Semester II
2009-10

BITScan
K.K. Birla Goa Campus

Semester Notes

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Issue 1

BITS, PILANI || K. K. Birla - Goa Campus
from the Editor’s Desk

A momentous semester—that’s how we can describe Semester II of 2009-10 at the BITS, Pilani - K. K. Birla Goa Campus. Visit by Dr. Kumar Mangalam Birla, Chancellor, BITS, Pilani—the first visit by him to any of the campuses of BITS, Pilani; rechristening of the Goa campus as K. K. Birla Goa Campus; experience-sharing by creative personalities at the TEDx event, the crowd-puller at the techfest Quark; achievements by students and members of faculty in academics and sports; launching of BITS Alumni Affairs Division with Prof. K. E. Raman as its Chairman; successful offering of BITSAT for the consecutive sixth year at the Campus; information sharing and learning through conferences and workshops; sensitizing students to the disability issues through a unique We Care festival organized for the first time in the history of BITS, Pilani—all these events at the K. K. Birla Goa Campus and the farewell to Prof. L. K. Maheshwari and welcome to the new Vice Chancellor Prof. B. N. Jain, at the Pilani Campus have made the II Semester of 2009-10 very special!

When we see a vibrant Campus abounding in a number of significant events and achievements, it becomes essential for us to ponder over the idea of capturing them in one document that mirrors their magnitude. We decided to do so and hence the dawn of this first issue of the semester newsletter BITScan of K. K. Birla Goa Campus. This newsletter will be published at the beginning of each semester wrapping up the events of previous semester.

As you read this issue, please keep in mind the efforts that have gone behind in collecting data from various sources to compile the information. We appeal to you to provide us with necessary information pertaining to all the events organized by you; competitions, scholarships and projects you have won; and your other achievements for the forthcoming issues.
Visit by Chancellor

BITS - Pilani, K. K. Birla Goa campus was blessed with the visit of Dr. Kumar Mangalam Birla, Chancellor of BITS Pilani on 2 and 3 February, 2010. He was received by Prof. L. K. Maheshwari, Vice Chancellor, BITS Pilani and Prof. K. E. Raman, Director of Goa Campus. This was his first visit to any of the campuses of BITS Pilani after assuming Chancellorship of the University.

The dynamic and visionary leader spent time with students and senior faculty of the Goa Campus on both the days. Students felt that they were fortunate to meet and interact with him on their campus. He also visited various laboratories, SAC, Medical Centre, Library and the projects showcased by students for Quark’10. Inaugurating Quark, the three day annual technical and innovation extravaganza of BITS Pilani Goa Campus on the evening of 3 February, Dr. Birla in his brief address urged the students to have imagination and passion to achieve their goals in life and to contribute to the growth of Indian economy.

Hon’ble Chancellor also inaugurated ‘Urja’, a programme that aims at having an energy efficient campus. Prof. L. K. Maheshwari delivered the welcome address while Prof. K. E. Raman proposed the vote of thanks. Mr. Akhil Mehta, President of Student-body enlightened the audience on the theme of Quark 2010.

The Chancellor met the steering committee members Prof. L. K. Maheshwari, Prof. K. E. Raman, Prof. V. S. Rao, Prof. M. Ramachandran, Prof. G. Raghurama, Prof. R. K. Mittal and Mr. Kris Ramachandran, of Vision 2020-Mission 2012, a project initiated by him. Then the 16 Task Forces dealing with the 6 thrust areas namely, Academic Programmes and Pedagogy, Research and Consultancy, People, Infrastructure, University Administration and Campus Life for achieving Mission 2012 presented their progress to the Chancellor.
new vice chancellor at BITS, Pilani

Prof Bijendra Nath Jain has taken over as Vice Chancellor of BITS, Pilani since 1 August 2010 after Prof L. K. Maheshwari’s retirement on 31 July. A Ph.D. from SUNY, Stony Brook (NY), in Electrical Engineering, Prof. Jain served IIT Delhi since 1975 in various capacities such as Microsoft Chair Professor, Head of the Department, Dean Alumni Affairs, and Deputy Director (Faculty Affairs). Prof. Jain’s teaching and research interests in Computer Networks and Systems, with applications to wireless networks, environment monitoring and information security enabled him to train over 2500 computer communication specialists, many of whom are leaders in R & D in India and abroad, including those in government or industry. He has several academic accomplishments to his credit. To name a few, Prof. Jain was the co-inventor with researchers from Cisco systems in seven patents; 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. With his academic, research and administrative excellence and his vast experience, Prof. B. N. Jain has joined the BITS family to take it to newer heights.

