

BITScan

Semester Gleanings

Issue 16



Semester II

2009 - 2010

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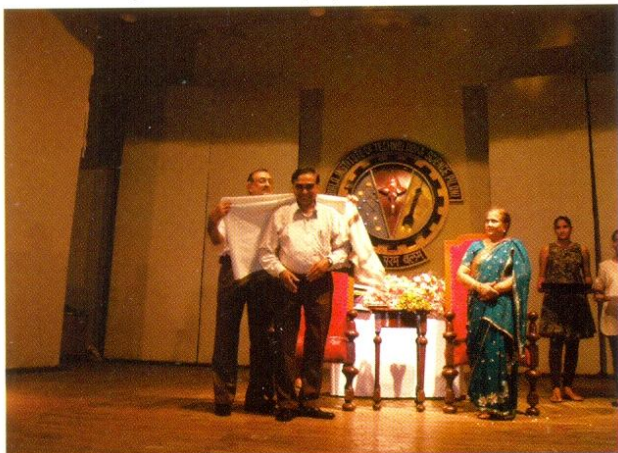


**BIRLA INSTITUTE OF TECHNOLOGY
AND SCIENCE**

**Pilani - 333 031
Rajasthan**

EDITORIAL

The Second Semester, 2009-10 witnessed BITS, Pilani marching ahead with myriad of developments on every front. Keeping in with the quintessentially eventful ambience of the campus, significant and variegated events kept unfolding and thrilling us as the days progressed.



The Institute gave a memorable farewell to Prof. L.K. Maheshwari, a man of extraordinary vision and acumen, who completed his term as the Vice Chancellor of the Institute and handed over the baton to Prof. Bijendra Nath Jain. Prof. LKM's association with BITS dates back to his student days when he joined the M.Sc. (Tech.) Program at BITS and later on pursued his doctorate from the Institute. For the next four decades, Prof. Maheshwari kept guiding and leading BITS in various capacities until he retired as its Vice-Chancellor on July 31, 2010. The Institute will continue to be benefited by his vision and guidance as Professor Emeritus and Advisor.

The semester also saw Prof. G. Raghurama taking over as the Director of the Institute and Prof. R.N. Saha as Deputy Director (Research & Educational Development and Administration) and Prof. G. Sundar as Deputy Director (Off-Campus Programs) respectively. Meanwhile, Prof. R.K. Mittal took over as the Director of BITS, Pilani – Dubai Campus.

Besides these happy tidings, the semester also saw the fraternity of BITS losing one of their most distinguished custodians in the passing away of Prof. S. Venkateswaran, the erstwhile Vice-Chancellor of BITS, Pilani on 15 May 2010.

Among other highlights of the semester, BITS, Pilani had the honour of playing host to Prof. Douglas Osheroff, winner of Nobel Prize in Physics in 1996 and presently, Professor at Stanford University, US. He delivered a lecture

entitled "Scientific Discovery: a Nobel Laureate's Experiences" on 14 February 2010. The semester also witnessed several other talks by distinguished experts, conferences and seminars.

That research at BITS has also taken a big stride forward, got evidenced as Dr. Raj Kumar Gupta, Physics Group, secured a prestigious project on *Development of Surface Plasmon Resonance Instrument with a Novel Optical Design* worth Rs. 25 lakhs. This will surely provide a fresh impetus to research drives across the institute.

Like the preceding years, the students of the Institute kept on bringing us more laurels as AcYut 2 and AcYut 3 developed by students of BITS Pilani (Sushma Vallabhaneni (Team Leader), Akash Gupta, Tushar Agrawal, Ankit Kulshrestha, Rohan Maheshwari and Viveka Nopani), won four medals in Robogames held at San Mateo Fairgrounds, California, US during 23-25 April 2010.

The semester was rounded off in greater enthusiastic fervour as the institute's eminence burgeoned further with a staggering number of 1,39,234 applications being received for BITSAT 2010 for a total of 2000 seats. The fact that this year as many as 21 All India Board Toppers have sought admission under the scheme of Direct



Admission to Board Toppers further underlines the growing popularity of the institute. The semester also vouchsafed the institute making a robust march towards translating the ideas put forth by the various task forces formed under Mission 2012 into reality. Now for taking the institute further on to a more enterprising voyage in pursuit of further excellence and innovations, both the faculty and the students are keen to stride further under the seasoned leadership of new Vice-Chancellor, Prof. Bijendra Nath Jain and the dynamic stewardship of Prof. G. Raghurama, Director, BITS, Pilani – Pilani Campus.

New Vice Chancellor at BITS



Professor Bijendra Nath Jain has taken over as the new Vice Chancellor of BITS, Pilani on 01 August 2010. Professor Jain obtained B.Tech. from IIT Kanpur and Ph.D. from SUNY, Stony Brook (NY), both in Electrical Engineering and Computer Science. Since 1975 he had been with IIT Delhi, where he was Professor of Computer Science. Earlier at IIT Delhi, he has been a Microsoft Chair Professor, Head of the Department, Dean Alumni Affairs, and Deputy Director (Faculty Affairs).

Prof. Jain has held various visiting assignments with Universities of Texas and Maryland, Bell Labs, and Cisco Systems. Most recently, he has been a Gledden Senior Visiting Fellow at University of Western Australia, Perth.

His teaching and research interests are in Computer Networks and Systems, with applications to wireless networks, environment monitoring and information security. Over the last 35 years, Prof. Jain has trained over 2500 computer communication specialists, many of whom are leaders in R&D in India and abroad, including those in government and industry.

Other than authoring a large number of research papers for international journals and for conferences of repute, he has co-authored the book "OSI: Its Architecture and Protocols" published in 1993 by McGraw Hill, New York, and translated into Japanese by Soft Research. Prof. Jain is also a co-inventor, with researchers from Cisco Systems in seven US patents.

In 1983, Prof. Jain was the first to propose a nation-wide data network for India. With funding from Government of India and UNDP, and together with developers from other institutions in India, he built and launched in 1989 India's first data network, ERNet. Today, ERNet is a thriving not-for-profit company connecting over a million users spread across over 2000 institutions in India.

Prof. Jain has helped several organizations in India build their data networks. These include

REC, IA, PNB, NTPC, NDDB, UNICEF, and (most recently) Customs & Excise Department. He is also a member of several committees, including DRDO's Naval Research Board, Technology Assessment Board of Microsoft Research, and Board of Governors of IIT Delhi.

Prof. Jain is also a Co-Founder and had been Chairman of Kritikal Solutions, a technology start-up focused on computer vision, embedded systems and networks.

With his vast experience, profound vision and sharp acumen, Prof. Jain is all set to take the institute to greater height of growth and glory.

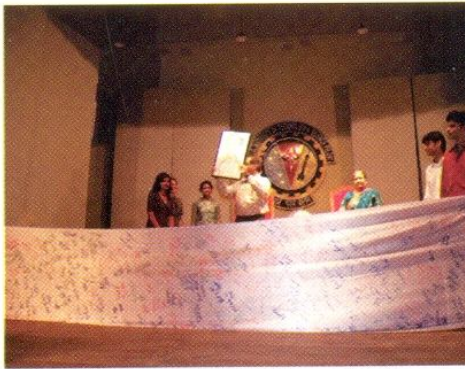
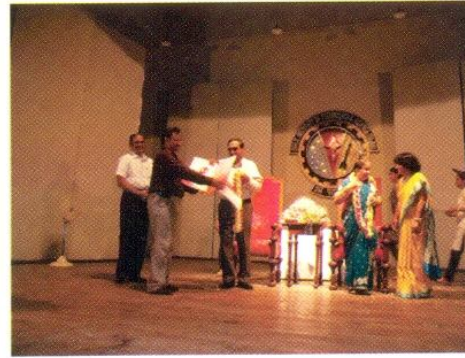
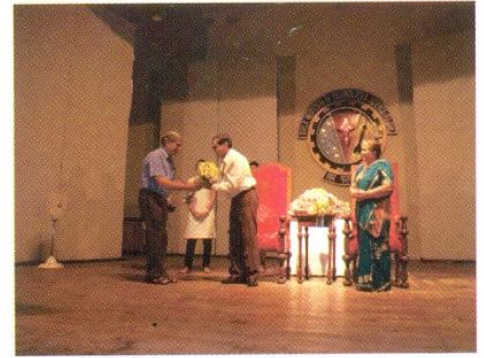
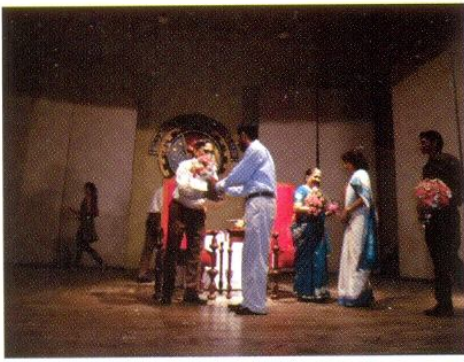
A Memorable felicitation to an Accomplished VC

Prof. L.K. Maheshwari, the man of extraordinary vision and legendary personality, completed his term as Vice-Chancellor of BITS on 31 July 2010 and handed over the responsibilities of Vice chancellorship to Prof. Bijendra Nath Jain. The institute will continue to be benefited by his vision and guidance as Professor Emeritus and advisor.



Prof. L.K. Maheshwari, fondly called *LKM Sir* by his students, served BITS for about 40 years in various capacities and added many feathers to its cap. He came to Pilani as a student at the age of 20 in 1965 and completed his M.Sc. (Tech.) and his Ph.D. degrees in 1965 and 1971 respectively. He commenced his career as a Lecturer in EEE Group in 1971 and became a Professor in 1982.





Prof. LKM is a teacher of rare caliber. One rarely comes across a gifted teacher and administrator like him who is popular among students and fellow colleagues alike. Quiet, modest and committed to his profession, he could win over the hearts of his students and staff alike. Driven by passion and enthusiasm, he transformed challenges into opportunities. He brought the moment of glory to the institute when he received TECH@EDU award from EFY for excellence in technology adoption in the education sector for the year 2009. Besides this, Prof. LKM received 'Scientist of the Year' award in 1995 from Gian Chand Jain Memorial Foundation, Ambala for contributions in education, research, and university-industry linkage programmes and in 2007 he was bestowed upon the 'Science Councillor Award – 2007' from Indian Society of Health, Environment, Education and Research (ISHEER), Jodhpur Centre, India. Prof. LKM has also been a Fellow of Institution of Electronics & Telecommunication Engineers (India), Member of IEEE, USA and WACE, USA.

