants to enhance butanol	Dr Pradip BabanRao Dhamole	DBT	Chemical Engg.	29,17,000	3 years
11	Synthesis of modified TosMIC & BetMIC for use as key reagents in the synthesis of boronated heterocycles	Dr Anupam Bhattacharya	CSIR	Chemistry	17,55,200	3 years
12	Synthesis & Biological activity of various triazoles as effective antifungal agents	Dr KVG Chandrasekhar	DBT	Chemistry	13,72,400	3 years
13	Structure Based Rational Design and Synthesis of Mycobacterium Tuberculosis inhibitors	Dr KVG Chandrasekhar	DST	Chemistry	22,00,000	3 years
14	Development of suitably customized polymers and clay based adsorbents for the effective removal of chromium from e-waste	Dr N Rajesh	DST	Chemistry	42,82,000	3 years
15	Localization of flexible polymer chains on chemically heterogeneous surfaces	Dr K Sumithra	CSIR	Chemistry	9,40,200	3 years

SI. No.	Title of the Project	Principal Investigator	Funding Agency	Department	Sanctioned Amount	Duration
16	Photocurable organic-inorganic hybrid precursors for the fabrication of metal oxide micro/nanostructures	Dr Ramakrishan Ganesan	DST FT	Chemistry	25,98,000	3 years
17	Collaborating for quality teaching and research in the area of computational mechanics	Dr Chandu Parimi	British Council	Civil Engineering	3,88,350	1 year
18	Integrated urban flood management in India: Technology-Driven solutions	Prof KS Raju	ITRA	Civil Engineering	19,06,000	3 years
19	Generalized Convexity, Hermite- Hadamard Inequality on Riemannian Manifolds and their Applications	Dr Akhladiqbal	UGC	Mathematics	6,00,000	2 years
20	Novel Minimal-Solid lubricant Mixture Application Method for Performance Improvement in Turning	Dr NSK Reddy	DST	Mechanical	32,50,000	3 years
21	Non -Invasive Delivery odsiRNA to treat Melanoma	Dr VVS Vamsi Krsishna	DBT (RGYI)	Pharmacy	22,84,800	3 years
22	Transcutaneous delivery of lipsomesirna complex to treat skin cancer	Dr Vamsi Krishna Venuganti	DST	Pharmacy	29,26,000	3 years
23	Study of Decoherence and Entanglement in Non Linear Systems and their Application	Dr KVS Shivchaitanya	DST-FT	Physics	14,16,000	3 years
24	Investigation of magneto-optical effects in composite magneto plasmonic nanostructures for sensing application	Dr Kannan Ramaswamy	DST	Physics	32,70,000	3 years
25	On the formation of Dwarf Elliptical Galaxies	Dr Rahul Nigam	UGC	Physics	5,40,000	2 years

## Student Welfare Division – Fostering Cultures and Talents

**Scholarships:** The following scholarships were received by the students of Hyderabad campus and the number of students who received them for this academic year is:

- Ashok Agarwal Scholarship –1 student
- Merit Scholarship 124 students
- Merit Cum Need Scholarship 1202 students
- DAAD Scholarship 7 students

BITS Embryo: BITS Embryo conducted Series of Lectures in the Academic Year 2013 as follows:

Date	Speaker	Торіс
20-Aug	Kiran Bedi	Importance of Leadership in today's India
25-Aug	Mr. Chandra Prakash Khatri	Six point Somebody: MS despite low CG
26-Aug	Manish Chauhan	An Interactive Session on Global MS Opportunities
28-Aug	Anand Tandon	A talk on Stocks and Investment Management
31-Aug	Srivarsha Rajshekhar	BITS2MSPHD: Knowing all about the application process
31-Aug	Adwait Gandhe	BITS2MSPHD: Knowing all about the application process
3-Sep	Dr Ayanna Howard	Pre-ATMOS
5-Sep	Prof Robert C Walcott	Pre-ATMOS
6-Sep	Prof Dave Irvine Halliday	Pre-ATMOS
12-Sep	Shivakumar Ganesan, Kartikeyan Krishnamurti, Siddharth Ramesh	What lies Ahead?
12-Sep	Shivakumar Ganesan, Kartikeyan Krishnamurti, Siddharth Ramesh	MBA MS Entrepreneurship
14-Sep	Sai Akhilendra N	All you need to know as an MBA aspirant
7-0ct	Rajroshan Sawhney	Have you planned an MBA career in ISB?
13-0ct	K Vijaya Rao	Atmos Conclave
13-0ct	Mani Shankar	Atmos Conclave
13-0ct	Venkat Sai Ram	Atmos Conclave
13-0ct	SK Nandy	Atmos Conclave
15-0ct	Suman Kapur	Rs.2 Blood Glucose Sensing: How? Why? What More?
20-Oct	Raghavendra Pradyumna	General Interactive Session on MS/PhD
21-Oct	Kartik Kumar	Road to Space