Prof. B. N. Jain visited the K. K. Birla Goa Campus during 21-24 July 2010. He visited the research labs and other facilities and interacted with faculty members, and students. After assuming the Vice Chancellor’s office at Pilani, Dr. Jain addressed all the faculty members at a meeting held at the Pilani Campus on 3 August 2010. His address was broadcast live at other campuses.

a befitting farewell to Prof. L.K. Maheshwari

Goodbyes are not forever
Goodbyes are not at the end
They simply mean we’ll miss you
Until we meet again!

These words were proved yet again in a glittering function held on 4th August at the BITS Auditorium at Pilani packed with a large number of members from BITS family consisting of the Vice Chancellor, Directors of all campuses of BITS, faculty, staff, students, alumni representatives, Heads of local institutions, journalists and prominent citizens of Pilani. They all had gathered to bid adieu to Mrs. Gayathri Maheshwari and Prof. L. K. Maheshwari (LKM) who retired as the Vice Chancellor of BITS on 31st July 2010 after contributing for four decades in various capacities. For details, Visit: http://www.bits-goa.ac.in/Imp_Updt/LKM-farewell_Alumni.pdf
The Convention was jointly organized by Developing Library Network, DELNET, New Delhi and BITS, Pilani—K. K. Birla Goa Campus during 15 – 18, June 2010 and was attended by about 260 professional librarians and information specialists from India and abroad. The theme of the convention was: Revitalizing Libraries in a Global Village: High End Technologies and Resource Management. Mrs. Anuradha V. Librarian of the Goa Campus was the Organizing Secretary. Inaugurating the convention, Dr S. S. Mantha, Chairman AICTE, New Delhi said, “Information is power and we need to develop systems in order to share knowledge by means of intranet. We need to develop expert systems not merely for accessing the resources but also to capture the knowledge.” Presiding over the inaugural function, Prof. L. K. Maheshwari, Vice Chancellor, BITS Pilani, said, “India had excellent information resources in ancient universities like Taxilla and Nalanda. Saraswati Mahal Library in Tanjore has archived and preserved the information available in palm leaves by using digital technology for future generations. Revitalization of libraries is the need of the day.” Prof. K. E. Raman, Director, BITS, Pilani – K. K. Birla Goa Campus, said, “Libraries need to be provided in every new campus. Faculty members need to be more informed about knowledge resources so that they can guide the students”. Dr. H. K. Kaul, Director DELNET (Developing Library Network) spoke on the theme of the conference. Dr. Sangeetha Kaul (Network Manager, age, DELNET) and Mrs Anuradha welcomed the gathering in the beginning. As a part of the inauguration, Prof. K. E. Raman opened the Exhibition which consisted of 15 vendors and database providers. Dr. M. Ishwara Bhat, Librarian, BITS, Pilani – Pilani Campus proposed the vote of thanks. Tutorial sessions on (i) KOHA Library Automation System by Dr Sangeetha Kaul of Delnet and (ii) Digitization and Institutional Repositories by Dr. Surinder Kumar of National Informatics Center, Delhi benefited the participants. Six technical sessions that included several talks and panel discussions by experts were also conducted. Department of Art and Culture, Government of Goa presented a spectacular cultural evening “Goench Sesaai” (which means the Divine Goa) at the Institute auditorium on 16th. The convention ended with a valedictory function in which participants appreciated the efforts that had gone into making the convention a grand success.

**International Workshop on Bioremediation**

(Jan 4-16, 2010)

A twelve-day workshop on Bioremediation was conducted by the Biological Sciences Group in collaboration with the American Society of Microbiology (ASM) with Dr. Srikanth Mutnuri of Biological Sciences Group as the Host Professor and Dr. Max M. Häggbom of Rutgers University as the Visiting Professor. The workshop aimed at sharing knowledge in the field of environmental microbiology and bioremediation of hazardous waste sites and fostering new collaborative research and training efforts in this field. This course consisted of lectures, laboratory bench work and demonstrations, as well as student team projects.
The workshop followed a carefully constructed agenda to deliver the knowledge essential for understanding the applicability, practicability and viability for implementing bioremediation approaches. In addition to the visiting and the host scientists, resource faculty included Dr. Utpal Roy, Dr. Anasuya Ganguly and C. Sivaraman, from BITS, Pilani - K. K. Birla Goa Campus. Dr. John Tharakan, from Howard University and Dr. Swaranjit Singh Cameotra from Institute of Microbial Technology, Chandigarh. Inaugurated by Prof. Sunil K. Lal from ICGEB, New Delhi and Ambassador for American Society for Microbiology (ASM) in India, the workshop benefitted over 21 participants.

**Workshop on Analog VLSI Design**  
(28 February 2010 to 1 March 2010)

A National workshop on Analog VLSI Design was conducted by the EEE Group. This workshop aimed at providing training to the participants to design VLSI integrated circuits. Various concepts related to VLSI design were discussed and taught.

