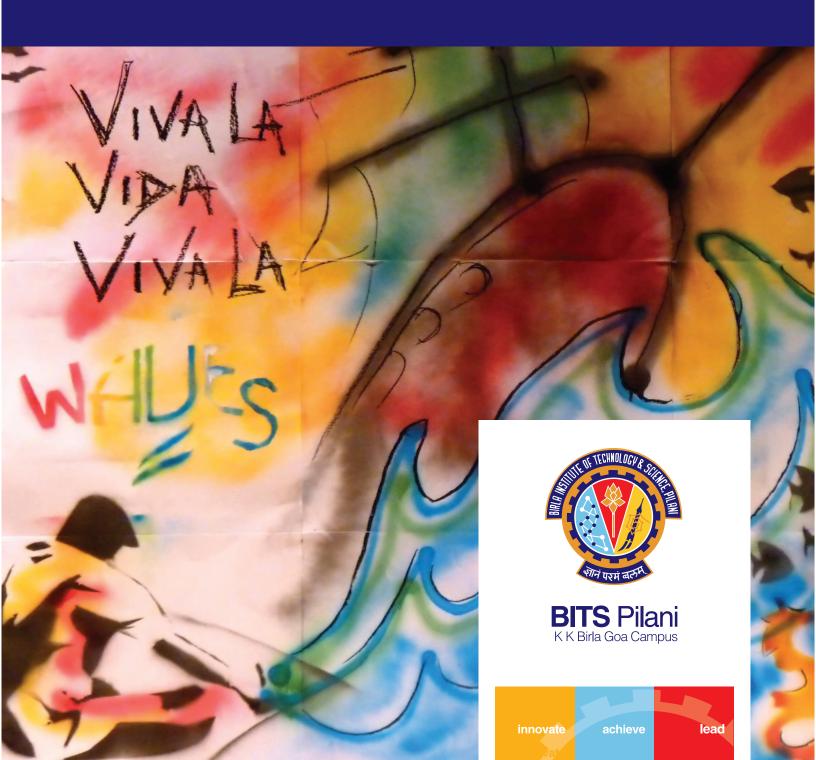
Semester-I notes 2010-11

# bitscan

K K Birla Goa Campus



#### from the

### editor

Pursuing BITS Pilani's Vision 2020 and Mission 2012, the campus truly reflected the spirit of progress and camaraderie during Semester I, 2010-11. Marked by events such as Waves 2010, IEEE international conference, Preparatory SERC school, 10-10-10 Global Work Party, and the Engagement survey, unheard of in BITSian history, the semester highlighted the beautiful blend of academic and cultural fervour running through the campus.

The following pages chronicle the various events in the academic sphere such as conferences, workshops, celebration of important days, new initiatives, achievements of faculty and students, and other major events organized by students in the cultural and social domains.

This second issue, we hope would enjoy as much support from you as the maiden issue had received. It has scanned through almost all events of Semester I, 2010-11 that were organized by the students and faculty from various departments. We thank you all for appreciating the efforts that have gone into initiating this newsletter. Once again we earnestly appeal to you to share with us all the activities you are organizing on campus and all the recognitions and achievements that have been conferred upon you so as to enable us to add more vigor, vitality and value to BITScan-K K Birla Goa Campus thus making it grow bigger and better!

#### Waves inauguratuion



#### → IEEE conference



## a confluence of ideas | CETET 2010 academia

seminars / conferences / workshops / training programmes

The 3rd International Conference on Emerging Trends and Engineering Technology (ICETET) was organized during 19th – 21st November 2010 at BITS Pilani, K K Birla Goa Campus. Jointly organized by G. H. Raisoni College of Engineering, Nagpur and the host institute, the conference aimed at bringing

together the International Community of Researchers & Academicians to discuss the latest advancement & future directions in the emerging area of engineering & technology. The conference was co-sponsored by Systems, Man and Cybernetics Society, IEEE Bombay Section (Region 10) and SMC Chapter, IEEE Bombay Section.

#### → ICETET conference



Dr. L. K. Maheshwari, Advisor to BITS Pilani and also the former Vice Chancellor, inaugurated the conference and appreciated the efforts of organizers. The talks included a myriad of topics by many illustrious speakers, such as Dr. Takayuki Fujita's lecture on MEMS, Dr. Ajith Abraham's lecture on Evolving Smart Information Systems, and Dr. Koji Murai's lecture on Human centered Transportation. Other areas covered were Environmental Protection, Thermal Engineering, Semantic web & Web services, Information Assurance and System Security and Image Processing, among many others. Over 400 papers were received from 12 countries, and the sessions were attended by 200 participants.

As part of the hospitality accorded to the guests, they experienced a little bit of regional culture in the form of classical music and dance programmes. Coordinated jointly by Dr. K. R. Anupama and Dr. Bharat Deshpande, the conference was a huge success and beneficial to all participants, enriching their knowledge and exposing them to new ideas.