In his tenure, Prof. LKM engineered several new collaborative programmes and signed MoUs with various industries and organizations within the country and abroad, besides introducing several remarkable innovations in teaching and research.

BITS, Pilani where he put in four decades of distinguished and dedicated services, reciprocated with unequivocal admiration from all. On his retirement therefore, Prof. Maheshwari was given a very emotional and memorable send-off. The institute honored Prof. L.K. Maheshwari at the grand finale of the felicitation ceremony on 4 August 2010 in the auditorium of BITS, Pilani. It commenced with a video show enumerating the highlights of Prof. L.K. Maheshwari's professional attainments.

Staff Association of BITS, Pilani felicitated Prof. L.K. Maheshwari on 04 August 2010. The executive committee of the staff association presented an antique statue of Lord Buddha which was a true admiration of his amazing patience and effable nature.

In the 156th Senate meeting also Prof. Maheshwari was honoured and a few senior members conveyed their heartfelt feelings.

His love for the institute is reflected in the Foundation instituted by him with the cooperation of his family members. **Professor L.K. Maheshwari Foundation, Pilani** will be proudly owned by students and faculty of EEE & Instrumentation groups of BITS, Pilani to further its activities. Dr. Chandrashekhar, the alumnus, BITS, Pilani and Director, CEERI, Pilani is the first recipient of the award. Prof. L.K. Maheshwari



honoured Dr. Chandrashekhar with Citation, **Memento of Distinguished Alumnus Award** and a shawl. Dr. Chandrashekhar accepted the honour with utmost humility and expressed his heartfelt gratitude towards the Trust for his selection. Prof. L.K. Maheshwari being a man with incredible intellect and vision encouraged both the students and staff and brought out several changes and flexibilities in academics and research of the institute.

Vision 2020: Mission 2012

During the second semester 2009-10 the Steering Committee has vigorously made significant progress as it kept achieving the goals of Mission 2012 which stemmed from Vision 2020.

The 'Mission 2012' project picked momentum during the semester and the task forces have put into action many of the progressive ideas.

In the area of academic programs and pedagogy, a thorough review of existing curriculum through a benchmarking exercise has been conducted. The outcomes are being consolidated and will be shared with the faculty and students. Academic and career counseling is being strengthened by the formation of Academic Counseling Cells in all campuses. A first-of-the-kind 'engagement survey' has been initiated with the help of a leading management research firm to assess the level of faculty, student, staff engagement in BITS and also to help in identifying areas for focus. An ERP system for managing the multi-campus environment is being put in place. A new office of Alumni Affairs Division has been formed and an Alumni Affairs Cell has been setup in each campus for better coordination of alumni related activities. New staff positions (such as CPO, CFO) have been created for effective administration. Energy saving drive, advanced student feedback mechanism, and improved policies for strengthening research etc. are also other areas where considerable work has been done. There is good progress in the area of Infrastructure modernization with a special focus on upgrading the Pilani campus.

ACADEMIA

A Confluence of Ideas

Seminars / Conferences / Workshops / Training programs

BITS Model United Nations Summit (12 - 14 February 2010)

BITSMUN 2010, held from 12 - 14 February 2010 was a Model United Nations Summit organized by the BITSMUN society of the institute. Over 350 delegates from all over India and abroad deliberated upon various critical global issues, grappled with complex crises, and produced imaginative solutions. Participants included 15 delegates from UK, Japan, Australia and Sri Lanka, twelve of whom obtained complete travel sponsorship through BITSMUN. BITSMUN simulated 6 organs of the UN namely- The Security Council, Human Rights Council, United Nations Environment Program General Assembly, Economic and Social Council and Commission on Science and Technology for Development. On this occasion, BITSMUN also organized a lecture by the Nobel Laureate for Physics- Prof Douglas Osheroff on 14 February 2010 on **Scientific Discovery: A Nobel Laureate's Experiences**. At the end of the conference, awards worth INR 1.5 lakhs were given to the best delegates. The participants deliberated on issues such as combating violence, transfer of green technology to developing nations, road after Copenhagen Environment Summit, combating food security, effective implementation of Millennium Development Goals etc. The conference also featured a Delegate



Banquet where delegates were able to socialize and build network for future development. Some notable delegates included Moeko 'best delegate awardee' of the Japan MUN, Steven Cox- British Representative to the Harry Messel International SS Conference, Australia 2009, Kenta- who in addition to MUNs, follows a passionate hobby by working part time as a professional Japanese magician, and Nine delegates from Sri Lanka, all winners of the Colombo MUN. The Faculty-in-charge for the event, Prof N V Muralidhar Rao,

Dean, Engineering Hardware Division appreciated BITSMUN for helping the students understand the functioning of the international organizations in general and UN and its initiatives in particular. The event was sponsored by Steel Authority of India, Yahoo, British Council, Opera Software and Myntra and worked in association with over a dozen social NGOs.

National Conference on Green and Sustainable Chemistry (19-21 February 2010)

A two-day national conference on *Green and Sustainable Chemistry* was organized at BITS, Pilani on 19 February 2010 by Chemistry Group. Over 200 delegates from all over India involved in green and sustainable chemistry participated in the conference. The Chief Guest, Dr Sudarshan K Arora, President, Research and Development, Ranbaxy Research Laboratories, said that nature is the biggest innovator and chemist whereas mankind is associated with hazardous and toxic materials and hence has caused huge damage to



the environment though very unintentionally. On this occasion, Dr Arora also released the book of *Abstracts*. Delivering the keynote address, Professor Asif K Chakravorti, Professor, National Institute of Pharmaceutical Education and Research, Mohali, said that Green Chemistry, Human Welfare and Sustainability are closely linked. Prof G Sundar, Professor of Chemistry said that Green chemistry concerns with eliminating wastage and minimizing the usage of toxic resources. He said that the conference facilitated the exchange of ideas and develop partnerships between the academic people and industries. Dr Dalip Kumar, Group Leader, Chemistry Group, explained the activities of the Chemistry Group at BITS. Prof Sivasubramanian, Professor of Chemistry, proposed the vote of thanks.

Empowering Women in Developing Countries through Better Healthcare and Nutrition (22-24 April 2010)

A three-day International Conference on *Empowering Women in Developing Countries through Better Healthcare and Nutrition* was



organised during 22-24 April 2010 by the Women Studies & Societal Development Unit, BITS, Pilani jointly with the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre). The Conference was supported by the United Nations Children's Fund (UNICEF), Rajasthan and was attended by senior health professionals, policy makers, academicians, gender experts from India, non-aligned and other developing countries. Delegates from 18 countries, including Cambodia, Egypt, Zimbabwe, Indonesia, Iran, Kenya, Malaysia, Mauritius, Mexico, Myanmar, Nigeria, Oman, Russia, South Africa, Sri Lanka, Syria, Tanzania and Uganda participated in the event. The conference aimed at critically examining the healthcare risks faced by women of child-bearing age in developing countries, such as India and particularly in the state of Rajasthan; and identifying the areas of weaknesses, obstacles and challenges in providing adequate healthcare and nutrition to women.

Prof. L.K. Maheshwari, Vice Chancellor, BITS, Pilani welcomed the delegates and highlighted the initiatives taken by BITS, Pilani towards empowerment of communities including women especially at the local grass root level. The Convenor of the conference and the Chief, Women Studies & Societal Development Unit BITS, Pilani, Prof. Nirupama Prakash introduced the theme of the Conference. Prof. Arun Kulshreshtha, Director, NAM S&T Centre spoke about the key aspects of Nam S&T Centre and its involvement in organizing events on scientific & social issues. Dr. Padmanaban, Advisor, National Health Systems Resource Centre, National Rural Health Mission, Ministry of Health and Family Welfare, Government of India, New Delhi delivered the inaugural address. Mr. Samuel Mawunganidze, Chief, UNICEF, Rajasthan spoke passionately about building institutions for women and child development. Delegates made country specific presentations on women's health and nutrition. Madam Sajjan Katara, MLA from Udaipur actively participated in the event. Dr. Raj

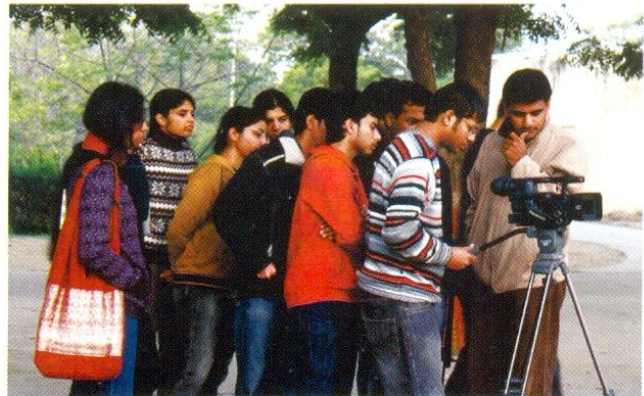
Kumar Sharma, the Minister of State for Medical and Health, Government of Rajasthan who was nominated by the state government, also participated actively in the conference.

Short Film Making Workshop (5-8 February 2010)

A four-day lecture series cum workshop on *Short Film and Documentary Film Making* was organized by the Languages Group during 5-8 February 2010. The workshop was coordinated by Dr. Geetha. B., the instructor-in-charge of the course BITS C395: Short Film and Video Production. The resource person for the workshop was the National Award Winning filmmaker



Mr. Abhaya Simha G. A., a post graduate diploma holder from the world-renowned Film and Television Institute of India (FTII), Pune. The workshop covered various theoretical aspects of short film and documentary making. It also gave the participants a hands-on experience of making a documentary film by scripting and shooting a small documentary film on BITS Library. The lecture series cum workshop covered topics

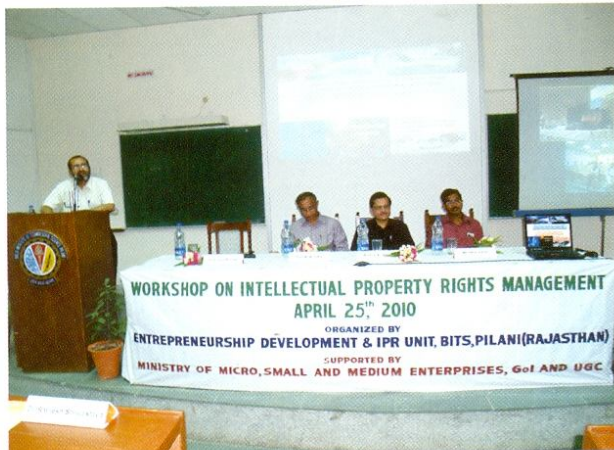


ranging from Films and Documentaries, Mise-en-scene and Developing the Story, Researching and Scripting for a documentary, Interviewing and Sound recording and Post Production Stage. The workshop was a part of the course on 'Short Film and Video Production'.