Emphasis was on first-hand experience of the implementation of Analog design methodology through extensive hands-on sessions. It covered the fundamental techniques required for the design of analog IC’s and had a practice session on Cadence software. The workshop was conducted by Mr. Gururaj Ghorpade and Miss Madhulata Bono, senior analog design engineers from National Semiconductor India Design Center, Bangalore.

**Workshop on Bioinformatics**  
(April 2 - 4, 2010)

SYMBIONTS – The student-club of Biological Sciences Group organized a workshop on Bioinformatics during April 2 - 4, 2010 in association with the Department of Supercomputing facility for Bioinformatics and Computational Biology, IIT Delhi. Attended by around 50 students and faculty members, the workshop included both theory as well as hands on training on Bioinformatics softwares. Dr. Srikanth Mutnuri was the faculty in charge; Ram Kumar Verma and Sai Krishna were the student coordinators; Dr. Shashank Shekhari, Project Scientist, Super Computing facility for bioinformatics and computational biology, IIT Delhi, conducted the workshop.

**Workshop on Creative writing**  
(27-28 February 2010)

Gieve Patel, a poet, playwright and painter settled in Mumbai conducted a two-day workshop for the students of creative writing course offered by the Humanities and Management group. Dr. Patel has been a critically acclaimed writer frequenting elite literary circles, ever since the start of his literary career in 1966. The workshop focused on developing the literary skills of the participants and analyzing the works and writing styles of various literary giants like Bernard Malmed, Ernst Hemmingway and a few acclaimed poems from Mr Arun Kolatkar and the Sangam Trilogy. The workshop, though lasted only just two days, gave adequate exposure for the participants to various writing styles and skills.

**National Certificate Programme in Network Management**  
(29 May - 20 June, 2010)

BITS, Pilani - K. K. Birla Goa Campus in collaboration with NETTEC conducted a Certificate Programme in Network Management at its campus during 29 May-20 June 2010 for aspirants from all over India. Over 200 registered participants honed their knowledge and skills in the area of Networking Management through the sessions conducted by Dr. Bharat Deshpande and Mr. Mangesh Bedekar of the CSIS Group.
Distinguished Lectures

<table>
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<tr>
<th>SPEAKER</th>
<th>DESIGNATION</th>
<th>TOPIC</th>
<th>DATE</th>
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<tbody>
<tr>
<td>Sir Vic Hayes</td>
<td>Senior research Fellow Delft</td>
<td>The Innovation journey of Wi-Fi</td>
<td>27 January 2010</td>
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<td></td>
<td>University of Technology, Netherlands. Father of Wi-Fi</td>
<td></td>
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<tr>
<td>Mr. Sunil Handa</td>
<td>Founder, Eklavya Educational Foundation, CEO, Core Emballage</td>
<td>Laboratory in Entrepreneurial Motivation</td>
<td>11-12 February, 2010</td>
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<tr>
<td>Mr. Patrick Kane</td>
<td>Cypress Semiconductor San Jose, U.S.A</td>
<td>MoU Signed with Cypress Semiconductor, San Jose, U.S.A &amp; PS</td>
<td>27 February, 2010</td>
</tr>
<tr>
<td>Prof. B. Viswanathan</td>
<td>Former Vice Chancellor, SCSVMV University, Kanchipuram</td>
<td>(i)MEMS based sensors and their applications (ii) Nanoscience and technology: A journey into the big world of small things</td>
<td>16 -17 March, 2010</td>
</tr>
<tr>
<td>Mr. Dilip D’Souza</td>
<td>Freelance Writer</td>
<td>Creative writing (Non Fiction) in English</td>
<td>18 – 19 March, 2010</td>
</tr>
<tr>
<td>Mr. Sidhartha Nath</td>
<td>Graphics Software Engineer, Intel, Bangalore.</td>
<td>Switchable Graphics</td>
<td>01- 02 April, 2010</td>
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Visits by Faculty: Enriching the Learning Experience

**International Visits**

**Dr. Srikanth Mutnuri**, Assistant Professor, Biological Sciences Group attended the Leeds Applied Food Microbiology Course from the 26 – 29, APRIL 2010 in Leeds, UK organized by Leeds City council. He obtained funding from Society for Applied Microbiology, UK to attend this course.

**Dr. Judith M. Braganca**, Assistant Professor, Biological Sciences Group presented a paper on Biodiversity of *Haloarachaea in hypersaline environments of saltpans of Goa – India* at the Halophiles 2010 Conference on halophilic microorganisms at Beijing China, during 29 June – 4 July, 2010.

**Dr Sunil Bhand**, Associate Professor and Group Leader of Chemistry presented FOUR research papers on *Biosensors for detection of adulterants in milk*, at the 20th World Conference on Biosensors organized by Elsevier, at Glasgow, UK 26-28 May, 2010.