#### preparatory

## **SERC** school

#### theoretical high energy physics

The Department of Physics, BITS Pilani, K K Birla Goa Campus hosted the SERC (Science and Engineering Research Council) Preparatory school in THEP (Theoretical High Energy Physics) during 20th October - 15th November 2010, entirely funded by the DST (Department of Science & Technology), Govt. of India. The school, started in 1985 at IISc, Bangalore is primarily meant for the 1st year Ph.D students of the High Energy Physics. 39 students from all over India (including IIT, IISER, NISER and several Universities) and 14 faculty members from all over India (including TIFR, IACS, HRI, IMSc, IIT etc) participated in this school, With Dr. Prasanta Kumar Das and Dr. V Sunil Kumar as the Joint Directors, the school was inaugurated by Prof. K. E. Raman on 20th October 2010. The school was inspected during the 2nd week of November by Prof. Ramadevi from IIT, Mumbai (DST and School Planning committee nominated) and received encouraging feedback from the participants. The Department is looking forward to hosting the Main school of the SERC series in near future.

#### Prof. K. E. Raman



#### certificate course in

## **CNC** machines

#### programming and practice

The Department of Mechanical Engineering offered a Certificate Course in CNC Machines: Programming and Practice during 15th –17th December 2010. This course was conducted for Teachers of Polytechnics in Goa and nearby districts of Karnataka. Attended by 8 participants, the workshop was coordinated by Dr. Hemantha Kumar under the leadership of Dr.Pravin Singru. Mr. Sachin Waigaonkar, Mr. C.P. Kiran, and Mr. Abhishek Kumar delivered lectures on CNC Programming and Simulation while Mr. G.J. Desai, Mr. Prasad Pai, Mr. Gokul Krishnan, Mr. Vrashab Ghongdi and Mr. Anup Gorla conducted the laboratory sessions.

## subject workshop on **MEMS**

The Department of Mechanical Engineering organized a subject workshop for the course **EA C415 INTRODUCTION TO MEMS** during 21st -24th December 2010. Prof. N.N. Sharma, from the Pilani campus conducted this workshop and Dr. Pravin Singru coordinated it. Faculty members Mr. Kiran Mali, Mr. Raghvendra Naik, Mr. C. P. Kiran, Mr. Abhishek Kumar,

→ CNC workshop by Prof. N. N. Sharma



Mr. Gautam Bhacher, Mr. Amalin Prince, Ms. Sarita Kumari and Dr. C. K. Ramesha attended the workshop. Prof. Sharma elucidated on the design & fabrication of MEMS devices and a half-day training on software SUGAR was also conducted.

## orientation programme

Over 600 newly admitted students of the 2010 batch were introduced to the BITS model of education with all its salient features through an orientation programme organized on the 30th of July 2010. Various sessions such as Highlights of BITS education system, Teaching and Evaluation, Academic Registration and Counseling, Campus Life, University Industry Linkage and Research at BITS familiarized the students with all aspects of the educational process that they would experience over four or five years at BITS. The programme ended with an extensive question-answer session where the presenters answered a number of questions raised by the students. On the 29th of October 2010, the Director met the parents of newly admitted students at a meeting held in the auditorium. Starting with a brief sketch of the history of BITS Pilani, he explained the unique features of BITS model of education to the parents and also answered questions raised by them.

→ Orientation-2010



## engineers day

The 43rd Engineer's Day was celebrated on 15th September 2010 with the theme *Impending Paradigm Shift in Engineering Sciences and Future Challenges*. To mark this occasion, a panel discussion was held with Dr. Ponnani as the moderator and Dr. Srinivas Krishnaswamy, Dr. Sunil Bhand, Dr. Mridula Goel and Dr. C. K. Ramesha as the panelists. Several ideas pertaining to the emerging integration among various science and engineering disciplines, the impact of such changes on the global economy, the need for students to choose a career in engineering and sciences other than software, etc., were discussed extensively.

#### → Engineers' day panel



### new labs

The Department of Biological Sciences has established a new Laboratory for **Applied and Environmental Biotechnology** on 4th September 2010 in room C 101. Inaugurated by Dr. Ponnani in the presence of Director, Prof. K. E. Raman, this Laboratory houses instruments such as Nikon Florescence microscope and Beckman Ultracentrifuge procured through the DST –FIST scheme. In addition, the laboratory is also equipped with PCR machines, Lyophilizer, pH meters, Laminar airflow and protein purification module.

#### → Environmental Biotech lab



The Department of Physics renovated the **Optics Laboratory**, which was inaugurated by Prof. M. Ramachandran, Former Director, BITS Pilani, Dubai Campus on 14th October 2010. Located in room B-109, the lab is supported by the fund received by the department under the DST-FIST scheme. The laboratory houses a Ti: Sapphire laser having pulse width of 100 fs, Second harmonic generator, Ar: Ion laser, He: Ne Lasers, and various optical components and photodetectors.

#### → Optics lab



## initiatives

A **Biogas** plant was set up on the campus on 18th November 2010. This takes care of one tonne of organic waste generated from the cafeteria. About 40 cubic meters of biogas is generated per day and can increase up to 60 cubic meters, which is equivalent to two gas cylinders. This biogas will be connected to the cafeteria.