Workshop on Intellectual Property Rights (25 April 2010)

Entrepreneurship Development and IPR Unit, BITS Pilani organized a workshop on Intellectual Property Rights (IPR) Management on 25 April 2010. The workshop was sponsored by the

Ministry of Micro, Small and Medium Enterprises and University Grants Commission, Government of India. The key objective of the workshop was to make the participants from academic institutions and micro, small and medium enterprises understand the importance of Intellectual property (IP) management in the knowledge economy and how they can go for protecting their intellectual property. The workshop was inaugurated by the Chief Guest, Prof. R.K. Mittal (Director, BITS,



Pilani - Dubai Campus), along with Prof. R.N. Saha (Deputy Director Research & Educational Development), Prof. Arya Kumar (Chief, EDIPRU), and the Conveners of the workshop Mr. Arun Vaish and Dr. Jyoti. There were 70 participants from BITS and other institutions. The invited guest speaker, Dr. Ratnesh Shrivastava, Vice President, Intellectual Property Cell, Sun Pharmaceutical Industries Ltd., talked on *Patentable US Law - United States Cases*. Other speakers; Shri Ajay Sharma, Asst. General Manager (Patents) at Torrent Research Centre Gandhinagar spoke on *Understanding Patents, Inventor ship and Extensions*. Mr. Satya Pal Arora, Global IPR Law Consultants, New Delhi, talked on *Drafting Patent Application and Filing Requirements*. Mr. Vikas Asawat, Project Officer IPFC for MSMEs Punjab State Council for S&T, Chandigarh, talked about *IPR Issues* in context to Micro, Small and Medium Enterprises (MSME).

Workshop on Science, Innovation and Discovery (10 -18 May 2010)

Science, Innovation and Discovery: A Science workshop for children jointly organized and sponsored by BITS Pilani and CEERI, was inaugurated at BITS Pilani on 10 May 2010. Speaking on the occasion, the Chief Guest, Dr. Chandrashekhar, Director, CEERI, Pilani called upon the participants to follow the trial of discovery, to do for oneself and to undertake the journey the original discoverer passes through. He also called upon the participants to remain



focused which would improve their ability to understand things. He also underscored the importance of cooperation among the participants and asked them to be open to ideas. Welcoming the participants, Prof. G. Sundar, Deputy Director (Off Campus Program), BITS, said that such workshops can go a long way in bringing up the intellectual and scientific temper of the



region. Prof. R.N. Saha, Deputy Director, Research and Educational Development, said that innovation and creativity are not limited to the grown up people alone. Prof Suman Kapur, Coordinator of the workshop gave an introduction to the event. The eight-day workshop included lectures, visits to laboratories and museum, observing experiments, various quizzes, debates, treasure hunt and interaction with scientists. The participants also got a chance to see 10 projects presented in this APOGEE. Over 85 children participated in the workshop. The workshop concluded with the prize distribution by our Vice Chancellor, Prof. LK Maheshwari who termed the workshop as a podium for the students wherein they can make new friends and give a new direction to their creativity. He encouraged the students to pay attention to environment preservation. In the end, the co-convenor of the workshop Dr. VK Dube proposed the vote of thanks.

Academic Development Programmes

An Academic Development Programme in *Basic Process Engineering* was conducted for the employees of Hindustan Zinc Limited (21 June - 19 July 2010) in which 84 employees were trained. Similar programme was also conducted for the employees of Bharat Aluminium Company Limited, Korba in two separate batches, 75 students in the first batch (26 Feb - 25 March 2010) and 42 students in second batch (25 June - 24 July 2010) were trained. During these programmes the employees were trained in Computer Applications, Chemical Engineering, Communication Skills, Engineering Measurements, Process Safety and Health, Electrical Machines, Management and Financial



Accounting, Process Synthesis Principles, Chemistry, Engineering materials, Maintenance Management, Workshop and Language Lab Practice.

SIGNIFICANT PROJECTS

<i>Principal Investigator and Co-investigator of the Group</i>	<i>Title of Project</i>	<i>Funding Agency</i>	<i>Amount & Duration</i>
Dr. Hemant R Jadhav (PI) Prof R. Mahesh (CI) Pharmacy Group	Design and Synthesis of Novel agents for the Management of Rheumatoid Arthritis	UGC	Rs.8,35000/- 3 years
Dr. Usha Manjunath (PI) Management Group Prof. NVM Rao (CI) Economics & Finance Group	An Empirical Investigation of Causal Relationships of Total Quality Service Constructs for Indian Hospital Industry	UGC	Rs..4,06,200/ 2 years
Prof. BV Babu (PI) Chemical Engineering Group	Education through ICT: Developing suitable pedagogical methods for various classes (Process Design Decisions), intellectual calibers and research in e-learning Anchored by IIT-Kharagpur	MHRD	Rs. 10,00,000 2009-10.
Dr. Raj Kumar Gupta (PI) Physics Group Dr. Manjula Devi V (CI)	Development of Surface Plasmon Resonance Instrument with a Novel Optical Design	DST	Rs.25 lacks 3 years
Dr. Sangeeta Sharma (PI) Languages Group Dr. VS Nirban (CI) Ms. Ruchika Sharma (CI)	Developing Multimedia Language Learning Modules for Rural Children from Class V- VIII	UGC	4,56,200/- 2 years

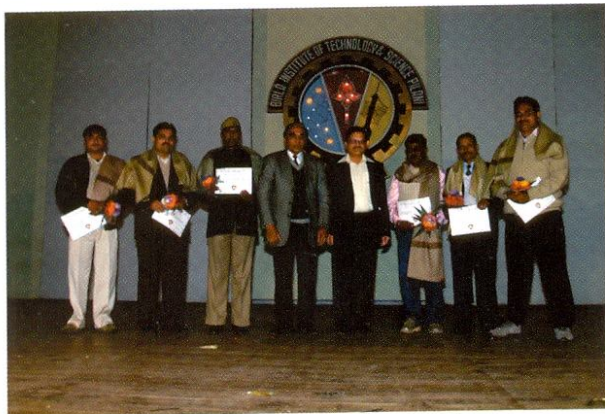
Founder's Day (20 January 2010)

BITS Pilani celebrated the Founder's Day on 20 January 2010. The program started with the offering of floral tributes to the Founder of the Institute, Sri G D Birla. Our Vice Chancellor, Prof L K Maheshwari led the floral tribute ceremony. This was followed by Thyagaraja Aradhana at the Faculty Division I hall wherein the students associated with the Carnatik Music Association

and Ragamalika rendered Thyagaraja's Keerthanas. They sang the five Pancharatna Kritis in a group. In the evening, a cultural program was held in the auditorium of the Institute wherein various cultural associations of the Institute presented entertainment programs reflecting their respective states and culture. The following states were represented by the respective cultural associations: Kerala, Delhi, Bihar, Maharashtra, Gujarat, Haryana, Rajasthan, Andhra Pradesh,



Uttar Pradesh, West Bengal, Tamil Nadu, Karnataka, Punjab, Orissa and Madhya Pradesh. On this occasion, Vice Chancellor, Prof. LK Maheshwari also honored six non-teaching employees of the Institute by presenting them the Best Performance Awards. The honored staff were: Sri Tulsi Ram Sharma, Sri Ram Singh Saini, Sri Santosh Kumar Saini, Sri Subhash Kumar, Sri Kishan Lal and Sri Raghubir Singh. Besides



faculty and students of the Institute, senior officers from Aditya Birla Group, Mumbai including: Mr Kris Ramachandran, Mr Luca Fontana and Mr Prashant Puri were also present on the occasion.

National Science Day Celebration (28 February 2010)

The scientific achievement of Sir CV Raman is celebrated as *National Science Day* in the institute every year. On 28 February 1928 the Raman effect was discovered and he was awarded the

Nobel prize for this discovery in 1930. The events of the Science Day celebrations were a science quiz competition for the students of local schools, lecture on Nobel prize winner of 2009 and a “*Treasure Hunt*” event for the students of BITS, Pilani. Further, to create an interest in science among the school children, the pupils from four schools of Pilani were invited to visit the laboratories of the science groups. *Treasure Hunt* for BITS students was held on 21 February in which about 150 students participated. Four schools with two teams from each school; with two students in each team from ninth standard to eleventh standard, took part in the science quiz competition: This event was held on 27 February. The quiz session comprised of three rounds: (i) visuals round; (ii) demonstrative round; and (iii) crack the jumble round. The first two teams were awarded prizes. On 28 February, the faculty members from three schools, visited the laboratories of Physics, Chemistry and Biology group, wherein the faculty demonstrated a few experiments and discussed with them about their applications. The laboratory visit of the school children was followed by a short valedictory function. A lecture on *Noble Prize Winners in Science, 2009* was delivered by Dr. Shibasish Chowdhury. Prof. L.K. Maheshwari, Vice Chancellor, BITS, Pilani, addressed the gathering and Prof. R. R. Mishra, Group leader of Physics gave away the prizes to the winners of the different events.

Basant Book Festival (16-21 February 2010)

Basant Book Festival was inaugurated at Akshay Supermarket by Prof A K Sarkar, Dean, FD-I and Instruction Division on 16 February 2010. Over 4000 books including Academic, Fiction,



Biography, History, Management, Sciences, Social Sciences, Children books and General Reference books were made available for display and sale. In this festival, Akshay offered special discount of 20% during the sale for the benefit of staff and students.