- Spreading knowledge about Finance to all the students on Campus and lecture series organized by Bulls n Bears.
- Guest lecture on Entrepreneurship as a Career delivered by Alumni Affairs Unit
- Guest Lecture on Occupational Health Hazards
- Awareness Program on entry through Young Leaders Program into Indian School of Business

## **Sports Activities**



Students have shown great enthusiasm in making use of the sports facilities provided in the campus. Each hostel has facilities for indoor games like Table-Tennis, Chess and Carom. There are two badminton courts and grounds for Volleyball, Football, Hockey, Cricket, Throw Ball and Lawn Tennis. Physical Education Department of SWD has been conducting friendly matches among Bhavans (RIXA - Inter Bhawan Championship) and inter-discipline tournaments apart from invitational competitions with other institutions like IIT Hyderabad, IIIT, NALSAR, CBIT, etc.

The SAC consists of state-of-the-art separate gyms for boys and girls. The boys- section is equipped with strength gaining single and multi-sections machines, electrical trainers and treadmills, while the girls-section consists of cardio fitness machines including electrical trainers and treadmills. Two badminton courts with maple wood flooring, 5 table tennis tables, 16 carom boards, 30 chess sets and 3 pool tables are also available in the SAC. Apart from indoor games, 2 basketball and 2 lawn tennis Nova

acrylic cushion surface courts are also available with chain link fencing and flood lights.

First nationwide sports festival – ARENA-2013 – was conducted on April 5, 6 and 7. As many as 35 colleges participated in various events like Foot Ball, Volley Ball, Basket Ball, and Tennis. The Second edition also will be conducted in ARENA-2014.

## Awards and recognitions won by students in BOSM-2013

- Chess: The chess team (Mr. Bharat Krishna, 2012A7PS092H, Mr. Tejas Ravichandran, 2013A7PS164H, Mr. Satrasala Naga Phani Kumar, 2012A3PS024H, Mr. Krishna Prasad Bindumadhavan, ID No. 2013A8PS519H, Mr. Prashant Sharma, ID No. 2013A2PS529H) won 2 Gold, 1 Silver, 1 Bronze medals.
- Swimming: Mr. Mokkapati Srikar, ID No. 2012A7PS111H, won 2 Gold, 2 Bronze.
- Power Lifting:
  - Mr. Siddarth Lenka, 2011A3PS300H, won 2 Gold Medals and one Silver Medal.
  - Mr. Siddharth Sharma, 2011A4342H, won Silver in Power Lifting.
  - Mr. Abdul Qadeer, ID No. 2011A7PS060H won Silver
- Athletics: Mr. M. Praneeth, ID No. 2012B2B1929H won Bronze Medal in 5000 Mts.

## Creative Zone – Cultural Activities

- On the occasion of Republic Day and Independence Day, BPHC Marathons were conducted on 26 January and 15 August 2013 for 3K & 6K Categories.
- Center for Entrepreneurial Leadership (CEL) in association with Project Spark by BITSAA conducted 'Earn While You Learn Scheme' for students.
- The student union elections were conducted by the Election Commission on 3 September 2013 to elect the office bearers of the Students Union Council for the academic year 2013-14.
- Mahatma Gandhi Jayanti was celebrated on 2 October, 2013.
- A programme 'Innovation in Chemical Engineering (ICE)' – conducted on 15-16 November 2013 saw keynote speakers ranging from premier academic institutions like IICT, BARC, UCT-MUMBAI, etc. and industry stalwarts from Aditya Birla Group, Dupont, etc. participating in it.
- French Language classes were conducted in BPHC.