#### → Biogas plant inauguration



As a part of Mission 2012, a new **Academic Counseling Cell (ACC)** was formed during the semester to offer counseling to the students who find difficulty in coping with issues of campus life. These include academic pressure, disciplinary issues, health, family or financial issues. ACC is committed to offer its best possible services on confidential basis to any student who seeks advice or counseling. Students can contact the faculty and / or student members of ACC subject to their availability. More details can be obtained by visiting http://bits-goa.ac.in/acc or http://acc.

For the academic year 2010-11 the following faculty members working as members of ACC can be approached:

Dr. Pravin Singru (convenor), Dr. C. K. Ramesha, Dr. Mitaxi Mehta, Dr. Anusuya Ganguly, Dr. K. A. Geetha, Dr. C. K. Prakash, Dr. Rashmi Chauhan, Dr. Reena Cheruvalath, Mr. Abhishek Kumar and Mr. Kiran Mali.

BITS Pilani, stands as the first university in India to take the **engagement survey 'My BITS-My Voice'** for its students, faculty and staff. As a part of the Task Force on Campus Life dealing with engagement & extension under the Vision 2020 - Mission 2012 project, an engagement survey was conducted by Gallup, a leading management research organization, among the stakeholders (students, faculty and staff) of all the campuses of BITS Pilani. The survey aimed at gauging their level of engagement or the emotional bonding and the psychological commitment towards their Institution. The results of this survey will be used to enhance the level of engagement wherever necessary.

### **visits**

Yuan-Huei Chang, Director of the Taiwan Embassy and Tien-Sze Fang, the Assistant Director, visited the campus on 28th October 2010 to learn more about the Institute and to initiate a few exchange programmes.

#### → Meeting with visitors from Taiwan Embassy



H.E. Mr. Ronald B. Allarey, Philippine Ambassador to India; Mr. Robert Ferrer, Consul, Philippine Embassy, New Delhi; Mr. Vichael Roaring, Commercial Attache, Philippine Embassy, New Delhi; and Mr. R. Swaminathan, ABG; visited the campus on 20th November 2010, and interacted with HODs and faculties In-Charge and took a campus-tour to visit labs and other facilities. The team was received by Prof. L. K. Maheshwai, Professor Emeritus & Advisor to BITS.

#### Prof. L.. K. Maheshwari with visitors from Philipines embassy



## distinguished lectures

speaker	designation	topic	date
Prof. Carolyn Heising	Professor, IOWA State University	Nuclear energy: the primary solution to global climatic change and the Indo-US nuclear deal	12 August 2010
Prof. G. Venkiteswaran	BITS Off-Campus Faculty and Coordinator, WILP Chennai Divison	Quasi Monte Carlo Methods for Diffusion	31 August 2010 and 1 September 2010
Dr. Gopal Pande	CCMB, Hyderabad	Cell-Cell Intercations and Stem Cells	9-16 September 2010
Dr. Sayaji Hande	Senior Director at NIL labs	Financial Maths & Engineering in Business	09 October 2010
Dr. Melkote Ramaswamy	Eminent physicist and Former faculty member of BITS, Pilani	America through years :My perspective	4 September, 2010
Prof S. P. Gupta	Professor, MIET,UP	Novel approaches for drug designing and screening	7 September 2010
Mr. Rajdeep Dua and Anirudh Dewani	Developer Advocate and Country Lead, Developer Relations, Google; Developer Programs Engineer, Google	App Engine ; HTML5	23 September 2010
Mr. SrinivasYanamandra	Assistant General Manager, Compliance Group at ICICI Bank,Mumbai.	Financial Crisis	24 September 2010
Dr. K. J Rangra	Scientist F', CEERI, Pilani	An Introduction to Micro Electro Mechanical Systems (MEMS) and its Applications	25 and 26 September 2010
Prof. Sunil Mukhi	TIFR, Bombay	Searching for the Super world	23 October 2010
Prof. Shun Hirota	NAIST, Japan	Investigation and regulation of protein and peptide structural changes	25 October 2010
Prof. Govindan Rangarajan	Professor and Head, Dept of Mathematics, IISC, 1980 BITS alumnus	Brain-Machine Interface	12 November 2010
Prof. R. B. Bapat	Professor of Mathematics, Stat. Math. Unit, Indian Statistical Institute,	Graph Theory with Chess Board	15 November 2010
Prof. L. K. Maheshwari	Professor-Emeritus & Advisor to Chancellor, BITS, Pilani	Overview of Microelectronic Circuits	18 November 2010

## visits by faculty

### enriching the learning experience

### international visits

**Dr. Debasis Patnaik**, Assistant Professor, Dept. of Economics delivered a talk on *Linkage analysis on Indian Industry* at the Regional Science Association at Glasgow, August 25th –27th 2010.