DISTINGUISHED LECTURES AT BITS PILANI



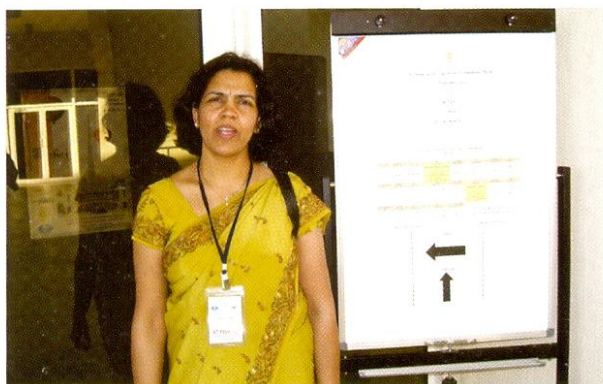
SPEAKER	DESIGNATION	TOPIC	DATE
Dr. Rajiv Gupta	Physician at Massachusetts General Hospital, Boston.	Broad Perspective on Medical Imaging and its Challenges	11 January 2010
Prof. Pnina Motzafi Haller	Professor, Department of Man in Desert, Ben Gurion University, Israel	Multiple Marginalization-Social Exclusion in Israel Desert Region	11 - 20 January 2010
Ashish Dhayal	Brand Manager, Maruti Suzuki India Ltd, New Delhi	Building a Brand: Maruti Way	16 January 2010
Prof. Renate Klein	Former Professor, Women Studies, Deakin University, Melbourne, Australia	Reproductive Technologies-Feminist Perspective	25 January 2010
Dr. Susan Hawthorne	Research Associate, Victoria University, Melbourne, Australia	Wild Politics-Feminism, Globalization & Bio-Diversity	25 January 2010
Dilip D'Souza	Mumbai-based writer and freelance journalist	All about Journalism	5 February 2010
Prof. Douglas Osheroff	Nobel Laureate	Scientific Discovery: A Nobel Laureate's Experiences	14 February 2010
Swami Anubhavananda	Spiritual Guru	Changing Scenario in Education Sector – Challenges Ahead and Anandmaya Jeevan ka Rahasya (Hindi) He also conducted a one day workshop on Happy Community Living for Staff and students.	14 - 17 March 2010
Mr. Anil Aggarwal	IPS Officer	Naxalism	11 April 2010
Dr. Chandrashekhar	Director, CEERI, Pilani	Research and Education Trends in Electronics	14 April 2010

VISITS BY FACULTY: ENRICHING THE LEARNING EXPERIENCE

International Visits

Prof. Nirupama Prakash was invited as a resource person to participate in the two-day meeting on *International Mother Language Day- In the framework of the International Year for the Rapprochement of Cultures*, organized during 23-23 February, 2010 at UNESCO-7, Place de Fontenoy, Paris, France. She was also invited by Women Studies Department, University of Maryland at College Park, U.S.A, during 1-20 June 2010.

Dr. Sangeeta Sharma presented a paper on *Enhancing Employability through Technology*



Application in the International Conference on Technology and Business Management at IMT Dubai during 16-18 March 2010.

Prof. Navneet Goyal delivered a talk on *Scalable Business Intelligence System Architecture for a Multi-campus university in India* at the ACM Special Interest Group on University & College Computing Systems, Spring Management Symposium 2010, held in Victoria BC, Canada during 21-23 April 2010.

Prof. K S Sangwan, on invitation, visited the Institute of Machine Tools and Production Technology of Technische Universität (TU) Braunschweig, Germany from 6-13 June 2010 as a visiting researcher on "*Lean and Green Manufacturing*". Prof. Sangwan also visited the Volkswagen plant and Automotive Research Center Niedersachsen to discuss future collaboration with these organizations and also took a class on sustainable production for graduate students. The student exchange programme was also finalized and two of our undergraduate students are currently doing their thesis at TU Braunschweig. The extension of student exchange programme for one more year was discussed with International Office Chief.

Prof. S B Singh visited University of Dundee, UK during 24 July - 04 August 2010 for presenting the progress report of UK-INDIA EDUCATION Research Initiatives (UKIERI) Collaborative project wherein institutions from UK and India participated. Prof. S. B. Singh is Indian Lead Partner of this project.

Dr. Anil Kumar visited Department of Biomedical and Pharmaceutical Sciences, University of Rhode Island, Kingston RI, USA as *Visiting Research Scientist* during 16 May 2010 - 28 July 2010.

Dr. Shibasish Chowdhury presented a research paper on *Preference of Amino acids in Different Protein Structural Classes: A Database Analysis* at Fourth International Conference on Bioinformatics and Biomedical Engineering (iCBBE 2010) during 18-20 June 2010, Chengdu, China.

Dr. Gajendra Singh Chauhan presented a paper on *Save our Languages: Act Now!* in the Asian Conference on Arts and Humanities during 18-21 June 2010 at Osaka, Japan. The conference was organized by the International Academic Forum in association with UNICEF.

Mr. Rajiv Ranjan Singh, Lecturer, EEE & Instrumentation Group, presented a paper on *Multi-Parametric Analysis of Sensory Data Collected from Automotive Drivers for Building a Safety-Critical Wearable Computing System* in the 2010 Second International Conference on Computer Engineering and Technology (ICCET 2010) during 16-18 April 2010 at Chengdu, China.

Dr. Pintu Modak presented a paper on *Fitness: A Speculum to Health* in The 21st Pan-Asian Congress of Sports & Physical Education in Nanchang, China, organized by Jiangxi National University, China, cooperated by Pan-Asian Society of Sports & PE and Int'l Society of Eastern Sports & PE at Jiangxi National University, Nanchang, China during 23 - 24 April 2010.

Mr. Navneet Khanna presented a paper in CIRP Second International Conference on *Process Machine Interactions (PMI)* held during 10-11 June 2010 at the University of British Columbia in Vancouver, British Columbia, Canada.

INVITED LECTURES BY FACULTY

Prof. Nirupama Prakash delivered a talk on *Discrimination against Women in Work Spaces* at the Workshop on "Women's Role, Expectation and Identity" at the International College for Girls (ICG), Jaipur, on 25 March, 2010.

Prof. Navneet Goyal delivered an invited talk entitled *Factors Governing Business Intelligence System Architecture for a Multi-campus University in India* at EDUMATICS 2010, organized by Indo-US Collaboration for Engineering Education at Chandigarh during 22-23 May 2010.

Dr. Ishwara Bhatt delivered an invited talk on *New technology, new services: Paradigm shift in LIS* at National Seminar on Paradigms in Library and Information Sector, conducted by the Jaipur Library and Information Society at Jaipur on 21 February 2010. He also delivered an invited talk on *Knowledge for rural development: New role for Librarians* at National Conference on Library and Information Networking, BITS Pilani, Goa during 15 - 18 June 2010.

Prof. B V Babu delivered a distinguished talk on *Introduction to Transport Phenomena and Energy Integration Analysis*, Staff Development Programme on Innovative Teaching Techniques for Transport Phenomena organized by ITM Universe, Gwalior during 12-17 July 2010.

Prof. K S Sangwan, on invitation, delivered a talk on **Sustainable Manufacturing** during a two-day event organized by Federal Ministry of Education and Research, Germany during 12-13 March 2010 at Mahratta Chamber of Commerce, Industries and Agriculture, Pune which was attended by 40 delegates from top German industries and academia.

Dr. P Srinivasan delivered a talk on *Fracture Mechanics and determination of residual life assessment of thermal power plant components* at NTPC, Ramagundam during 26-27 February 2010.

Prof. C B Gupta delivered talks on various topics such as *New Trends in Mathematics* on 19 January 2010 at Arya College of Engg. and IT Jaipur; *Why Study Mathematics?* On 27 January 2010 at JVMGRR Institute of Computer Applications, Charkhi Dadri, Knowledge on 4 February 2010 at LCRT College of Education, Panipat; *Operations Research, An Overview (IMS Sponsored)* on 20 February 2010 at Central University, Rajasthan, Jaipur etc . He also delivered lectures on *Rural Market*, 19 February 2010, JVMGRR PG College Charkhi Dadri, Haryana; Probability, 12 March 2010, BKBIET, Pilani; Applications of Simulation in Queueing Systems and Inventory managemnet, 21 March 2010, Department of Mathematics GJU of Science and Technology, Hisar; *Centroid and Moment of Inertia*, 30 March 2010, Shree Bankey Bihari Group of Institutions Meerut; *Simulation Techniques*, 16 April 2010, Marudhar Engg. College, Bikaner; *Application of Simulation Techniques*, 2 May 2010, Institute of Engg. and Technology, Alwar.

Dr. Sangeeta Sharma conducted a one-day workshop on *Role of Communication Skills in Management* on 6 February 2010 in Compcu Institute of Information Technology and Management, Jaipur. Dr. Sangeeta Sharma and Dr. Devika also conducted a one-day workshop on *Personality Development and Communication Skills in Bhartiya Institute of Technology*, Sikar for Administrators, Faculty members and students on 23 March 2010.

Dr. Anil Kumar delivered a talk entitled *Design and Synthesis of Src Tyrosine Kinase Inhibitors as Therapeutic Agents* at the International Conference on Chemical Biology for Discovery: Perspectives and Challenges organized by Central Drug Research Institute, Lucknow during 15 - 18 January 2010. Dr. Anil also delivered a talk entitled *Promoter Activation by ACGT element in Response to salicylic and abscisic acids is differentially regulated by the spacing between the motifs* at MNIT in the conference on Bioprospecting, Access for sustainable development during 19-20 February, 2010.

Dr. A K Digalwar delivered two invited talks, first on *Critical success factors for implementation of Knowledge Management in SMEs* and second on *An Overview of Performance Measurement Systems* in short term training programme (STTP) on Knowledge Management: Issues and Challenges (KMIC) at SVNIT Surat during 5-6 January 2010. He also delivered an invited talk on Tools and Techniques for World Class Manufacturing at JDIET Yavatmal on 2 July 2010.

Dr. Satish Dubey delivered an invited talk on *Residual Life Assessment Technology and Fracture Mechanics of Thermal Power Plant Components* at NTPC, Ramagundam during 29 - 30 January 2010.

Dr Trilok Mathur delivered an invited talk on *Application of Hilbert-Schmidt theorem on solving Integral Equations, and Structure of Finite Fields* in Banasthali University, during 10-13 March 2010.