- Students represented Hyderabad Campus at different youth festivals like OASIS, WAVES, and MOOD INDIGO and won prizes in various categories.
- Important community festivals like Lohri, Pongal, Ugadi, Rama Navami, Ganesh Chaturthi, Durga Puja, Diwali, Janmastami, Mahavir Jayanthi and Christmas were celebrated by the students with great enthusiasm. Various cultural activities were organized as part of the festivities.
- Quad Copter and Aero Modelling workshops were conducted by RC Club.
- Students came up with the fourth issue of the annual magazine of the campus, 'ON THE ROCKS', which showcased their creative abilities.
- RBI-BITS Interface was conducted on the campus.
- Journal Club released journals during PEARL, ATMOS and other major events.

## PEARL'13



Pearl is the Annual Cultural Festival of BITS Pilani Hyderabad Campus. Be it dance, music, art or drama, Pearl is synonymous with glamorous Professional Shows, having featured some of the most respected artists from India as well as abroad. It also reflects a culmination of the culture and heritage of our country with a modern touch.

Pearl was held from 07-10 March 2013 and continued it's legacy of bringing in rock bands from around the

globe and had the world renowned Amplifier all the way from Manchester, England. The fest also showcased the best of Indian talent as well, with Junkyard Groove and Nikhil D'Souza swaying the crowd. Pearl was graced by a scintillating performance by maestro Embar Kannan in classical Indian Music section. Pearl 13 paraded events to match every student's interests. The fest drew in over 6,000 students from all over the country.







#### Convocation '13



BITS Pilani, Hyderabad Campus held its convocation for the outgoing undergraduate, post graduate and Ph.D. students on 21 July 2013. Ms. Shobhana Bhartia, Pro-Chancellor, Birla Institute of Technology and Science, Pilani, presided over the convocation. Dr (Smt) D. Purandeswari, Hon'ble Minister of State for Commerce and Industry, was the chief guest and delivered the convocation address. Smt Manjushree Khaitan, Prof BN Jain, Vice Chancellor, Prof VS Rao, Director, Hyderabad Campus, Prof MMS Anand, Registrar, Directors of other BITS campuses and senate members participated in the academic procession. The other dignitaries included members from academia,

industry, BITS Alumni and administrative officials. The students receiving the degrees, accompanied by their parents, were present on this occasion.

In this convocation, a total of 613 students received their degrees, out of which 561 were undergraduate students, 48, higher degree holders and 4, doctoral students, on this day. Ms. Divya Ravi of Computer Science was awarded the gold medal. Chetlur Ravi Vishnu Vardhan and Challa Samyuktha of Electronics and Communications Engineering were awarded silver and bronze medals respectively for the best academic performance in the graduating class of 2013.























#### **ATMOS**

ATMOS 13, the annual techno-management fest was held from 11-13 October. With a footfall of 5000, it continued its legacy for being a platform for students to learn, compete and inspire. Spanning 60 hours, the fest featured guest lectures, paper presentations, competitions, quizzes and other technical shows.



The headline event was Windows Appfest conducted by Microsoft where students competed to design the perfect user-friendly app. Coding enthusiasts participated in Codejam while MUNners battled it out during BITSMUN. Another highlight of the fest was the ATMOS conclave, featuring Bollywood director Mani Shankar, Padma Shri awardee Vankat Sai Ram and other acclaimed personalities. The pro-show by Karnatic rock band Agam entertained one and all through their soulful music.

## Campus Life: Community Welfare Unit

The Community Welfare Unit (CWU) coordinates the welfare and recreational activities of the students and staff members of the institute. In 2013, quite a few consultants in specialized fields visited the medical centre regularly. Professionals visited the campus to teach musical instruments, classical dance, keyboard, yoga and karate. The diagnostic needs of the campus residents are taken care of by trained staff visiting the medical centre from Mediciti every morning to collect the samples.

- A New Year's Eve party was hosted for the community in the children's park where lots of children and adults showcased their varied talents.
- The Republic Day was celebrated on the campus and Mr. Ashok Reddy B., Chairman of Confederation of Indian Industry, Andhra Pradesh was the chief guest on the occasion.
- Holi Milan was celebrated on 17 March. On the occasion, the community had fun with colors in the morning and

cultural programmes followed by high tea, in the evening.