Dr. Srikanth Mutnuri, Assistant Professor, Biological Sciences Group visited Professor, Ralf Otterpohl's lab, Technical University –Hamburg Harburg, Germany during 1st –l9th October 2010 in connection with German Technical Cooperation's, Waste to Energy project. Dr. Srikanth also attended the First International Workshop on Terra Preta Sanitation, organized by Institute of Wastewater Management, Technical University –Hamburg Harburg at Großlppener, Germany during 27th –30th September 2010.

organized by Mr. Nagarajan Ramswamy, coordinator of BITSAA Australia chapter.

also visited Sydney to participate in the Alumni Meet

Dr. M. Srikanth



Dr. D. M. Kulkarni, Associate Professor, Dept. of Mechanical Engineering and Computer Center Incharge, attended 2010 International Conference on Mechanical and Aerospace Engineering (ICMAE 2010) held at Kuala Lumpur, during 26th –28th November 2010 as a Programme Committee Chair. ICMAE 2010 is co-sponsored by the International Association of Computer Science and Information Technology (IACSIT) and IEEE, and supported by University Putra Malaysia (UPM) and University Teknologi MARA (UiTM).

Prof. Meenakshi Raman



**Prof. Meenakshi Raman**, Professor and Head Department Humanities & Management presented a paper on *A multi-pronged approach to strengthen the brand of a university* at the 3rd International conference of the ACU, UK (Association of Commonwealth Universities) held in Melbourne, Australia during 24th –26th November 2010. She

Prof. D. M. Kulkarni



**Dr. N. N. Ghosh,** Assistant Professor, Dept. of Chemistry presented a paper at the Third International Conference on *Recent Advances in Composite Materials* (ICRACM2010) during 13th –15th December 2010 at ENSIL, Parc d'ESTER, 16 rue Atlantis, Limoges, France

#### Dr. N. N. Ghosh



# invited lectures by faculty

Prof. M. K. Deshmukh conducted a workshop on Renewable Energy and Environment Management-Role of Carbon Credits and Energy Audit, organized at NITTTR (National Institute for Technical Teachers Training and Research), Porvorim, Goa during 16th – 18th August 2010. He delivered the keynote address on Impending Paradigm Shift in Engineering Sciences and Future Challenges, at the Annual General meeting and 43rd Annual Engineers day, at Institution of Engineers (India), Goa State Chapter on 18th September 2010.

#### > Prof. M. K. Deshmukh as chief guest



Dr. Deshmukh also delivered talks on *Comprehensive Continuous Evaluation in School Curriculum* and on *Taxation System in India- A tax-payer's Perspective*, at Navy Children School on 6th October 2010 and at the National Seminar on Proposed Changes in Indirect taxes with *Special reference to Goods and Services Tax in India*, organized by MES College, Zuarinagar, on 17th December 2010 respectively.

Dr. Tarakeshwar Singh, Assistant Professor,
Dept. of Mathematics delivered an invited talk on
Neighborhood magic graph at the national Conference
on Distance in Graphs at Poornapranja College,
Udupi, during 4th –6th October 2010.

#### Dr. Tarakeshwar Singh



**Dr. Anil K. Pundir,** Assistant Professor, Dept. of Mathematics delivered an invited talk on *Linear Programming and its Application with Matlab* in the National Workshop on Optimization-Theory and Practice held at SSJ Campus Almora of Kumaun University, Uttarakhand, India during 15th -19th November 2010.

**Dr. Ranjan Dey,** Assistant Professor, Dept. of Chemistry delivered an invited talk on *Awareness on climate change and renewable & sustainable energy –steps taken by BITS Pilani, K K Birla Goa Campus* at the national Academy of Sciences, Allahabad, on 20th December 2010.

**Dr. Dibakar Chakrabarty**, Associate Professor, Dept. of Biological Sciences delivered an invited lecture on *A Low Molecular Weight Anticoagulant from Indian Cobra (Najakaouthia) Venom* at the 1st National Conference on Animal, Microbial and Plant Toxins (AMPTOX 2010) in Kolkata on 11th and 12th December 2010.

**Prof. Meenakshi Raman,** Head, Department of Humanities and Management was the Chief Guest at the Teachers' Day Felicitation Function of Lion's Club, Vasco, Goa on 10th September 2010 and she delivered a talk on *Critical Role of a Teacher.* She was also the Chief Guest at the Annual Day function of Kidzee school, Vasco on 15th December 2010.

→ Prof. Meenakshi Raman as Chief Guest



**Dr. Prasantha Kumar Das,** Assistant Professor, Department of Physics, delivered two invited talks: (i) at the IISER, Kalyani, Kolkata on *Non-commutative* phenomenology at the linear collider on 23rd and 24th December 2010 and (ii) at the Indian Statical Institute, Kolkata on *Higgs pair production in the non*commutative standard model on 30th December 2010.

**Dr. Tarun Kumar Jha,** Assistant Professor, Dept. of Physics delivered an invited talk on *Application of Relativistic Mean Field theory in Nuclear Physics* at the DAE BRNS Symposium on Nuclear Physics during 20th –24th December 2010 at BITS Pilani, Pilani Campus.

**Dr. R. N. Behera**, Assistant Professor, Department of Chemistry delivered an invited Lecture on *Effective* attraction between like-charged Colloidal particles in the National Seminar on *Recent Trends in Chemical Sciences* (RETICS-2010) held at School of Chemistry, Sambalpur University, Orissa during 19th –21st February 2010.