Mr. Ram Shukla was invited to deliver a talk on *Career Counselling for Sanskrit Graduates and Teaching Methodology* for Faculty and students on 25 February 2010 at Shri Birla Acharya Sanskrit Mahavidyalaya, Pilani, Rajasthan. The workshop was sponsored by UGC, New Delhi. He also delivered an invited talk on *Improving Personal and Interpersonal Skills* for faculty and students on 23 February 2010 at Shri Birla Acharya Sanskrit Mahavidyalaya, Pilani, Rajasthan.

ACADEMIC ATTAINMENTS OF FACULTY

Faculty members from various disciplines have been appointed as members of national and international advisory committees/ acted as reviewers for books/papers published in journals of national and international repute.

S.No.	NAME	GROUP	JOURNAL / MEMBER DETAILS
1.	Prof. B V Babu	Chemical	<p>Appointed Expert Member, Peer Team, National Assessment and Accreditation Council (NAAC).</p> <p>Appointed Member, Board of Studies (BOS), Banasthali University, Banasthali, 2008 - 2011.</p> <p>Reviewed 15 articles published in 14 International Journals such as Transactions on Evolutionary Computation (IEEE), Computers and Mathematics with Applications (Elsevier), Bioresource Technology (Elsevier), Journal of Hazardous Materials (Elsevier), International Journal of Computer Applications in Technology (Inderscience), Science of the Total Environment (Elsevier), Transactions on Systems, Man, and Cybernetics—Part A: Systems and Humans (IEEE), International Journal of Hydrogen Energy (Elsevier), Fuel (Elsevier), Chemical Engineering Journal (Elsevier), Applied Energy (Elsevier), Chemical Engineering Research and Design (Elsevier), AIChE Journal (Wiley).</p>
2.	Dr. M. Ishwara Bhatt		Co-edited the volume, Knowledge, Library and Information Networking published by DELNET, Delhi, 2010.
3.	Prof. Nirupama Prakash	Humanities	<p>Co-Editor of Ageing: Social Issues, published by Jain Brothers, New Delhi, 2010.</p> <p>Co-Editor of Empowerment of Women Through Science & Technology Interventions, published by Centre for Science & Technology of the Non-Aligned & Other Developing Countries (NAM S&T Centre), New Delhi & Department of Science & Technology (DST), Ministry of Science & Technology, Government of India, New Delhi, 2010.</p>
4.	Dr. S.B. Singh	Civil	Reviewed a book entitled "Basic Structural Analysis, 2 nd Edition" authored by C. S. Reddy, Tata McGraw Hill Private Ltd, New Delhi, January 2010.
5.	Dr. Anshuman Dalvi	Physics	Reviewed one research paper for International Journal of Ionics.
6.	Dr. C B Gupta	Mathematics	Appointed as a member of board of PG Studies in Statistics and OR, Kurukshetra University, Kurukshetra, from 18 February 2010 to 17 February 2012 for two years as an external expert.
7.	Dr. Sangeeta Sharma	Languages	Reviewed four papers for the AIMS International Journal of Management.
8.	Dr. Rajesh Mehrotra	Biology	Reviewed an article entitled Lipase supported on granular activated carbon and activated carbon cloth as a catalyst in the synthesis of biodiesel fuel and "Immobilized recombinant Rhizopus oryzae lipase for the production of biodiesel in solvent free system" for journal of molecular catalysis published from Elsevier.

10.	Dr. Usha Manjunath	Management	Reviewed a book titled- "Indian Ethos and Values in Management" Tata McGraw Hill, India. (Higher Education: Business & Economics Division). January 2010. Reviewed 3 papers for the AIMS International Journal of Management. She also copy edited 5 papers for AIMS International Journal of Management.
11.	Dr. A K Digalwar	Mechanical	Appointed as an Editorial board member and Reviewer for International Journal of Manufacturing Systems published by Science Alert, USA.
12.	Dr. Devika	Languages	Reviewed two books entitled "Developing communication Skills, Macmillan India" and "Business Correspondence and Report Writing, 4 th edition, Tata McGrawHill".
13.	Dr. Anil Kumar	Chemistry	Reviewed research articles for journals- Catalysis Letters, Green Chemistry, The Open Catalysis Journal, Journal of Heterocyclic Chemistry and Central European Journal of Chemistry.
14.	Navneet Khanna	Mechanical	Reviewed two papers for CIRP PMI 2010 and three papers for CIRP HPC 2010 conferences.

ACCOLADES AND ACHIEVEMENTS

Prof. L.K. Maheswari honoured **Dr. Chandrashekhar, Director CEERI and BITS Alumni**, with Citation, Memento of Distinguished Alumnus and a shawl on the occasion of the first function of "Professor L.K. Maheshwari Foundation, Pilani" which was organized on April 14, 2010 at BITS, Pilani.

Ruchika Sharma received the **Distinguished Service Award** in recognition of her outstanding contribution to **AIMS International Journal**. The award was given by 'The Association of Indian Management Scholars International (AIMS International)' in the award ceremony held at IIM Bangalore Auditorium on 21 December 2009 during "Seventh AIMS International Conference on Management" (20-23 Dec).

Student Round-up

A student team of BITS Pilani with Gaurav Baheti (2007A4PS269) as Team Leader and Mr. Anirudh Singh as a driver of the vehicle secured 10th place in the All India contest for designing all terrain vehicle held at Indore on 29-31 January 2010.

Comprised of 80 teams from across India, the contest was organized by Society of Automobile Engineers, India Chapter (SAE India). While SAE provided a standard engine to all the teams, the designing and fabrication was done by the BITS team members.

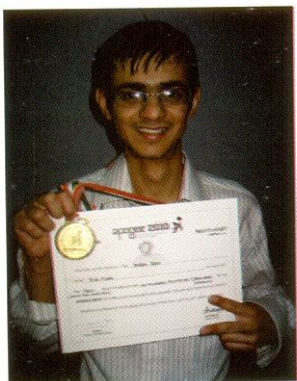
Raghav Mimani (2007A1PS383), 3rd year BE Chemical Engineering student of BITS Pilani was awarded **Green Globe Foundation Award for 2010** under the category, "Youth Unite for Voluntary Action" (YUVA). The Award have been instituted as a salutation to the efforts of organizations and individuals fighting climate change through their work in environment preservation and regeneration. The award was presented at an event held at Hotel Taj Palace, Delhi by Prime Minister of Bhutan, H E Mr Jigmi Yoser Thinley on 5 February, 2010 on the occasion of Delhi Sustainable Development Summit (5-7 February) organized by TERI.

BITS Basketball Team (both men and women) won a **gold in the sports tournament** held at MNIT, Jaipur during 18-21 February, 2010.

Sonal Keshawrao Thengane (2009H101016) won the First Prize (Cash Rs.4000 and Excellence Certificate) in **Poster Presentation Competition**

on **LCA Analysis** and 3rd prize (Cash Rs.2000) in Quiz in AZEOTROPY-2010 organized by IIT BOMBAY during 6-7 March, 2010.

Prateek Joshi (2009H129002P), won the Gold Medal as 1st Prize for the Project – **Antimicrobial**



Activity of Citrus Seed Extracts, in APOGEE 2010 held at BITS Pilani during 10 - 14 March, 2010.

Shourya Gupta (2007A2PS468), was awarded the IAStructE – S C Mehrotra Award in the fourth Essaineers at New Delhi on 06 April, 2010.

Sonam Samat (2006B3A4460) and Saurav Patyal (2006B3A3479), two fourth year students of BITS Pilani, attended the **Clinton Global Initiative University Meeting (CGI U) 2010**, held at the University of Miami, Florida, during 16 – 18 April, 2010. The CGI U was launched by President Clinton in 2007 to challenge students and universities to tackle global problems with practical, innovative solutions and to engage the next generation of leaders on college campuses around the world.

Jyoti Arya (2006A3PS272), Rishi Mathur (2005A8PS264) and Dr. Shikha Tripathi, ex-faculty presented a paper titled “Unified 3GPP and



3GPP2 Turbo Encoder using Runtime Partial Reconfiguration in IEEE Ninth Annual Wireless Telecommunications Symposium, 2010, held in Tampa, Florida, USA during 21-23 April, 2010. Their paper won the **Best WTS 2010 Undergraduate Student Paper** award. A total of

52 research papers were selected. This was the only paper selected from India.

Humanoids AcYut 2 and **AcYut 3** developed by students of BITS Pilani, won four medals in Robogames held at San Mateo Fairgrounds, California, US during 23-25 April 2010. While AcYut 2 won one **Gold Medal** under the Sumo category, AcYut 3 won one **Silver Medal** under the Freestyle and one **Silver Medal** under the Sumo category and AcYut 3 won one **Bronze Medal** under the category, Kung Fu. Overall BITS team secured the 6 place in the medal count. Four members of AcYut’s team who participated in this year’s Robogames were: Ms Sushma Vallabhaneni (2007A7PS063) (Team Leader), Mr Akash Gupta (2008A4PS305), Mr Tushar Agrawal (2009A7PS161), Ankit Kulshrestha (2008A3PS163), Rohan Maheshwari (2008A4PS299) and Mr Viveka Notani (2009C6PS697).

Mr. Sharadh Narayanan (2005B5A3404; Best Awardee), Mr Arvind Pawan R (2005B5A3404; Second Best Awardee) and (Shared) Mr Prashant Tadimalla (2005B2A4799) were the students who won the **Dr Ranjit Singh Chauhan Undergraduate Research Award** for the year 2009-10. The award aims to motivate students to engage in short and long term research, and is given each year to one or more first degree students who have demonstrated outstanding ability to conduct original research in Science, Engineering, Technology, Liberal Arts and Humanities.

Dinkar Nandwana (2007A4PS721), third year Mechanical Engineering student got selected for the **German Academic Exchange Service (DAAD) Work Internship** for Science and Engineering(WISE) Scholarship 2009-10. He did his internship in BAM Federal Institute of Material Research and Testing, Berlin from 15 May, 2010 to 31 July, 2010.

Aditya Shanker Raghuwanshi has got TEDx fellowship.