- The 67<sup>th</sup> Independence Day was celebrated on the campus and Dr. K Srinath Reddy, President, Public Health Foundation of India, was the chief guest for the function.
- The community celebrated for the first time a week long Ganesh Puja in the new stage in the children's park. The celebrations ended with cultural performances by kids and adults in the community.
- Children's Day celebration was organized by the Unit in the children's park with lots of games, fun-filled activities and competitions for kids on 14 November.
- Saraswathi Puja and Diwali were celebrated by the campus community and many cultural events were organized on both occasions.
- The community also had a party on the New Year's eve with games, cultural programme, bonfire and dinner.

## Innovation and Entrepreneurship

CIIE: The Centre for Innovation, Incubation and Entrepreneurship (CIIE), was envisaged by Prof. V. S. Rao, Director, BITS Pilani, Hyderabad Campus, with a vision to foster innovation-driven entrepreneurship, in alignment with BITS Pilani's VISION 2020. The vision is to '[B]e amongst the top 3 Technology & Science institutions in India by 2015 and amongst the top 25 Technology & Science institutions in Asia by 2020. One of the imperatives to achieve our vision is Innovation & Entrepreneurship".

CIIE got an impetus in August 2013, when the dedicated physical infrastructure was created in the basement of the library. CIIE is a one-stop source that offers multiple services associated with entrepreneurship. Dr. P. Sankar Ganesh is the Faculty in-charge of CIIE. He also leads the Innovation & Entrepreneurship imperative of Mission 2015.

#### CIIE comprises:

- Centre for Innovation (CFI), which aims to inculcate a spirit of innovation.
- Technology Business Incubator (TBI), which aims to provide a low cost and resource intensive sandbox where entrepreneurs can develop their product, services or process ideas towards commercialization.
- Centre for Entrepreneurial Leadership (CEL), which aims at fostering entrepreneurial skills among the students.

**CFI:** The Centre for Innovation (CFI) aims to inculcate a spirit of innovation and foster a culture of excellence and perfection among all the stakeholders at BITS Pilani, Hyderabad Campus.

The goal is to make the campus a storehouse of ideas, where all the processes are undertaken in a manner that brings maximum benefits to every individual on the campus and the society. The Centre functions as a nodal agency, which promotes ideation and innovation in each and every possible sphere of lives in the campus. CFI works in collaboration with Technology Business Incubator (TBI) and Centre for Entrepreneurial Leadership (CEL).

**TBI:** BITS Pilani, Hyderabad Campus, in collaboration with the Department of Science and Technology, Government of India, has established a Technology Business Incubator. TBI@BITS Hyderabad aims to provide a low cost and resource-intensive sandbox where entrepreneurs can develop their products and services or process ideas towards commercialization. TBI@BITS Hyderabad provides office and lab space equipment, seed funding and vitally, mentorship from an international network of successful business leaders. Prospective entrepreneurs, BITS students, faculty, staff and alumni are engaged with TBI in a friendly and hassle free environment. Mr. Surya Rao is the Managing Director of TBI@BITS Hyderabad.

#### **Progress**

- Infrastructure
  - 4500 SFT of office space has been set up and is functioning.
  - 2000 SFT biotech/Pharma lab is to be launched in April 2014.
  - 2600 SFT Micro-Electro Mechanical Systems (MEMS) lab to be launched in June 2014
  - 1200 SFT 'ICT for Healthcare' lab to be set up.
  - A total of 5 incubatees Nabler (digital analytics), Sri Krishna Research Co (bus interior automation), SSK Bio (bio-control and drug development) Idea3D (novel bio-materials for 3D printing) and Applytics (product authentication software) – have signed incubation agreements.

**CEL:** The Centre for Entrepreneurial Leadership, popularly known as CEL, at BITS Pilani, Hyderabad Campus, is aimed at fostering entrepreneurial skills among the students on the campus. In the process of identifying, nurturing, training and establishing start-ups, CEL is involved in a wide range of activities. CEL works in collaboration with Technology Business Incubator (TBI) and Centre for Innovation (CFI). CEL is a consortium dedicated to find the entrepreneur in the students of the BITS Pilani, Hyderabad Campus. It connects students with solid entrepreneurial skills, in the campus, to form a close knit network, working together to spread the word of entrepreneurship.