**Dr. N N Ghosh**, Assistant Professor, Chemistry visited University of Birmingham, UK for collaborative research during 25-31 July 2010.
Dr. Debasis Patnaik spoke on Functions of the Gods and the Role of the Human at the Tenth World Theosophical Congress held in Rome from 10-15 July 2010 organized by the Italian Section of the Theosophical Society. He also participated in a Round Table Discussion on 'Universal Brotherhood’ on 14 July, 2010.


Invited lectures by faculty


Dr. Sunil Bhand, Associate Professor and Group Leader, Chemistry Group delivered an Invited lecture on BIOMEMS for pesticide analyses at National Conference on Green & Sustainable Chemistry Organized by Chemistry Group BITS, Pilani – Pilani Campus during 19-21 February 2010.

Dr. Anil K. Pundir, Assistant Professor, Mathematics Group delivered lectures on Mathematica and its Applications at the National Workshop On Mathematical Softwares and Applications held at Department of Mathematics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during 23-27, March 2010.

Dr. Tarakeshwar Singh, Assistant Professor Mathematics delivered 3 invited Lectures on Graceful Signed Graphs and its Applications, in National Workshop on Discrete Mathematics, Banasthali University, Rajasthan, during 1-5 May 2010. He also delivered 4 invited lectures on Graph Labeling Problems and its Applications in a refresher course in Mathematics in Algebraic and Number Theoretic Aspects in Graphs and Applications at the UGC Academic Staff College, University of Mysore, Mysore, during 11-12 June 2010.

Dr. P. Dhanumjaya, Assistant Professor, Mathematics Group was invited as a resource person at the National workshop on Mathematical Softwares and Applications held at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, during 23-27 March 2010. He delivered lectures on Solving Differential Equations using MATLAB.

Prof. Meenakshi Raman, Professor and Group Leader, Humanities & Management Group conducted a two-day session on Acing the Job Interviews at K. K. Birla Goa Campus during 8-9 January 2010. She spoke on Creativity and Critical Thinking and was a panelist at WiCamp jointly organized by Wipro & BITS Pilani Goa.

Dr. Anil K. Pundir, Assistant Professor, Mathematics Group delivered lectures on Mathematica and its Applications at the National Workshop On Mathematical Softwares and Applications held at Department of Mathematics, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during 23-27, March 2010.

Goa Campus on 6 February 2010 during Quark 2010. Dr. Raman conducted a one-day workshop on Relationship Building through People Skills for 52 supervisors at JSW Steel Ltd., Vijayanagar Works, Toranagallu, Bellary, Karnataka on 24 April 2010.
Achievements

Faculty

Dr. D. M. Kulkarni, Associate Professor, Mechanical Engineering Group and In charge, Computer Center was conferred the ASME (American Society of Mechanical Engineering) ambassadorship for ASME Online Campus India. Under this recognition he is required to design courses/training programme for ASME Certification Course for industrial professionals. He was honored with the coveted Rashtriya Gaurav Award along with Certificate of Excellence from the Indian International Friendship Society in a Seminar on Economical Growth and National Integration held in New Delhi recently. This award was given in recognition of his meritorious services, outstanding performance and remarkable contribution in the field of Industry, education and research.

Dr. Sunil Bhand, Associate Professor and Group Leader, Chemistry Group, received a Certificate of appreciation from ICAR (Indian Council of Agricultural research) for the technology innovation at National meet on Technology Innovation in Agriculture, organized during Mid Term review of World Bank funded projects, N. Delhi during 21-22 May 2010.

Dr. N. N. Ghosh, Assistant Professor Chemistry Group, and Dr. Gerard Franklyn Fernando, Professor, University of Birmingham (UK) have jointly received The Royal Academy Of Engineering for Research Exchanges with China and India – Short Award for 2010.

Students

Manoshi Gayen (2008H129003G ) and C. Raghavendra (2008H129001G) have been selected to do their M.E. Biotechnology Dissertation cum PhD at the USUHS, USA.

Ankita Arvind Kejriwal, was awarded the prestigious Google India Women in Engineering Award.

Anupama TV (2004A3PS007G) won the All India Rank 4 at UPSC-2009 (IAS Entrance Exam).

Pratik Mandrekar (2006A7PS006G) was selected as Young Ambassador for the German Academic Exchange Service (DAAD).

Vinit Kumar Mittal (2007A1PS458G) was awarded a summer fellowship at MAX Planck Institute, Magdeburg (Germany) with monthly stipend of 650 Euros + travel expenses.

Bhakta Vatsal Shukla (2007A1PS413G) was chosen as a summer research fellow by Indian Academy of Sciences to work at Indian Institute of Science (IISc) Bangalore with the stipend of Rs 6000/month along with accommodation and travel expenses.