**Dr. Pravin Singru,** Assistant Professor and Head of Dept. of Mechanical Engineering delivered an invited lecture on *Trends in Academics towards meeting Industries' expectations* on 7th April 2010 at Institute of Ship Building Technology, Bogda, Goa.

**Dr. N. N. Ghosh**, Assistant Professor, Dept. of Chemistry delivered an Invited Lecture on *Simple* but Novel Aqueous solution Based Chemical Methodologies for Preparation of Magnetic Nanoparticles for use in Nanomedicine at the First World Conference on Nanomedicine and Drug Delivery (WCN-2010): Development during 16th – 18th April 2010, Kottayam, Kerala, India.

**Dr. Srikanth Mutnuri**, Assistant Professor, Dept. of Biological Sciences, delivered an invited talk on *Anaerobic Aerobic treatment of Industrial and Municipal Waste* at the annual Environment Health & Safety workshop of Murugappa group of industries held on 5th June 2010 in Chennai.

## achievements

## by faculty

**Dr. Srikanth Mutnuri,** Assistant Professor, Dept. of Biological Sciences was awarded the prestigious American Society for Microbiology Indo-US Research Professorship to pursue research with Dr. Max Haggblom at Rutgers University.

Dr. Reeta S. Dubey, Head, Dept. of Mathematics received Rashtriya Gaurav Award along with Certificate Of Excellence for Meritorious Services, Outstanding Performance and Remarkable Role in Society at the seminar on Global Participation in India's Economic Development' at New Delhi on 19th September 2010, organized by India International Friendship Society (IIFS).

**Prof. Meenakshi Raman** was awarded the ACU (Association of Commonwealth Universities) Bursary for presenting a paper at its 3rd international conference held in Melbourne during 24th –26th November 2010. The bursary covered the registration fee and her board and lodging during the conference.

Mr. M. M. Bijeesh & Mr. Arunkarthik, (Ph.D Scholars, Physics Department) received the BEST POSTER award at the National Laser Symposium (NLS-19) organised by DAE at RRCAT, Indore during 1st – 4th December 2010. They presented the poster on Construction of a Simple Confocal Microscope.

**Dr. N. N. Ghosh,** Assistant professor, Dept. of Chemistry along with Mr. P.P.Sarangi and B.D.Naik has contributed an invited chapter in the following books:

Powder Engineering, Technology and Applications. Eds Jason M. Barker (Nova Publishers) 2010.

Combustion Synthesis Novel Routes to Novel Materials, Eds. Lacner, M. (Bentham) (Invited book chapter) Ghosh, N.N. 2010

Nanomaterials: Properties, Preparation and Processes, Eds. Cabral, V and Silva, R (Nova Publishers) 2010.

## by students

**Deepak Mehta** (2007A7PS062G) has topped the CAT 2010 with one hundred percentile. He is one among the eight 1st rank holders. Shraddha Mehta (2007A7PS030G) with her 99.99 percentile in CAT 2010 shares the 2nd position with nineteen others.

Todwal Shashank Murari (2007B5A7497G) has been selected as the Head for the Goa State Google Technology User Group (Goa State GTUG). GTUG is a global initiative supported largely by Google Inc. Goa State GTUG is a Goa, India based open group of members to use/test, learn, share and contribute to Google Developer Technologies and in general to the wonderful World of Open Source.

Students can contribute and learn through open source codes easily while studying. Currently, Goa State GTUG spans across: BITS Pilani, K K Birla Goa Campus, National Institute of Technology Goa, Goa Engineering College, Computer Engineering Department, Goa Engineering College, Information Technology Department, PCCE: Padre Conceicao College of Engineering, Shree Rayeshwar Institute of Engineering & Information Technology (SRIEIT) and Don Bosco College, Panjim, Goa. More information is available at: http://goa.gtugs.org/

Chinmay Duvedi (2008A3PS047G) and Smarjeet Sharma (2008A3PS441G) of BITS Pilani, K K Birla Goa Campus along with Dr. Shashikant Sadistap, and Dr. B. A. Botre of CEERI Pilani presented a paper on Design and Interfacing of Farm Robot for Green House Monitoring using Embedded Linux and ARM 9 Processor at the International Conference on Intelligent Network and Computing 2010 sponsored by IEEE and held In Malaysia during 26th –28th November 2010. The conference covered topics ranging from Image Processing to Wireless Sensor Networks; from complex mathematical equations to beautiful system designs with social importance.

#### → Chinmay at the Malaysia conference



#### Drama club at the theater festival



The **Drama Club** of the campus received the honor of performing at Thespo'12 at the National Centre for Performing Arts (NCPA), Mumbai on 18th December 2010. Thespo is a national level theatre group youth festival held every year in Mumbai.

The play *Kkkab Jagega Bharat* by the Drama Club of the Campus shows what India is; chaotic but nuanced. This brilliant performance showcased the energy and vigor of the actors while highlighting one of the core problems of an Indian mind, adherence to age old dogma and superstitions and was appreciated by eminent theatre and film personalities who attended the play.