Anantha Padmanabhan R (2006B1A3338) and Shravan S. (2006B1A7298) was awarded the **Khorana Scholar** (for the Khorana Scholars Program 2010). The students were selected for an internship at University of Wisconsin, Madison held during May 18 – July 31, 2010 at New Delhi.

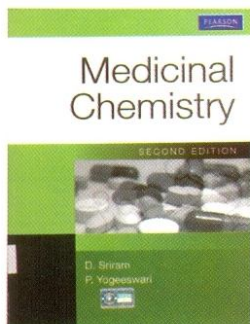
Om Prakash Jat (2006A2TS901), was awarded the prestigious **WISE Scholarship by DAAD** (Deutscher Akademischer Austausch Dienst) during summers 2010. This is a German Academic Exchange Programme for which the selection is based on performance in academics and extracurricular activities.

Ruchir Hajela (2009H112112), Debopriyo Ghosh (2009H112118), Atharva Chauthaiwale (2008H103422), Nitin Jose (2009H112116), and Abilash Rajakoti (2009H112114) won the First Prize in **Design - Appliances Category in project presentation** for the project i-home in APOGEE, 2010 on 14 March 2010.

Ruchir Hajela (2009H112112), Debopriyo Ghosh (2009H112118), and Abhishek (2009H112122) have won the **Windows 7 Local Award at Imagine Cup, 2010** in Imagine Cup 2010 for their project Farmers Voice organized by Microsoft.

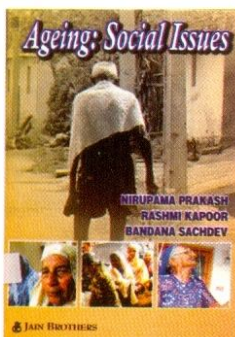
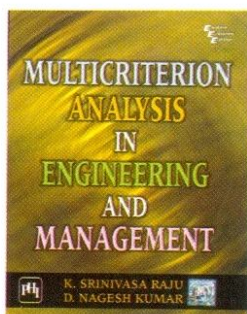
Mahesh Jakhotia (2006B3A8412) was selected for **Asian Finals of the Global Social Venture Competition** organized by the Haas School of Business at UC Berkeley in partnership with five Regional Partner Schools, Hyderabad during 4-7 March 2010.

IN PRINT



Medicinal Chemistry, D. Sriram, P. Yogeeswari, Pearson, 2010

Multicriterion Analysis in Engineering and Management, K. Srinivasa Raju, D. Nagesh Kumar, PHI, 2010



Ageing: Social Issues, Nirupama Prakash, Rashmi Kapoor, Bandana Sachdev, Jain Brothers, 2010

JOINING HANDS

MoU's

Sustaining the collaborative efforts, BITS signed the following MoUs with institutions in India and abroad:

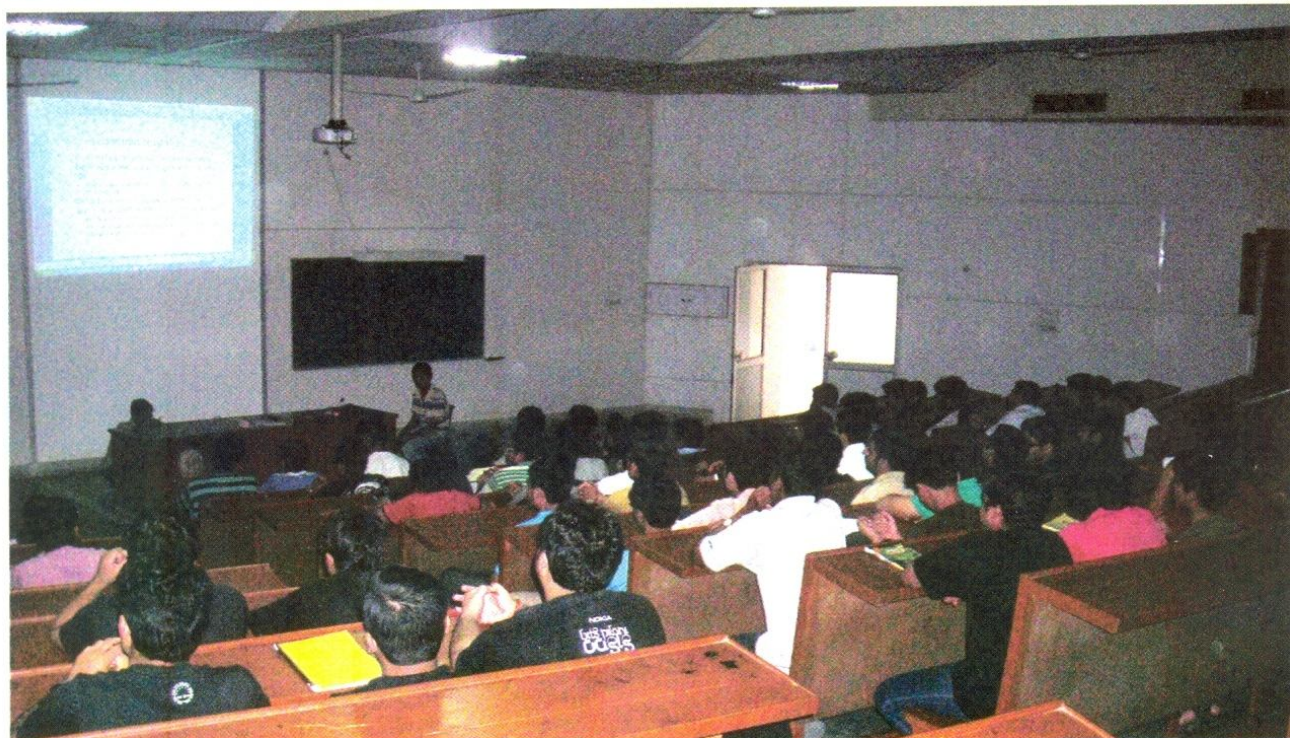
- With **International Center for Biosaline Agriculture, Dubai, UAE** for contributing to agricultural research and development for appropriate utilization and management of water and natural resources in a sustainable manner on 9 November 2009.
- With faculty of **Engineering and Graduate School of Science and Technology, Kumamoto University, Japan** for an



academic exchange in various areas of education and research on 17 March 2010.

- With **Austriamicrosystems – India Design Center, Hyderabad** for fostering scientific interaction between the two organizations by providing the opportunities of academic and research interest on 9 April 2010.
- With **Torrent Pharmaceuticals Limited, Ahmedabad** with the objective of fostering collaboration between the two institutions to promote Research and Development activities and interactions of mutual interest on 22 December 2009.
- With **Concordia University, Montreal, Quebec, Canada** for student exchange, collaborative research and sharing of scientific information on 2 February 2010.
- With **Cybage Software Private Limited, Pune** for promoting academic and research interactions on 12 February 2010.
- With **Technische Universitat Braunschweig, Gernay** for promoting exchange of faculty, visiting faculty and research fellows on 14 February 2010.

PROJECT EMBRYO



Under the able guidance of the faculty mentors and unflinching support from the Software Development and Education Technology (SDET) Unit, this semester EMBRYO successfully organized more than 15 online lectures on topics ranging from Pharmacokinetics to Naxalism. It's worth recalling here that Project embryo is a joint Alumni-faculty-student initiative to take education beyond formal coursework. Considering the fact that more than 100 such lectures have been delivered by experts in various fields since its inception, the project definitely seems poised towards its objective of providing border-less classrooms and bottom-less resources to the inquisitive students. Some of the well attended and representative lectures of last semester are tabulated below.

S.NO	DATE	SPEAKER	DESIGNATION	TOPIC
1.	11/04/2010	Dr. Anirudh Gautam	Associate Director, Metabolism and Pharmacokinetics, Ranbaxy Laboratories, Gurgaon	Good Laboratory Practices (GLP) & Bio-Analysis
2.	11/04/2010	Shri Anil Agrawal(IPS)	IG,SSB(Lucknow Range)	Naxalism
3.	04/04/2010	Dr. Jyoti Paliwal	Director-Metabolism and Pharmacokinetics, Ranbaxy Laboratories.	Application of Pharmacokinetics in Pharma R&D
4.	28/03/2010	Dr. Venkat Selvamanickam,	(Professor, Department of Mechanical Engineering, University of Houston)	Advanced Materials for Energy Applications'
5.	28/03/2010	Shri Atul Kaji	Vice President(Environment) Reliance Industry Limited Hazira.	Application of Innovative Environment Management Systems in Reliance Industry Ltd., Hazira Plant.
6.	10/01/2010	Shri Vinay Deo	Principal Program Manager in Microsoft's adCenter product group	Talk on Online ads - Driving Innovations in Technology & Business

Centre for Entrepreneurial Leadership (CEL) (6-13 February 2010)

Centre for Entrepreneurial Leadership organized a seven-day Entrepreneurship Week (E-Week) during 6-13 February. Theme of this year's E-Week was 'India – Opportunities Within' and it was inaugurated by the Vice Chancellor Prof L K

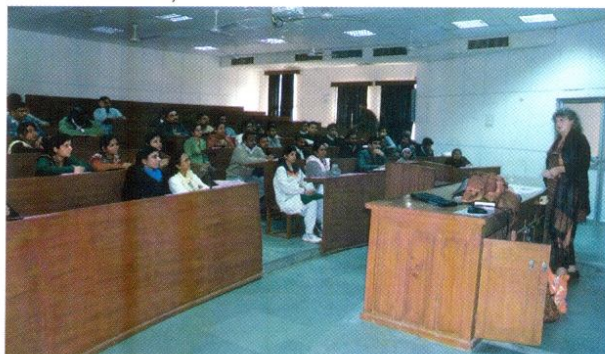


Maheshwari on 6 February. E-Week included programmes such as Business Quiz, Panel Discussion, Design Competitions, Social Media Challenge, Critical Reasoning and Marketing an idea. Besides, there was screening of films too. One of the competitions of the E-week was the Bedrock, wherein the students had to manage restaurants in the campus for a day and win prizes. Apart from this, CEL also organized an event called TEDx Pilani on 13 March 2010 in which 11 speakers spoke on prominent current issues faced by the Nation. The program was webcasted live for the benefit of a large number of people all over the world. Another major event organized by CEL this semester was Tech Bazaar. Showcasing of new products, competitions for business plans and small innovations, interaction with entrepreneurs and experts from business and industry were the highlights of the two-day Tech Bazaar held at BITS Pilani during 26-27 March 2010. In all, 85 participants participated and demonstrated 33 projects from various disciplines of engineering, pharmaceutical, biological, IT and finance. A team of experts from Academia, Industry, R & D labs and Venture Capitalists interacted with participants and evaluated their projects on the overall business worthiness and potential and gave them valuable advice. These experts also acted as mentors to the participants by sharing with them on-the-job knowledge as well as by answering questions relating to various strategies involved in finance management, etc. The following projects were chosen by the experts for the award of prizes: I Prize - Nano Silica Aggregate Solutions for Recycling in Industries; II Prize - Near Surface Monitoring and Structural Health Monitoring of Structures Repaired with FRP; III Prize - Green Plastics; IV Prize - Eppendorf Cleaner. Another highlight of CEL this semester has been the introduction of a unique

course titled "New Venture Creation" which has been introduced for the benefit of students deeply interested in taking up entrepreneurship as a career option. This course has been launched in association with BITSAA International. One round on experimental basis was steered by Abhinav Khushraj, BITS Alumnus and Strategy & Business Development Manager, Nokia along with Prof Arya Kumar, Chief ED & IPR Unit during the first semester 2009-10 and was found to be an invaluable experience for truly aspiring entrepreneurs. The purpose of this course is not only to study entrepreneurship but also to practice it.