Chetan Bansal (2008B1A1690G) was selected for Google Summer of Code 2009 and again was selected for Google Summer of Code 2010 under which he worked with the GenMaPP group during summer on a project for finding and visualizing relationships between Bio-medical Pathways and processes. Mentored by Mr. Thomas Kelder, from the University of Maastricht, Netherlands, Chetan completed the project successfully and received a stipend of $5000 from Google.
Kricket Club of BITS, Pilani - K. K. Birla Goa Campus emerged Champions in the Salcete Zone B division final at the match held against Pollem Cricket Club on 23 April 2010 at the Campus. Himanshu Yadav was declared Man of the Match. With this victory, the team has been qualified for next season’s A Division League.

Team BPGC WS comprised of Santosh Prabu C, Nishant Prasad, Vidya Shankar Vellal and Rishikesh BG, and was mentored by Prof. Mridula Goel, won the national championship CIMA (Chartered Institute of Management Accountants) Global Business Challenge on 29 May in Mumbai and participated in the finals held in Kuala Lumpur during 5-6 August 2010.

Significant Projects

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR &amp; NAME OF THE GROUP</th>
<th>TITLE OF THE PROJECT</th>
<th>FUNDING AGENCY &amp; AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Meenal Kowshik Biological Sciences</td>
<td>Biological synthesis of metal sulfides &amp; metallic nanoparticles using halophilic archaebacteria</td>
<td>Ministry of Earth Sciences (MoES), Amount: Rs 17,13,810/-</td>
</tr>
<tr>
<td>Dr. Halan Prakash Chemistry</td>
<td>Chemical modification of some metal binding peptides with photoactive molecules and investigation on their photoinduced DNA damage and photoenhanced antimicrobial activity</td>
<td>DBT Rapid Grant for Young Investigators, Amount: Rs 21,24,000</td>
</tr>
<tr>
<td>Biological Sciences Group</td>
<td>DST- Fund for Improvement of S&amp;T Infrastructure in Higher Educational Institutions (FIST)</td>
<td>DST FIST, Amount: Rs 41,00,000</td>
</tr>
<tr>
<td>Physics Group</td>
<td>DST- Fund for Improvement of S&amp;T Infrastructure in Higher Educational Institutions (FIST)</td>
<td>DST FIST, Amount: Rs 98,00,000</td>
</tr>
</tbody>
</table>
| Dr. N N Ghosh Chemistry                     | 1. Development of Nanostructured High Surface Area Alumina and Silica based adsorbent with Tailored Pore structure for Removal of Fluoride ions from Ground Water  
2. Development of a novel aqueous solution based “one pot” synthesis route for hard-soft-ferrite nanocomposites and their properties. | Board of Research in Nuclear Science (BRNS), India, Amount: Rs 29,07,150/- |
| Dr. Anjan Chattopadhyay Chemistry            | Spectroscopic properties of some low-lying electronic states of alkali metal- rare gas and alkaline earth metal-rare gas molecules | Defence Research and Development Organization (DRDO), India, Amount: Rs 14,98,000/- |
| Dr. Rashmi Chauhan Chemistry                | Development of Novel Initiators for Controlled Radical Polymerization of N substituted Itaconic Acid/ Itaconimide Monomers | DST, under SERC Fast Track Scheme, Amount: 5.46,000/- |
|                                            |                      | DST, under SERC Fast Track Scheme, Amount: Rs 19,86,600 |
Consultancy

Dr. D. M. Kulkarni received Knowledge Consultancy from American Society of Mechanical Engineering for industrial professionals on advanced FE Analysis and Fracture Mechanics. The 'Knowledge Consultancy' will be $1800 per 'Interactive Meeting cum Training'.

Dr. Meenakshi Raman, Mr. V. V. S. N. V. Prasad and Dr. Basavadatta Mitra successfully completed a consultancy project *Impact Analysis on Training Programme for empowering women and SC/ST candidates using ICT tools in the State of Goa* for KEONICS, for the Karnataka State Electronics Corporation Limited.

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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.