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.

name	department	journal / member details
Dr. Srikanth Mutnuri	Biological Sciences	Chief Editor of the journal, International Journal of Anaerobic Digestion and Renewable Energy
Dr. Meenal Kowshik	Biological Sciences	Reviewer for the journal Biotechnology Progress
Dr. N. N. Ghosh	Chemistry	Member Expert in Chemistry for selection of candidates for Commonwealth Scholarship, UK Nominated by Ministry of Human Resource Development, Government of India (2010).  Reviewer for Journal of the American Ceramic Society, Journal of Surface Coating and Technology, Powder Technology, Journal of Microporous and Mesoporous Materials, International Journal of
Dr. Panian Dov	Chomistry	the Physical Sciences, Journal of Experimental nanoscience.  Reviewed papers for International Journal of Chemical
Dr. Ranjan Dey	Chemistry	Reviewed papers for International Journal of Chemical Modeling (IJCM), Chemical Engineering Communications (Taylor and Francis- Routledge Press), Journal of Solution Chemistry, African Journal of Biochemistry and Journal of Soil Science and Environmental Management.
Dr. Rashmi Chauhan	Chemistry	Member of Editorial Board for journal ISST Journal of Applied Chemistry (IJAC)
Prof. M. K. Deshmukh	EEE and E&I	Educationist Member of School Management Committee, Navy Children School, Dabolim, Goa.
Nitin Sharma	EEE and E&I	Associate Editor for the International Journal of Modeling and simulation ACTA Press Canada.
		Reviewed a Paper for IEEE Transactions on Evolutionary Computations.
Dr. Pravin Singru	Mechanical Engineering	Member of Board of studies of Mechanical Engineering at Rajarambapu Institute of Technology, Islampur, District Sangli (MS); expert on Research & Recognition Committee, RTM Nagpur University, Nagpur
		Reviewer for Journal of Vibration & Control, Journal of Manufacturing Engineering

## signifcant projects

principal investigator & name of the group	title of the project	funding agency, amount & duration
Dr. Amrita Chatterjee Chemistry	Development of turn-on type chemodosimer for selective of sulfhydryl-containing amino acids and peptides in aqueous media. (SR/FT/CS-092/2009).	DST, Rs.19.86 lakh
Dr. Mainak Banerjee Chemistry	Redox-sensitive Vesicles of Cucurbit[7]urils as an Efficient Targeted Intracellular Drug Delivery Vehicle.	DST; Rs.24.15 lakhs
Dr. Srikanth Mutnuri Biological Sciences	Construction of one tonne horizontal plug flow reactor	Goa Energy Development Agency (Rs. 3.65 lakhs) and BITS Pilani (Rs. 3lakhs)

## consultancy

**Dr. Srikanth Mutnuri**, Assistant Professor, Biological Sciences carried out a consultancy project for Taloja wastewater plant and another for ITC limited, Coimbatore on Biological analysis of Aeration Tank Sludge Sample.

## caring beyond our walls

### nirmaan

Celebrated the Joyfest on campus from 24th September –2nd October 2010. The Joy of Giving Week included donation drives, visits to orphanages and old-age homes, workshops and performances The Joyfest is a nationwide philanthropic drive, which celebrates the joy of giving to the society. The national festival is organized by the publishers of JAMMAG, Mumbai with over 350 colleges participating in this cause. Students and faculty donated over 500 pieces of clothing, books worth over 1.2 lakh and about 50,000 rupees in cash.

Organised a blood donation camp on 9th October 2010 with assistance of the doctors from Goa Medical College, Panjim.

#### → Blood donation camp



Organised an information session on 8th November 2010 on campus about Nirmaan- Teach For India (TFI) project of Teach To Lead. TFI is a nationwide movement of outstanding college graduates and young professionals who commit two-years to teach full-time in under resourced schools and who will become lifelong leaders working from within various sectors toward the pursuit of equity in education.

Opened a science club in Govt. Middle School, Birla to generate interest in the subject amongst students.

Nirmaan-school kids interaction



Assisted a group of 9 women from Zari to work on handicrafts and paper bags to make articles that were sold at the Nirmaan Waves stall. With a tremendous response from the visitors, the articles were sold out with a whopping profit margin of 70 percent.

### **EPAC**

## (environment protection and awareness club)

This second decade of the 21st century demands active participation from all sections of society to deal with the harsh realities of pollution, global warming and other environmental hazards. With an understanding of this dire need coupled with the zeal to make a difference, the students formed an Environment Protection and Awareness club (EPAC) and have been working incessantly towards the cause and have made significant inroads over the past few years.

#### → EPAC at work



For the past six months EPAC has been involved in the Great Power Race (GPR), a point-based clean energy competition amongst the colleges of India, China and the United States. Under this banner, the students of the Club have worked exceedingly hard to incorporate green solutions on campus. This included awareness efforts through posters, movies and campaigns, beach cleanup drives, development of solid waste recycling facilities, cleanliness drives, tree plantation and a lot more. At the end of the year (2010), the Campus secured 9th position out of nearly 1000 campuses worldwide.