## Caring Beyond our Walls - NSS/ NIRMAN/SCIO

#### Social and Environmental Activities

There are many social organizations like NIRMAAN, YUVA (Youth Under Visionary Action), HOPE and SIRI (Society Involved in Reinventing India on campus) SCIO and NSS, actively working on the campus.

#### **NIRMAAN**

**SAP (School adoption Program):** Focusing on the quality of education offered at the government schools, our project also aims to bridge the huge void created by the lack of English language skills among the kids there. We adopted 4 government schools near our campus.



As a result of the constant efforts that we have put in and the continuous support given by the Microsemi Corporate for developing the primary school in Malkaram Village, the School Adoption Program-Malkaram, in collaboration with Microsemi Corporate, bagged the second prize for 'Innovative & Path Breaking Initiatives in the Areas of Community Development & Environment Protection by SME Member Companies'.

**Livelihood Opportunities:** Empowering women and providing an alternate means of livelihood to the financially backward, our livelihood projects in the village target 53 women. We trained 50 women in skills like tailoring, candle making, interior design.

SAAKAR is a candle-making project initiated by the livelihood operations team in October 2012. The team tries to create employment opportunities for these rural women. They are taught candle-making techniques by a professional, and they are given the raw materials to proceed further under the guidance of the student volunteers.

The later stage involved the marketing of their candles by the volunteers in various schools and townships across Hyderabad and also in our campus. We invested around 38,000 INR in this project and it made a huge profit of around 20,000 rupees. By turning more than 50% of our investment into profits, we just made Saakar bigger and better.

**Community Development:** The team looks after various needs of the community in areas of health, hygiene, awareness and other infrastructural lacks. We have conducted various medical camps and have spread awareness on sanitation and the like.

As a part of an effort to contribute to the greenery of the nearby villages, we organized tree plantation drives in Malkaram and Upparpally. Around 50 Neem saplings were planted during this event. To ensure that the students have adequate knowledge about tree plantation and their maintenance, the necessity of roots and their role in absorption of nutrients was explained. Then the students were asked to plant the saplings under the guidance of the volunteers. Yet another successfully conducted awareness and activity campaign came to an end on a happy and satisfying note.

**Ignite - All Round Education Project:** It is an education project aimed at providing value-based education to the under-privileged. Extending from schools, orphanages to a cluster of houses, we were able to reach out to kids of different backgrounds and bridge the quality gap in education by adding a more practical component to it. We are able to reach 750 under-privileged students in an academic year.

**SCIO:** SCIO is a Section-25, non-profit company aimed at counselling students and making them adept with the load of information available on various career choices. It aims to form a support structure for the current educational system and counsel students so that they can choose their careers wisely.



**Veda 1.0:** As part of our various activities, we conducted a fest in BITS-Pilani, Hyderabad Campus on 27 January 2013 for students of class VIII, IX and X from various schools of Hyderabad. The aim of the fest was to expose the students to a vast amount of information and content that will

help them to choose a well-assessed career. We also held competitions like essay writing, elocution, quizzes.

Vaidya Medical Camp: A mega medical camp was conducted by the members and volunteers of SCIO in the premises of the primary school at Lakshmapur, a village in Shameerpet Mandal, in association with Apollo Hospitals. There were more than 700 beneficiaries who got free medicines and counseling. We also provided facilities for free blood pressure, ECG and blood sugar check-up. The camp was inaugurated by the local M. L. A, who was very proud of and glad about our social service activities. Further, he promised us his immense support and wished us the best for our forthcoming activities.

Campus Tour: Students along with teachers from various schools in Hyderabad were invited to the campus for a daylong visit. The picturesque campus with state-of-the-art facilities, labs and the educational departments proved to be inspirational and enlightened young minds. Students were extremely enthusiastic and delighted to know about the different branches available in engineering and their future prospects.