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name</th>
<th>Group</th>
<th>Journal / Member details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Dr. Lucy Gudino</td>
<td>Computer science &amp; Information Systems</td>
<td>Reviewed one manuscript for IEEE Transactions on Antennas and Propagation</td>
</tr>
<tr>
<td>2.</td>
<td>Dr. Judith Braganca</td>
<td>Biological Sciences</td>
<td>Reviewed manuscripts for international journal Ecotoxicology</td>
</tr>
<tr>
<td>4.</td>
<td>Dr. Sunil Bhand</td>
<td>Chemistry</td>
<td>Reviewed manuscripts for international journals Biosensors and Bioelectronics, Biochemical Engineering, Analytical Letters and International Journal of Environmental Analytical Chemistry</td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Tarakeshwar Singh</td>
<td>Mathematics</td>
<td>Reviewed one research paper for the Mathematical Review of American Mathematical Society as Reviewer committee member</td>
</tr>
<tr>
<td>5.</td>
<td>Dr. Meenakshi Raman</td>
<td>Humanities and Management</td>
<td>Reviewed 2 research papers for IATEFL Journal of ESP-SIG, UK</td>
</tr>
</tbody>
</table>
Joining Hands

MoU

BITS, Pilani — K. K. Birla Goa campus and Cypress Semiconductors, California, USA signed in February 2010, a memorandum of understanding for collaborative research and funded lab development. The Director of Cypress University Alliance, USA, Mr. Patrick Kane inaugurated a state-of-the-art PSoC3 lab in the campus. Mr Kane and his team interacted extensively with the faculty and students and conducted a workshop for the Electrical, Electronicsand Instrumentation Group, towards a new collaborative research between BITS and Cypress. In what comes as a breakthrough for an engineeringand technology institute, the PSoC3 (Programmable System-on-Chip) lab, the first of its kind in India, will provide opportunities for the students to launch ingenious projects and work on microcontrollers on single chips to form solutions for embedded systems.

BITSAAn

A new division, BITS Alumni Affairs Division, was created in July 2010 with Prof. K. E. Raman as its first Chairman. The division will seek to connect and engage students, alumni, friends and well-wishers for a longtime relationship with BITS Pilani. It will also focus on development of alumni support to the continuing development of the Institute’s academic, research, and off-campus programs, expansion and renewal of its facilities, and providing scholarships and financial aid to students through annual fundraising campaigns. It will aim to foster connections among alumni and between alumni and the Institute. By building relationships, promoting diversity, and enhancing BITS Pilani traditions, the Division will work to develop services and benefits, manage events, and bring news about the Institute and other alumni. It will create opportunities for alumni and friends of the Institute to give their time, talent, and treasure to enhance the vitality and reputation of BITS Pilani. sure BITSAAN organized a farewell party during April 2010 for the graduating students of II Semester 2010. The association also published a Year Book for the batch.
Quark, the three day annual technical and innovation extravaganza of BITS, Pilani – K. K. Birla Goa Campus kicked off on the 4 February. Inaugurating Quark, on 3 February, Dr. Kumar Mangalam Birla, the Chancellor, in his brief address urged the students to have imagination and passion to achieve their goals in life and to contribute to the growth of Indian economy. Prof. L. K. Maheshwari delivered the welcome address while Prof. K. E. Raman proposed the vote of thanks. Mr. Akhil Mehta, President of Student-body enlightened the audience on the theme of Quark 2010.

This year, Quark transcended from being a technical festival to an innovation festival. With more than 1000 outstation participants, TEDxBITSGOA, BITS Model United Nations, and exhibitions by DRDO and CSIR, Quark 2010 emerged bigger and better. Guest lectures by Chemistry Nobel Prize Winner, Sir Harry Kroto, and Physics Nobel Prize Winner, Sir Douglas Osheroff and a presentation by Chris Csikszentmihályi, Research Director, Computer Culture - MIT Media Lab were the major attractions. Workshops conducted by renowned establishments like KPMG and Cypress Semiconductors, added more value to the Fest. A special guest lecture was also delivered by the Father of Wi-Fi, Sir Vic Hayes on 27 January 2010 as a part of pre-Quark event.

The 2010 edition of the festival was one of the biggest ever seen in the history of the BITS Pilani and certainly the biggest innovation festival Goa has ever witnessed. With a Diaspora of speakers ranging from top-notch technocrats to the innovation evangelists to maverick CEO’s, TEDx was without doubt the poster event of Quark 2010. BITSMUN witnessed over 200 participants at their diplomatic best as they lobbied for their countries in simulated crises while following UN protocol. In addition to this, there were the special nights, which were memorable in themselves. Chris Csikszentmihályi, the Director of the Media Labs Computing Centre at MIT, showcased some of the work that he had done at the labs and also discussed methodologies that he had conceptualized, all based on technology. But even amidst the plethora of technical discussions and projects on display, the contingents from various institutions were provided some relief through the awesome performances of the drama club, the mime club and the music club of BITS, Goa.