The biggest event for EPAC, 10-10-10 – Global Work Party marked an international climate change awareness day by 350.org. Organised along with the council for student affairs, the celebrations included an amalgamation of many events into a daylong festival on the 10th of October 2010. With activities such as campus cleanliness drive, tree plantation, street play - nukkad natak staged by Delhi-based group Manzil, interactive quiz and a movie screening, the Global Work Party was a success with significant media coverage in most of Goa's major newspapers.

# creative zone waves

Waves, the Annual National Cultural festival of the Campus celebrated its 6th edition during 14th -16th October 2010 with the theme Viva La Vida (Long Live Life). Inaugurated jointly by Prof. M.Ramachandran, ex-Director, BITS Pilani, Dubai Campus and Mr. B.C.Jain, former President of students' Union and the founder of OASIS, the Annual Cultural festival of BITS Pilani, WAVES 2010 kicked off with a soulful, serene rendering by the Music Club. With the stunning performances of the Mime Club and the Dance Club, the inauguration of the festival truly reflected the cultural vibrancy of the campus.

#### BITS-Goa students at Waves 2010



The events themselves didn't leave anything to chance –the enthusiasm and the sheer talent were all breathtaking. For all the participants, BITSians and those from guest colleges from all over India, it was a tough and exhilarating fight in each event –be it the acoustically pleasing, highly energetic Indian Rock or the graceful, precise gyrations of Natyanjali and of course, that great event for hoots, whistles, paper plane flight trials and sizzling ramp walks –FashP. Apart from these big-ticket competitions, Waves offered a plethora of events in which every person could try his luck and hidden skills at, with various arts, literary and other fun events kept at his disposal. And of course, the participation in each of events mentioned above just keeps getting bigger each year.

#### → Shafqat Amanat Ali performing at Waves 2010



Waves 2010 allowed everybody to pick up one snazzy, unusual talent/skill at the myriad workshops it played host to. Featuring some of the best known names in their respective lines of work, workshops such as Belly Dancing ('Waka Waka') by Katie Holland and 'Hands Of Fortune' by Bejan Daruwaala evoked considerable interest and participation all around. Other well-attended workshops included Ventriloquism, 'A Thousand Folds' (Origami) and 'Happy feet'.

#### → Competition at Waves 2010



The Special Nites have just been designed to coerce even the most reluctant amongst students into letting their hair down – singing, dancing, shouting and generally making merry without a care. Waves 2010 saw some truly special nights delighting the crowds, especially the perennially excited first-years. DJ Donna and DJ Harshit embarked on a journey of insanely paced music and lunatic crowds, set in an

environment of artificial precipitation with sprinklers. The crowd danced themselves crazy to the tunes of the interesting remixes and the bass-belting, loud speakers. In sharp contrast, the following night was soulful, restful and blissful music as Shafqat Amanat Ali (of 'Bin Tere' and 'Mitwa' fame) crooned his way into the hearts of his fans, performing the very best of his discography, and completely mesmerizing the audience. The closing night saw two of India's best rock bands, Blackstratblues and Thermal and a Quarter performing their best tracks, keeping the audience hooked with favourites such as 'Anuva's Sky' and 'Paper Puli' respectively. The wet weather couldn't stop the fireworks display from dazzling the gathered masses, highlighting the spectacular success of yet another edition of Waves.

Over 1250 students from more than 60 colleges participated and HR College, Mumbai emerged victorious as the winners of Waves 2010. In all, Waves 2010 indisputably stood up to its theme. It was the exact embodiment of everything that Waves is about – in simple words, the celebration of a BITSian's life. The unflagging enthusiasm, unshakeable determination, the inbred and incredible creativity, the sheer talent, the love of life – all compressed into a 3-day frenzy, which, in its own way, mirrored the larger life of a BITSian - 'Viva La Vida' just highlighted a BITSian's undying love for life.

#### → Dance-drama at Waves 2010



### sponsors for waves





















































































## zephyr 2010

Though the aberrant November showers brought down the average temperature of Goa, there was absolutely no reprieve for the students from the heat kindled by the advent of Zephyr, as the hostels tripped over one another in their dogged pursuit to be crowned as the undisputable sultan of them all. Rising again from the ashes, as the tagline suggested, Zephyr 2010, in a new avatar, usurped all the glory of its predecessor, Zephyr 2008, creating infectious excitement, adding more events and surprises, and generally raising inter-hostel competitive spirit to unheard-of levels.

#### Boys performing at Zephyr 2010



Inaugurated on the evening of 16th November by the Director along with the President and the General Secretary of CSA, the inter-hostel competition kicked off with the grand unveiling of the Zephyr trophy. The inauguration was soon followed by the interhostel group singing competition. With the hostel songbirds battling each other for supremacy, it was a second year hostel, which bagged the first prize for their excellent vocal skills. The inauguration also featured the intriguing hostel videos, with each hostel portraying its colourful lifestyle, the bonding between the inmates, the talent it houses, and the various humdrums of their daily life. However the main feature of the inauguration proved to be the zeal, zest and lung power displayed by the audience especially the 2nd and the 1st yearites, this being their first zephyr. With everyone sporting their respective hostel t-shirts with a sense of pride, and boisterously egging their hostel on, it was truly a sight to be witnessed.