Centre for Women Studies

A three-day International Conference on *Empowering Women in Developing Countries through Better Healthcare and Nutrition* was organised at BITS, Pilani, Rajasthan, India during 22-24 April 2010 by the Women Studies & Societal Development Unit, BITS, Pilani jointly with the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre). The Conference was supported by the United Nations Children's Fund (UNICEF), Rajasthan and was attended by senior health professionals, policy makers, academicians,



gender experts from India, non-aligned & other developing countries. Delegates from 18 countries participated in the event. Apart from this, three distinguished lectures were organized one by Prof. Pnina Motzafi Haller Professor, Department of Man in Desert, Ben Gurion University, Israel during January 11 – 20, 2010 on the topic *Multiple Marginalization- Social Exclusion in Israel Desert Region* and another one was by Prof. Renate Klein, Feminist International Network of Resistance to Reproductive and Genetic Engineering (FINRRAGE) & Former Professor, Women Studies, Deakin University, Melbourne, Australia on the topic *Reproductive Technologies- Feminist Perspective* on 25 January 2010. The third lecture in the series was delivered by Dr. Susan Hawthorne, Research Associate, Victoria University, Melbourne, Australia on 25 January, 2010 on the topic *Wild Politics-Feminism, Globalization & Bio-Diversity*.

INTERFACE

The 33rd All India Management Convention-INTERFACE was held in the Institute during 12-14 February 2010. Based on the theme *Anveshan* (The Search), the Convention vouchsafed participation from many Top B-Schools of the country like NITIE, DMS, IIT Delhi, IIM Indore, IIFT, IMT GHAZIABAD., MICA, NIRMA,



Fore, Welingkars, BIM-Trichy, etc. The program was inaugurated by Ms. Puneeta Pandey, CEO of Net Customer. It was followed by the CEO meet - An enlightening discussion on "Search for excellence-next generation leader" Participants were: Mr. Ajay Khanna (CIO, Volvo Eicher), Mr.Sriram (CEO, Arteria Technologies) and Mr. Alok Gopal (Regional Head, Dr. Reddy Labs). This year's Interface had many other interesting programs too, including a lecture on "Mumbai Dabbawalas", YMOM (Young Manager Of the Meet), Clutters and Clatters (Marketing), Ashwamedha (Merger and Acquisitions), Jigyasa (Paper Presentation), Mudra (Stock Simulation) and Biz Quiz.

APOGEE 2010

APOGEE (A Professions Oriented Gathering Over Educational Experience), the Annual Academic Fest of BITS, Pilani was held during 10 – 14 March 2010. The technical fest of BITS Pilani, was inaugurated this year by Mrs. Meera Sanyal, M.D., Royal Bank of Scotland along with our Vice Cancellor Prof. L.K. Maheshwari. Mrs. Sanyal praised the college and gave them encouragement to continue their good work. In the inauguration, the President of the Student's Union, Sudheer Babu, and the General Secretary, Raghav Mimani expressed their gratitude towards the joint efforts of the clubs and departments who made Apogee 2010 a reality.

The major attractions of the inauguration were Kathak and Bhangra performances which were followed by fireworks. This Apogee had plethora



of events like Air Show, Dirt Bike Racing, TEDx, Fireworks, and many more.

This time APOGEE received huge sponsorship; Platinum sponsor: Hindustan Zinc Limited, Title sponsor: Samsung Gold Sponsor: SAIL, McGraw Hill Education, Silver sponsor: State Bank of Mysore, Punjab National Bank, Syndicate Bank, Cognizant, Campus France, IBM, Steelcase, UCO Bank, Roop Telesonic Ultrasonix Ltd.CCD, Dominoes, Digit, Intel, Infineon, Birla Corporation, Honda, Discovery Channel, VinnEx, 95FM, WWF, Wildlife Institute of India, Mera Career Guide, Innobuzz, College Khabar, Freshers World, Think Ware, KnowAFest, Indyarocks, SKOAR, Saviance.

During APOGEE students showcased a good number of projects and paper presentations. The participation from outside colleges was commendable too with a number around 650.

Workshops

Apogee 2010 provided students with ample opportunity to enhance their knowledge in various fields. A large number of workshops were held for students of both BITS, Pilani and outside. The



most notable among them were the Astro workshop and the Origami workshop. The Astro Club of BITS, Pilani held a four-day workshop which included telescope handling, astrophotography, viewing the southern hemisphere using an inflatable dome, a lecture by Dr. S. Pal, renowned scientist of ISRO, and other lectures and sky watching sessions by the members of the club. This workshop saw great participation especially from students of other colleges. The origami workshops, organized by MATRIX proved to be a great success. The workshop was conducted by Hitomi Ashta, the author of books like Origami and More Origami. A workshop on Quantum Information was organized by the Physics group. It was a three-day workshop and dealt with various areas like Quantum Teleportation, Quantum Cryptography and Quantum Computation. Other major workshops conducted were X-MechBOT(a Robotics workshop), Cyber Forensics and Ethical Hacking and a workshop on Green Chemistry.

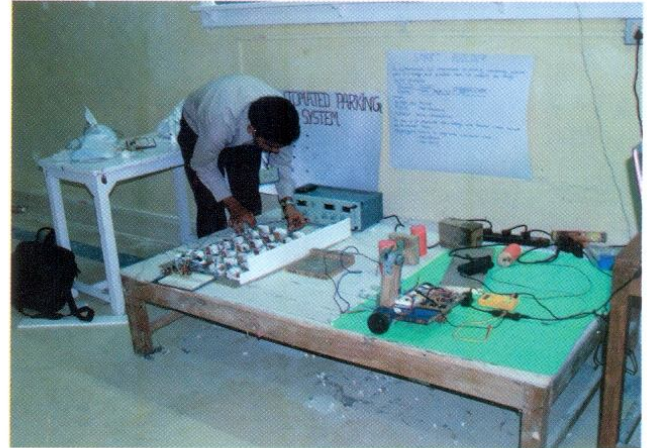
Quizzes

The most famous quiz in Apogee was BOB (Brain of BITS) which was organized by the English Language Activities Society. BOB provide a stage to test one's mettle against the best quizzers on campus. And as every year, BOB lived up to the full expectations of the large number of audience who had come to be a part of this event. BULB and Jeopardy were two more quizzing events, conducted by the Department of Informalz. The Lab quiz, organized by the Biology, Chemistry and Physics Societies was a quiz designed to test the experimental skills of an individual. Another quiz, which gained huge popularity this Apogee, was WHO DUN IT, conducted by the Chemistry group. The most noteworthy thing about this quiz was its participation, which was more than expected. Other major quizzes held were Jeu de Technology, the Journalism quiz, the Messier Marathon, the India Quiz, Fast and Quirous, REBUS, the Mythology Quiz, Over Head Transmission, Physics Challenge, World Wars, and many more.

Online Competitions and Models

Two major online competitions, named *Layers* and *Portfolio*, were organized by the Photography Club. While Portfolio tests the skills at photography, Layers tests the mettle of a participant in post processing of an image. The winning entries were showcased in Panorama, a photography exhibition during Apogee. *Numero Uno* is a combination of case study analysis with an online treasure hunt. Another major competition held was IStructE. The event tested observational skills and also problem (structural problems) solving skills which were the basic

requirements of a structured engineer. Other online competitions held were *SMS: Stock Market Simulation*, *Blog Business*, *Creativity Quotient Test*, *Code 2 Play*, *Qrious* and *Simu-Quantalate*.



The APOGEE participants displayed various models of effective traffic control system, AutoCad design, etc. which got an overwhelming response from viewers.

Guest Lectures

This Apogee witnessed a large number of great lectures organized by the department PEP. A lecture which was received very well was by Archana Sharma, an Indian experimental physicist and a staff member of CERN - European Organization for Nuclear Research since 1987 and presently working on the Compact Muon Solenoid (CMS) experiment at the Large Hadron Collider (LHC) project in Geneva, Switzerland. A very inspiring lecture was given by Meera Sanyal. She is currently the Chairperson and Country Executive for ABN AMRO Bank (now RBS) in India and on the National Advisory Board of AIESEC, an international students' organization.

A lecture which received huge audience was by Satish Jha. Satish Jha is a writer, editor, researcher, international corporate executive, social entrepreneur, an executive coach, mentor and a management consultant with special interest in information technology management. He is currently a Special Adviser to Kofi Annan Centre for Excellence in ICTs, and to several other organizations including UNGAID, Development Gateway of The World Bank and co-chairs the World IT Forum (WITFOR). He talked of his dream project "One Laptop per Child". Another lecture was by Dr. A.S. Pillai, a distinguished scientist and Chief Controller, R&D, DRDO and also the CEO and MD of BrahMos Aerospace. He received the Padma Shree award in 2002. This Apogee, students also got to hear R Sukumar, the proud BITSian who hogged the news media by taking up position as Managing Editor of the Mint, one of the largest business newspapers of the country.