The Associations of various engineering and science disciplines showcased their projects during the festival. Students were delighted to explain their projects to Chancellor Dr. Kumar Mangalam Birla, Vice Chancellor Prof. L. K. Maheshwari and the Directors of all campuses of BITS, Pilani.
For the year 2010, perhaps the fest that stole the show was Spree hosted by BITS, Pilani - K. K. Birla Goa Campus. Spree broke free of its tag of being a fest solely confined to Goa by extending its reach to Bangalore, Chennai, Kerala, Mumbai, Pune, Nagpur and even Kashmir! With over 50 colleges participating in the sports extravaganza, the fest saw unprecedented participation. Spanning for four days during 4 - 7 March 2010, the sports festival witnessed matches being played out with great intensity. Finally SRM University, Chennai emerged as the Champions and the host Institution as runners up. SRM dominated all the matches in cricket, basketball, volleyball and chess. However, VNIT, Nagpur grabbed the first position in football while CoE, Pune secured the top spot in tennis. BITSGians put up a very respectable performances overall in most of the events, finishing runners up in badminton, cricket and tennis. The All India Carrom Federation (AICF) was gracious enough to send Mr. Yogesh Pardeshi, the world champion and Mr. S. K. Sharma, general secretary, AICF for the Fest.

Workshops on air rifle shooting, boxing and juggling attracted a large number of participants. A Karaoke night in the SAC, performance by African acrobats and a DJ Nite on the last day rendered a fitting finale to a fest which had witnessed its participants and organizers leaving no stone unturned to make it a huge success. Salgaocar FC was the title sponsor while Reebok, Goa Cricket Association, Netcore Solutions and indiaeducation.net were the associate sponsors.
We Care Film Fest (12-13 February, 2010)

We Care Film Fest 2010, on the disability issues, was celebrated at BITS Pilani –K.K.Birla Goa Campus auditorium during 12-13 February 2010. Organized jointly by BITS Pilani Goa Campus, Brotherhood, the National Trust, UNIC, UNESCO, and Asian Academy of Film and Television of India (AAFT) in association with the local organizations ESG (Entertainment Society of Goa) Sangath and DRAG (Disability Rights Association, Goa), the festival entered successfully its 7th year.

The Festival witnessed the screening of 32 documentary and short films on various forms of disability from India and overseas. It has introduced a unique participatory rating process wherein the students and the audience rates each film and an independent jury judges the films on the basis of these ratings.

Inaugurating this unique festival, the first of its kind to be organized by BITS Pilani, the Chief Guest Prof. K. E. Raman, Director of BITS Pilani Goa Campus appealed to the students to think about the various issues of persons with disabilities and make use of their knowledge to promote their rights. He added, “BITS had been organizing various national-level cultural and other educational events in its Pilani, Goa, Hyderabad and Dubai centers, but this is the first time it is organizing a festival on disability issues.” Mr. Venancio Furtado, General Manager of ESG (Entertainment Society of Goa), Mr. Avelino D’Sa, President of the Disability Rights Association of Goa and Mr. Vishram Gupte, Chairperson of Sangath, Goa expressed their pleasure over the We Care Filmfest being organized in Goa and assured to take it further. Children with disability from Sanjay School, Goa, enthralled the audience by their scintillating dance performances. Students from The Department of Theatre at BITS Pilani Goa Campus presented a thought-provoking skit that gelled with the theme. Mr Satish Kapoor, the Founder Director of We Care said, “the Festival is an opportunity for all students to develop their understanding and perspectives relating to disability issues besides contributing to the process of participatory rating.” Organizing Secretary Prof. Meenakshi Raman thanked the dignitaries, performers, and others who had made the festival a huge success. The five film-screening sessions showcased 32 films of varied duration. About 200 students from BITS Pilani - Goa Campus, St. Xaviers, Don Bosco College and people from other local NGOs watched the films and actively joined the participatory rating process.
Under the dynamic leadership of Snehit Borgaonkar and Kunjan Gandhi, students of BITS, Pilani - K. K. Birla Goa Campus, the members of Nirman successfully carried out several societal initiatives besides celebrating certain important days as briefed below:

- **National Youth Day**: (12 January 2010) Organized Vivekananda Yuva Sanka Program in the Govt. High School, Zuari Nagar, Goa; distributed books on Swami Vivekananda’s life and message; conducted informal discussion sessions on Swamiji’s ideas and his expectations from youth in rejuvenating of India.

- **Republic Day celebrations**: conducted competitions in drawing, mosaic, elocution, etc., in the Govt. Schools in Zari and Birla during 25-26 January 2010 and prizes given.

- **Study material distribution**: donated study material for Board exam preparations enabling the teachers to conduct mock tests for class X students.

- **National Science Day**: (28 February 2010) organised various programs in the Zuari Nagar Government High School, with a view to inculcate scientific temper among the students. A film was screened.

- **Project Shiksha**: a pilot project taken up to provide free and quality coaching to the 5th standard students, appearing for the Jawahar Navodaya Vidyalaya Admission Tests; proper research was carried out by the Nirman team to develop the teaching curriculum, in tune with the exam syllabus; conducted classes everyday in the Birla Area from October 09 to February 10; organized mock tests, doubt clearance and motivation sessions in addition to regular classes.