Girls performing at Zephyr 2010



Different events such as the Group Songs, Dance Duo, Group Dance, Fash-P, Mr. and Ms. Zephyr, Ignoble Awards, Sport events brought out the very best of the cultural, technical and athletic aspects of the hostel inmates. The 4th years had made it a point to entertain the crowds in their full capacity as the outgoing batch. Though Zephyr came to a close with the second year girls' hostel winning the trophy and the second year boys coming a close second and third, the festival proved to highlight the sheer dedication of the participants and the intra-hostel unity.

## introducing new faculty

name	designation	discipline	research area
Dr. Hemanth Kumar	Assistant Professor	Mechanical Engineering	Vibrations
Sunanda Khosla	Lecturer	EEE	Embedded Systems, Specification Languages and Neural Networks.

## editorial team

faculty:	Email Id:
Prof. Meenakshi Raman	mraman@bits-goa.ac.in
Dr. Judith Braganca	judith@bits-goa.ac.in
Dr. Shalini Upadhyay	shaliniu@bits-goa.ac.in

#### students:

Mr. Cherukuri Aditya	
Mr. Rohan Menon	
Mr. Hemanth Sindhanuru	
Mr. Vamshi G	



### **BITS** Pilani

K K Birla Goa Campus

mediaspeak

#### BITS Pilani wins Dempo Biz Quest

NT NETWORK

PANAJI: S S Dempo College, organised the 'Dempo Biz Quest-2011' an all Goa intercollegiate business quiz to commemorate the memory of their founder, Srinivassa Sinai Dempo, on January 6.

The quizmaster was Harshvardhan Bhatkuly, who was assisted by Rajiv D'Silva. Bits Pilani - Goa Campus- walked away with the top spot, with Goa Institute of Management, Sanquelim, and Goa University, Department of Management Studies, coming in second and third respectively. Consolation prize was given to Don Bosco College.

The principal, Dr Ms
Radhika S Nayak gave the
welcome address, Mr Srinivas
Dempo, Trustee of DCT and
Chairman of Dempo Group,
addressed the gathering, and
Ms Sangeeta Jadhav proposed
the vote of thanks.

Mr Vishwasrao Dempo, Trustee of DCT and Mr Sunil Prabhudessai, administrator, were

#### Google event held in Goa

PANIM OCT 1

PANJIM, OCT 1
The Google Goa State event organised by the Goa State Google Technology User Group had delegates from Google Inc deliver talks on App Engine and HTMLS. The event was hosted in the auditorium at BITS, Pilani – K K Birla Goa Campus, recently,
The event had over 1300 participants consisting of fac-

The event had over 1300 participants consisting of faculty and students of over 10 colleges across Goa. Various working professionals, IT free-

ciation between Goa State Google Technology User Group and Google Inc in future," said Shashank Todwal, head of the Goa State Google Technology User Group, for futurer details at shashank@gtugs.org.
"Such events will bring Go State in the purview of big technology giants like Google for the betterment of the whole state. The participants

"Such events will bring Goa State in the purview of big technology giants like Google for the betterment of the whole state. The participants are updated with latest Google Technologies so that they can start contributing to Google Developer Technologies and in to the wonderful world State Google Technologies are Group Goa State Google Technologies Group Goa State Google Technologies Group Goa State

to the wonderful world a Source," he added State Google Technoler Group (Goa State is a Goa based open of members to use/test, hare and contribute to Developer Technoloding general to the won-World of Open Source. Developer Technoloclude everything from 1 and App Engine platto product APIs like the

and App Engine platto product APIs like the e API and the Google at API, to initiatives like



Young Shashank Todwal, student of BITS-Pilani Goa Campus, has been sele as the Head for the Goa State Google Technology User Group (Goa State GT

#### **Environmental seminar at BITS-Goa**

GT NEWSROOM: BITS, Pilani, KK Birla Goa-Campus, is organizing an open lecture on "Global Environmental Crisis and Strategies for Mitigation" by eminent environmentalist Professor R Rajagopalan, on November 9 from 5 pm onwards. Prof. Rajagopalan is known for his significant contributions to environmental education, particularly for school children. He is author of several books for schools and colleges on environmental education. He conducts workshops on environment for teachers and general public at many places including Auroville and Navadarshanam. During his three day visit to the Institute, he will deliver special talks for school children on "Ordinary People, Extraordinary Deeds- True Tales of the Environment" and interact with students, teachers

eaks at the inaugural cererse. Seated are (from left to lector North Goa Amarsen

renewable energy sources itled 'Carbon Credits and stitute of Technical Teach-Centre Goa.

tion with BITS Pilani Goa saking at the inauguration al Collector North Goa sical teachers the course lelp keep the State green to provide alternative re-



ROCKSTAR USTAD SET TO ROCK GOA



Birla Institute of Technology and Science, Pilani K K Birla Goa Campus

Near NH 17B, By Pass Road Zuarinagar-403726 Goa, India

Phone: +91 8322 580105 Website: www.bits-goa.ac.in