**Veda 2.0:** A second edition of the fest was organised on 17 November 2013 for the high-school students. The fest was aimed at describing various career choices available to them. The guests of the day were Shri K. Suresh Reddy (Former Speaker, AP State Legislative Assembly), Dr. G Satheesh Reddy, (Director, Research Centre Imarat (RCI)), Mr. K. Prabhakar Reddy (IAS-Former Secretary to the Chief Minister, Andhra Pradesh), Mr. Venkat Reddy (Retd. IPS Officer), Dr. Pradeep Patalay (General Practitioner), Dr. P. K. Thiruvikraman and Mr. Sivarama Krishna Kodali (Faculty, BITS-Pilani, Hyderabad Campus).

CRPF Event: We had a counselling stall at CRPF National Exhibition held on 29 & 30 December, 2013. We were able to extend our help to nearly 300 student and parents.

#### National Service Scheme (NSS)

Three units of National Service Scheme were allotted to BITS-Pilani, Hyderabad Campus, by the State Liaison Officer in March 2009. Currently there are 300 volunteers which include 174 male and 126 female students.

Prof. V. S. Rao, Director, is the Chairman of the NSS team. There are three Programme Officers one for each of the units. Unit I: Mr. Shamuel Tharu, Unit II: Dr. N. Jalaiah and Unit III: Dr. Basudha Misra. Shamuel Tharu also serves as the overall Programme Coordinator.

The units have adopted three villages: Adraspalli, Keshavapuram and Mallemguda, which are the main focus

areas of most of their philanthropic activities. Volunteers take yearly surveys and petition governmental authorities about common grievances, improve physical condition of schools, provide basic education in hygiene and personal finance, career guidance to youth and credit information to small farmers and businessmen.

A regular feature of the NSS-BPHC is its bi-annual blood donation drive in collaboration with the Society of the Red Cross. Since its inception, over 1500 units of blood have been collected. As part of our environmental awareness drive, over 7000 saplings have been planted with almost an 80% survival rate. Regular drives ensuring safe disposal of waste are also conducted. The NSS also works closely with the Entrepreneurship Cell of BPHC in order to effectively sustain small economic initiative is the villages adopted.

Currently, students are working on a survey on political and social awareness and implementation of government programmes in the adopted villages. As part of *Prathiba*, in coordination with YUVA, over the last three years, NSS volunteers have visited various orphanages in the city spending time and playing with the children, educating them on basic issues of personal health and hygiene, the importance of education and environmental awareness.

#### List of NSS Activities Starting From 2013

- Mass camp at Adrasapalli, 19-20 January 2013
- Republic Day celebration on campus, 26 January 2014
- Blood donation drive (with Red Cross), 26 January 2013
- Effective Leadership program for NSS volunteers by HSS Department, 7 February 2013
- Eco awareness drive and carbon footprinting during Pearl 5 March 2013
- Talk on benefits of Volunteering Dr. Sree and Sreenath 14 March 2013
- Earth Hour Tree plantation and awareness drive, 23 March 2013
- Campus Cleaning drive, 24 March 2013
- Special camps in Ignite schools
  - Don Bosco and Courtsey and Valmiki Foundation, 24 March 2013
  - Manichadulu and Aman Vedika, 24 March 2013
- Village camp in ADRASPALLI 12-14 April 2013
  - 140 plants planted in government school
  - Conducted candle-making and detergent-making workshops
  - Organized a medical camp
  - A session regarding various schemes of government by Dr. P. Lalitha, head of Economics and Finance Department.