TEDx

A very integral part of APOGEE 2010 was TEDx, organised by Centre for Entrepreneurial Leadership, BITS Pilani. Speakers like Vishal Talreja, Cleo Pascal and Harish Shiv Ramakrishnan had come all the way to Pilani to interact with the students. This event was a great success and received huge response from the students. A TED Talk by Ron Eglash, on Ethno-Mathematics has been rated as one of the most jaw-dropping talks ever given. He spoke at length about the need of the day. He argued that who knew 10 years before that mobile phones would



become so common that more than half of the population will own one, but today it has been possible and we are the ones who have made it happen. Similarly now it's the time for another revolution. He described his **one laptop per child** scheme, wherein he dreams of equipping each child with a special laptop, minus the sophistications and adding the required roughness. He believed that learning and education were different and we need to find the right perspective. He advised the students that it would be better if instead of going for a job, they could create jobs for the world.

The whole event was highly successful and lived up to the expectations of both students and faculty who enjoyed the distinguished talks delivered by high profile speakers.

Apogee came to an end on 14 March 2010, with the Valedictory Ceremony. The function began with Satish Jha, the chief guest, addressing the students. The address was followed by the declaration of winners of the projects and paper presentations and prize distribution for events; the projects were divided into different categories like Automation, Health and Nutrition, Industrial process and application, material sciences, pure sciences, software design etc. The paper presentations were won by Sona College of Technology (chemical, mechanical), Nirma University (civil and computer science) BITS Pilani (management and communication systems) and others. Besides these, the sponsors also distributed a hoard of prizes for their events.

CARING BEYOND OUR WALLS

NSS

NSS Unit of BITS Pilani organised a health camp on 7 March 2010 in Garinda village (12 kms from Pilani) in the Government Upper Primary School, Garinda. The camp was inaugurated by Prof. R.K. Mittal, Deputy Director (Administration), BITS-Pilani. Medical Superintendent of BITS, Dr. R.P. Pareek (Physician) and Dr. Sanjana Bhatt (Gynaecologist) provided their expert services. During the health camp, about 160 people availed the facility of medical checkup along with blood sugar testing and those who were in need among them were given free medicines too. On this occasion, Prof Mittal presented the Inspiration Award to Mr Surinder Kumar, eighth class student of the same School. The award was sponsored by the Department of Science and Technology, Government of India in recognition of the student's aptitude in Science. The award included a cash prize of Rs 5000 also.

NSS, BITS, Pilani chapter bagged the Red Cross Award for the third time, on world blood donor day (14 June) by the Indian Red Cross Society for highest unit of blood collection from any educational institution, this year. This also accounts for setting a record of sorts for the country's highest-ever blood collection turn up by an educational institution. This award winning camp was organized at Student Activity Centre on 30-31 January, 2010 in the vigil of Vikas Gurwani,



the president, NSS and Alok Soni, the health coordinator. The total turn up was more than 1030 and the number of units collected was 841. The award was presented to Dr. Vimal Bhanot, Manish Gurwani and Nitish Kumar Singh by Mr. GulamNabi Azad, the honourable Health Minister, Government of India.

BITSAA

Graduation ceremony for the 2006 -10 batch was held at the VFAST lawn of BITS Pilani on Wednesday 28 April 2010. Calling upon the young

graduates to be ready to face the constant changes in life, Vice Chancellor Prof. L K Maheshwari said, "Change will be a continuous process and you will have to live with it. Let there be a joy of understanding change". Other faculty members who spoke on the occasion were: Prof G Raghurama, Director; Prof R K Mittal, President, BITSAA and Director Designate of Dubai Campus; Prof. N V M Rao, Dean, Education Hardware Division; Prof. S K Verma, Chief Warden; and Prof. Surekha Bhanot, Warden, Meera Bhavan. Several students also shared their experiences in the Institute.

BITS Alumni Affairs Division

BITS Alumni Affairs Division has been created under the Chairmanship of Prof. KE Raman, Acting Director, BITS Pilani K.K. Birla Goa Campus. Each campus has a dedicated cell with a Faculty In-charge to coordinate the activities of Alumni Affairs. The Division will set the overall direction and framework in relation to all alumni activities. The Campus Cells thus, will work under its direction and framework and continue to organize events such as Alumni Batch visits, and Graduation batch activities. During the semester numbers of activities such as souvenirs sale periodically, batch snaps, BITSAA scholarships for different purposes etc. were organized. Vice Chancellor's farewell to graduating students was a special event. More than 30 Alumni sessions were organized online in different fields through Embryo as also face-to-face for the benefit of students.

Kidz Island

Since long a serious need for a crutch where small children could be looked after while parents are away to work, had been felt by the faculty and other staff of the institute. This idea got



materialized mainly owing to Mrs. Kanchan Upadhyay's sincere efforts. Finally, the Kidz Island was set up in the old Student Union Block and it was inaugurated on 12 April 2010 by Mrs. Gayatri Maheshwari. Both faculty and staff are extremely happy with this facility.

Ragamalika

Tyagaraja Aradhana Practice was held on the founder's day on 20 January 2010. The Ragamalikans trained a group of BITSians for about two weeks and rendered the five Pancharatna Kritis composed by saint Tyagaraja, namely Jagadānandakāraka in raag Nāta, Dudukūgala in raag Gowla, Kanakana ruchi ra in raag Varāli, Sādinchane in raag Ārabhi and Endarō mahānubhāvulu in raag Sri.

Sangamam 2010 was held on the 23 February 2010 in the auditorium. It was based on the Sanskrit play *Abhijñānaśākuntalam* by Kalidasa'. The concert was called 'The Lost Ring' since it was based on the separation of king Dushyant and his wife Shakuntala due to the loss of a ring presented to her by him and their reunion later on. Most of the music was composed by Ragamalikans themselves.

A Kathak workshop was organized for the semester as a new initiative to impart knowledge of classical dance among BITSians. It was held during 8-21 April, 2010. About 30 participants belonging to all years including higher degree students attended the workshop regularly. Namrata Jain, the Kathak dancer from Ragamalika, taught the students basics of Kathak style of classical dance.

'Strings Attached' was a carnatic instrumental concert held on 17 April. It was performed by Preethi on the veena, Ajay Aditya on the violin and Deepak Krishnamurthy on the mridangam. Six captivating carnatic compositions were played evenly balanced between the violin and the veena with percussion support from the mridangam. The Annual Ghazal concert 'Shaam-e-Ghazal' was held on the 20 April 2010 in LTC-QT. Many people attended the concert which went for about one-and-a-half hours.

A cultural evening was organized on the 22 April, 2010 for the delegates who had come for the International Conference on Women's Empowerment which was held during 22-24 April in BITS, Pilani. There were events such as an instrumental performance by Preethi on the veena, Ajay Aditya and Shraavan on the violin and Deepak Krishnamurthy on the mridangam. Later on, Namrata Raman and Manjeera, Bharatanatyam dancers from Ragamalika gave a dance performance. They danced for a Thillana in raag Sindhubhairavi.

MATRIX

In the second semester, Matrix started a new format for introducing books to readers under the guidance of the mentor, Prof A K Sarkar and Prof-in-Charge, Dr.Geetha B. The event proved to be

the taste of what MATRIX stands for. There were five speakers introducing five books and the panel in each review session consisted of faculty and students. It started with Vladimir Nobokov's *Lolita* by a fourth year student Chayanika, who touched on the various aspects of the book without overstepping them. It was followed by an interesting science read book *Survival of the Sickest* by Dr. Sharon Moalem with Jonathan Prince which Dr. Kaushar Vaidya brought to light. Next book was *Reluctant Fundamentalist* by Mohsin Hamid reviewed by Ishan Sharma, a third year student. It was followed by *My Name is Red* by Orhan Pamuk which was discussed by Santhanam Balaji, a third year student. The event

ended with the last book *Paranoia* by Joseph Finder which was reviewed by Sharavani Vatti, a second year student and also member of MATRIX. The audience included Prof G. Raghurama, Director of Pilani campus and other faculty members and students. Matrix organized an Origami workshop and a Mythology quiz during APOGEE. The workshop was one of the major events during Apogee and saw participation from both faculty and students alike. It introduced the traditional Japanese art of paper folding to a huge gathering. The workshop was conducted with the help of a professional origami artist from Japan. The Mythology quiz was also conducted by two second year students, Aman Gupta and Sai Ram.

INTRODUCING NEW FACULTY

NAME	DESIGNATION	DIVISION/UNIT	DISCIPLINE
Bijendra Nath Jain	Vice-Chancellor	VCB	EEE & Computer Science
Shriniwas Shrikant Arkatkar	Assistant Professor	FDI	Civil
Arun Kumar Jalan	Assistant Professor	FDII	Mechanical
Paritosh Shukla	Assistant Professor	FDIII	Chemistry
Devendra Kumar	Assistant Professor	FD III	Mathematics
S Murugesan	Assistant Professor	FDIII	Pharmacy
Shuvendu Narayan Patel	Assistant Professor	FDI	Civil
BVN Phanindra Kambhammett	Assistant Professor	FDI	Civil
Sai Jagan Mohan	Assistant Professor	FDII	Mechanical
Pankaj Biswas	Assistant Professor	FDIII	Mathematics
Asokan A	Lecturer	ESD	Civil
Khandgave Santosh Sopanrao	Lecturer	PSD	Chemical
Raaj Ramsankaran	Lecturer	FDI	Civil
Ram Awtar	Visiting Professor	FDIII	Mathematics
Murlidhar Arora	Visiting Professor	PSD	Physics
A Muthulakshmi	Visiting Faculty	PSD	CSIS
Sarvesh Satija	Visiting Faculty	FDI	Management
Abha Jindal	Visiting Faculty	PSD	Management
Belsare Shashank Sanjayrao	Visiting Faculty	PSD	Civil

WE MISS YOU



Prof. S. Venkateswaran

(15 January 1939- 15 May 2010)

Prof. S.Venkateswaran, the erstwhile Vice Chancellor and Professor Emeritus-cum-Advisor who served BITS more than three decades, breathed his last on 15 May 2010 in Chennai. The faculty, students and staff paid their tribute to the departed soul.

EDITORIAL TEAM



Editor: Dr. Pushp Lata

Members of Editorial Committee: Dr. Virendra Singh Nirban
Dr. Sushila Rathore