- **Solid Waste Management**: carried out a field research to observe the topographic and demographic distribution of the area; chalked out a three phase plan to permanently solve the garbage disposal and presented to the concerned authorities.

- **School Bag Event**: organized on 06 February an awareness program for school students, on the theme personal hygiene as a part of School Bag event in Quark’10

- **Vastra Samman**: initiated an old clothes collection drive as a part of Vastra Samman, a nationwide program being organized in more than 80 colleges across the country. The clothes were sent to Goonj Organization, for distributing among the needy as a reward for their contributory participation in the social development (construction of schools, roads etc.).

**Snake Awareness Workshop 19 April 2010**

The Environment Protection and Awareness Club (EPAC) of the campus organized a Snake-Awareness Workshop on 19 April, in association with Commission for Energy and Environmental Development (CEED) to spread awareness about snakes found in Goa among the students and faculty members of our campus. The workshop was conducted by Mr. Aaron Fernandes and his team from Green Cross, Goa, which is a non-profit wildlife rescue organization, actively involved in rescue operations and awareness campaigns all around Goa and Maharashtra, since the past decade. The event saw a huge participation with students. Some varieties of snakes which are commonly found in Goa like Python, Cobra, Boa, Viper and Tree snake were also exhibited. Participants were allowed to overcome their fear by touching and holding the snakes, except for the venomous varieties like the Cobra, which were shown from a safe distance.
Orientation Programme for Goan Pre - University Students

In an effort by its current students and alumni to enable aspirants to understand the BITS model of education better and inspire them to excel in their pre university, BITS Pilani Goa campus, opened its doors to 220 students from Goa’s premier Higher Secondary schools, namely, Jawahar Novaday Vidyalaya, Navy Children School, Central school, K. V. No. 2, and Carmel Higher secondary School. On 8 December 2009, the students were given a peek into the daily life of a BITSian on campus, as they were taken on a visit to various facilities like labs, workshop, computing centre, recreational facilities and so on. Later, the Director of BITS Pilani, Goa campus, Prof. K. E. Raman conducted an awareness session in the auditorium, where he explained the BITS model of education to the aspiring students from Goa. The presentation covered several important facts and features regarding BITS model of education, its linkages with industries, etc. Harish, a senior student of Goa Campus presented the students' lifestyle and future with BITS Pilani. After the session, the Director answered the eager youngsters, who had several questions to ask about the admissions process, the mode of testing, the campus lifestyle and so on. He remarked, "If even 10% of the students who have come today are inspired to excel and become BITSians then the purpose of this session is served."

Creative Zone

Matrix

The Matrix Club coordinated by Dr. Ranjan Dey and Dr. Saby K. John organized the following book reviews:

- Animal Farm by George Orwell: Book Review; Panelists: Dr. Ranjan Dey, Ajachi Chakravarti.
- The Namesake: Movie & Discussion; Panelists: Dr. K. A. Geetha, Shweta Goyal.
- Catcher in the Rye by J. D. Salinger; Reviewers: Dr. K. A. Geetha and Prashanth Star
- Trek Series: An Overview; Panelists: Akshay Walia and Anupam Mitra
- Roadrunner: An Indian Quest in America: Discussion with the author Mr. Dilip D'Souza ‘76 Computer Science, BITS Pilani, a freelance writer & journalist

- The elephant, The tiger, and the cell phone by Shashi Tharoor; Panelists: B. Kaushik, J. Arvind, S. Shrikiran, and G. Shiva Shankar
- Men of Honor, Movie review; Panelists: Lt. Commander Parnjeet Sood (Indian Navy), Dr. A. V. Kulkarni and Rasagy Sharma

Dance, Drama and Festivals
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in memoriam

Prof. S. Venkateswaran, Ex-Vice Chancellor and Professor Emeritus cum Advisor breathed his last on the very early hours of 15 May, 2010 in Chennai after brief illness. He joined BITS, Pilani on 30th January, 1974 as a faculty member and later served in various capacities as Dean, Deputy Director, Director, Vice Chancellor and Advisor till 31st December 2009. During his tenure, the Institute expanded and also established many new campuses both within India and abroad. He was an outstanding administrator, excellent human being and was highly respected by students, staff, faculty and alumni of the Institute. He was a wellknown personality in education in India and abroad. His gracious smile, his witty speeches and his immense contribution to the growth of the Institute will be remembered forever.

ditorial team

Dr. Shalini Upadhyay, Prof. Meenakshi Raman, Dr. Judith Braganca, Cherukuri Aditya, Rohan Menon, Hemanth Sindhanuru, Vamshi G.