- SAHARA clothes collection drive 11-12 May 2013: Collected 100 books, nearly 200 t-shirts, 200 pants, 150 girls-dresses and many other old things. (Books were given to GRANDH, BPHC --- Grandh is a collection of old text books, which are available to students at lower prices in BPHC and distributed to nearby schools and villages).
- NSS induction on 14 August 2013: 100 new members were inducted into NSS to offset the passing out batch.
- A socio-economic survey was conducted in six villages of Mallamguda, Babaguda, BandhakadipalliKesharam, Uddamarri and Keshavapuram on 22 August 2013. Around 30 students went to each village.
- Clothes collected in SAHARA were donated to seven orphanages: Manchikalalu Organisation, Don Bosco Navajeevan, Grace Social & Educational society, Amma foundation, Good will foundation, Spoorthi and Kamalamma Old Age Homes from 22 August to 8 September 2013.
- A two-day village camp was conducted in MALLAMGUDA from 14-15 September 2013
  - Planted around 145 plants in village
  - Conducted martial arts workshop to 50 kids
  - Arranged a medical camp for nearly 100 villagers
  - Conducted a drawing competition to kids in government school
- Tree plantation drive in campus 5-6 October 2013
  - Planted 150 saplings across CP to SAC road, around KRISHNA, RAM, SHANKAR, VYAS bhavans.
  - Distributed 100 plants in city
  - 50 saplings were given to villagers in the Upparpalli and pothayapalli.
- A street play on social evils was performed on 7 October 2013 during 4 k run.
- REFORM NATION: BPHC-NSS team started conducting events for Reform-nation competition conducted by IIT-Bombay on 13 October 2013.
- Blood Donation Drive: Altogether a total of 120 students and faculty members donated blood during this drive, which was organized in co-ordination with RED CROSS SOCIETY on 17-18 October 2013.
- A guest lecture on 'Democracy & Right to Information' by
   B. Ramakrishnam Raju, Convenor, National Alliance for people's movement was organized on October 24.
- Conducted rallies for anti-drug addiction campaign and cancer awareness campaign on campus and citywide on 27 October 2013.
- Painted the Government school in MALLAMGUDA on 14 November 2013.
- Organized voter registration drive on 16 & 20 November: In co-ordination with 'VOLUNTEER FOR A BETTER INDIA', we registered around 500 students for voter ID.

## Introducing New Faculty (1 January – 31 December 2013)

SI No	Name of the Faculty Member	Designation	Group	Research Area
1	Adonis Vasile Lupulescu	Assistant Professor	Physics	Nuclear Magnetic Resonance Spectroscopy
2	Amrita Priyadarshini	Assistant Professor	Mechanical	Manufacturing Science and Engineering
3	Ashok Kumar Kapoor	Visiting Professor	Physics	Elementary Particle Physics, Quantum Mechanics
4	Balaram Ghosh	Assistant Professor	Pharmacy	CNS Drug Discovery, Epigenetic Modulations, Behavioral Neuropharmacology
5	Durba Roy	Assistant Professor	Chemistry	Molecular Dynamics Simulations, Physical Chemistry, Simulation Laser Spectroscopy
6	Hanumantha Rao S	Visiting Faculty	Economics & Finance	Finance and Operations
7	Jagan Mohan Jonnalagadda	Assistant Professor	Mathematics	Discrete Fractional Calculus, Difference Equations
8	Kartick Tarafder	Assistant Professor	Physics	Condensed Matter Theory
9	Khalid Anwar	Lecturer	Mechanical	Thermodynamics and Fluid Mechanics
10	Kishore Kumar N	Assistant Professor	Mathematics	Numerical Linear Algebra, Numerical Methods to Partial Differential Equations
11	Lakshmi Sirisha P	Lecturer	Chemical	Bio Process Technology and Biofuels
12	Onkar Prakash Kulkarni	Assistant Professor	Pharmacy	Pharmacology and Immunology
13	Payal Mehta	Visiting Faculty	Economics & Finance	Management, Human Resources and Organizational Behaviour
14	Phaneendra Kiran Chaganti	Assistant Professor	Mechanical	Machining, Sustainable Manufacturing and Green Machining
15	Pradip Babanrao Dhamole	Assistant Professor	Chemical	Bio separations, Bio fuel
16	Shrikant Yashwant Charde	Assistant Professor	Pharmacy	Novel Drug Delivery Systems, Analytical and Bio-analytical Method Validation
17	Sivarama Krishna Kodali	Visiting Faculty	Economics & Finance	Management, Global Macro Trends, Financial markets and Behavioural Finance
18	Sri Kalyana Rama J	Lecturer	Civil	Civil Engineering Structures
19	Sudatta Banerjee	Assistant Professor	Economics & Finance	Growth Theory and Economics of Education. Applied Econometrics
20	Sumit Kumar Vishwakarma	Visiting Faculty	Mathematics	Theoretical Seismology, Elastic Wave propagation
21	Swaminathan S	Professor	Biology	Virology and Biotechnology
22	Swati Biswas	Assistant Professor	Pharmacy	Drug Delivery Pharmaceutical Sciences and Nano medicines
23	Vikranth Kumar Surasani	Assistant Professor	Chemical	Reactive Transport in Porous Media, Modeling and Simulation in Chemical Engineering.

I have been pleasantly surprised by the cosmopolitan outlook.

S Jaipal Reddy

Former Union Minister – Science and Technology

A great organization with excellent ambience, strong engineering strength and a committed faculty. I look forward to working together with this team to build our national capability.

Avinash Chander SA to RM Secretary Defence R & D DG, DRDO

A memorable visit on a very auspicious day. I look forward to a grand and highly productive collaboration between the BITS family and the PHFI family

K Srinath Reddy

President, Public Health Foundation of India (PHFI) (Delhi & Hyderabad)

It was a great experience visiting BITS (H) Campus, interacting with students and faculty. I find it a very progressive institution with excellence in many fields of engineering and serving linkages with National R&D labs and industries. What impressed me most is the self-sustaining nature of this institute. I wish the institute all the best in their efforts to promote engineering education and research.

Dr V K Saraswat

Former Secretary, DDR&D SA to RM, DGDRDO, MoD, New Delhi

Fantastic Experience!!

Ichiro Lino

Managing Director, Hitachi, India

It is a privilege for me to be at BITS-H Campus, which is absolutely splendid. More importantly, I found the leadership and faculty very energetic, young and vibrant. Infrastructure is fantastic. Nice landscaping which definitely stimulates and motivates students and faculty. BITS (H) has bright future and I wish them the best.

V Rajanna

Vice President & Regional Head Tata Consultancy Services (TCS)

An excellent educational institution. Being Ph D from BITS Pilani, I am very happy for Hyderabad Campus for its quality education.

M Y S Prasad

Director, SDSL, SHAR ISRO I am extremely impressed by the excellent campus of BITS Pilani, Hyderabad and the way it has come up in less than 6 years. I am sure that this campus would achieve many great successes not only in India but globally in future which would make Hyderabad proud.

Navin Mittal

Special Commissioner Greater Hyderabad Municipal Corporation

BITS Pilani Hyderabad Campus is best gift Birla group has provided to Hyderabad. The vision is envisaged in taking BITS Pilani Hyderabad Campus as the best campus in the world may be even in topline.

Ramachandra Naidu Galla Chairman, Amarraja Group Tirupati

Hugely impressed with the campus. Though associated with development of the institution as Principal Secretary since 2005. Very happy to see it first time. Very good library, hostel, dining halls, labs impresses me. Hope and wish this institution will further grow and be a very colorful feather in the cap of Hyderabad.

C R Biswal, IAS (Retd)

Chairman, Public Service Commission, AP

Extremely enthusiastic student body and very impressive facilities – All the ingredients are in place to create a world-class institution

M Vidyasagar

The University of Texas, Dallas

Thank you for receiving us today. Your school is doing wonderful

**April S Wells** 

US Consulate General, Hyderabad

Thanks Birla's role in the future of India and the world

Robert C Wolcoth

Kellogg School of Management, USA.

It is a great learning and source of inspiration. The campus has come up very well. The faculty and students are highly motivated and are doing things with passion. Dr V S Rao garu, the Director of the institution is leading the team and he is a great source of inspiration to one and all.

VV Lakshmi Narayana, IPS

Former Joint Director, CBI, Hyderabad

It was a wonderful visit coming to BITS Hyderabad. I look forward to future collaborations with you and the students

Prof Ayanna Howard

Gerogia Tech

Very impressive campus and staff. My best wishes to Dr Rao and his team

Sridhar

Monash University of Australia



## BITS Pilani Hyderabad Campus

# భవిష్మత్లో సిబీ కోసం యుద్దాలు COMBINATION තිඬිත సంరక్షించాలి Bridge rural-urban divide, Purandeswari tells students Young gun blazing Students of change Thrilled to BITS: 613 students get degrees The 'fastest autibiotic finder' developed set's Pilani to incubate 7 start-ups at Hyd campus Uniformity keeps BITS campuses integrated **රාාබිම් ම්ර්ම කා**ර්දා



Birla Institute of Technology and Science, Pilani Hyderabad Campus Jawahar Nagar, Shameerpet Mandal Hyderabad - 500078 Telangana, India **BITS in Media**