Semester-Inotes 2015-16

bitscan

K K Birla Goa Campus



from the **editor**

With its Chief Guest Mr.Naveen Tewari of InMobi fame, the fourth edition of the grand Convocation Ceremony held on 9 August 2015 marked the highlight of the First Semester 2015-16. Waves, the annual cultural festival of the campus hosted a plethora of events attracting a large number of participants from all over India. The semester witnessed a record number of conferences/ workshops and also the first ever BITS Alumni Summit. Coalescence, the E-summit organized by CIIE pulled a vast audience to listen to young entrepreneurs from various domains. Several faculty members, research scholars and students visited countries abroad in pursuit of and sharing of their research experiences. Keeping up the spirit of research, faculty members and students published their research papers in reputed journals. The departments invited experts to deliver talks to students and faculty to enrich the domain knowledge. Faculty members on invitation from external institutions and organizations, delivered talks, conducted workshops, etc., thereby not only disseminating knowledge but also keeping the BITS Pilani flag flying higher. With unwavering enthusiasm, Nirmaan team organized several outreach activities including the well-established Joy of Giving Week. A number of projects applied by the faculty members were approved by the funding agencies.

Started with the first issue covering the events of the Second Semester of 2009-10, BITScan of K K Birla Goa Campus has completed 12 editions. It has been possible because of all your cooperation in providing information related to your academic and research activities and achievements. We, the editorial team thank you wholeheartedly and we are sure that you would continue to enable us publishing this newsletter with a wider coverage in the semesters to come.

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a confluence of ideas academia

Advances in Robotics –AIR 2015 (2-4 July 2015)

The Second International Conference of Robotics Society of India, Advances in Robotics -AIR 2015 jointly organized by Robotics Society of India and BITS Pilani, K K Birla Goa Campus was hosted in BITS Pilani K K Birla Goa Campus in 2nd -4th July 2015. The conference was inaugurated by Prof Roland Siegwart- Professor of Robotics, ETH Zurich, Switzerland. Key note speeches were delivered by Prof Roland Stewart, Prof Steven M LaValle - Prof of Computer Science, University of Illinois Prof Jae Bok Song - Professor , School of Mechanical Engineering, Korea university. Conference was attended by approximately 250 researches from Industry and Academia and Several Research Institutions like DRDO, BARC, CSIR etc. The conference was followed by a Doctoral Symposium chaired by Prof Santonu Choudhary, Professor-Department of Electrical Engineering, IIT Delhi . The Symposium discussions were steered by the mentor group members and PhD Supervisors from reputed institutions throughout India. Prof Anupama (Dept of EEE/ENI) and Prof Narayan Manjerakar (Dept of EEE/ENI) were the Convenor and the Co-Convenor for the Conference.



Technical Session on Chemistry & Industry: An Outlook (22 August 2015)

The Department of Chemistry organized a Technical Session entitled "Chemistry & Industry- An Outlook" on 22-Aug-2015. The session focused on various aspects including current trends in Research & Development, safety aspects, environment in chemical laboratories. various opportunities for chemists in a chemical industry including Job Opportunities. Attended by PhD Scholars. UG students and faculty colleagues, the training program included several talks followed by discussions. The speakers were Dr. Kamlesh Pai Fondekar, Head, Technology and Engineering division Syngenta India Pvt. Ltd., who spoke on HSE in Chemical Laboratories and Opportunities for Chemists in Industry; Dr. Vidyadhar Jadav, HOD, VERGO Organics, Goa, who delivered talks on Introduction to Pharma Industry and Green drive in Synthesis.

The talk was followed by an interactive session with the faculty and students.



Workshop on Modern Underwater Systems (29-30 August 2015)

The two day workshop was jointly conducted on 23rd and 24th August 2015 by BITS Pilani K K Birla Goa campus and CSIR-NIO, Panjim, in association with EEE and E&I association and BITS Genesis, a CSA initiative of the campus for the audience interested in area of underwater communication, Acoustic network, robotics and technologies. Event was sponsored by Tektronix.

Topics such as Navigation of Robotic Underwater Vehicles, Ocean Observation System, Underwater Acoustic Sensor Network Network, Simulation tools for underwater network, Advances in Underwater Robotics were discussed during the workshop sessions by the following speaker:

Dr. Sanjeev Afzulpurkar, Chief Scientist, Marine Instrumentation Division, NIO Goa Dr. Antonio Mascarenhas, Senior Principal Scientist, Marine Instrumentation Division, NIO, Goa Pramod Maurya, Senior Scientist, NIO, Goa

Tata Sudhakar, Scientist F, Ocean Electronics Group, E S S O - N I O T , C h e n n a i Prof. K R Anupama, Dept of EEE and E&I, BITS-Goa Dr. Mohit Tahiliani , Dept of Computer Science and E n g i n e e r i n g , N I T K , S u r a t h k a I Sarang Dhongdi, Dept of EEE and E&I, BITS -Goa Rohit Sant, BITS-Alumnus, Graduate student at CMU-RI.

BITS Alumni Summit (30 August 2015)

With its resolute mission to keep the alumni of BITS connected to their alma mater and to maintain the integrity and strength of the vast alumni community, BITS Alumni Affairs Division – Student Team Goa, conducted the Alumni Summit 2015 on the 30th of August 2015. It was a first of its kind event and witnessed speakers who had established themselves in various fields of life. They reminisced about their life back at the BITS campuses and their journey thereafter.

Seven speakers who shared the stage were: Anugula Rakesh Reddy- a BJP Youth Wing politician and the founder of Nirmaan, Akash Gupta- the founder of Grey Orange Robotics, Jenish Mehta- a Graduate Student at California Institute of Technology, Ajay Chaturvedi- the founder of HarVa and a published Author, Nikita Bhardia- an MBA from IIM Ahmedabad and the founder of Udaan, Harish Sivaramakrishnan – the lead singer of the band Agam and Garv Malik- a standup comedian and founder of OpenMics.

Anugula Rakesh Reddy spoke about how he joined politics after graduating from BITS. His experience at BITS in contesting elections, and his role as the General Secretary during his time at BITS motivated him to take up politics. He mentioned how the BITSian tag was special for him as it distinguished him from the crowd. He stressed on the need for educated people to take up the responsibility of changing the political landscape in India and talked about political entrepreneurship as a career.

Akash Gupta narrated his decision to leave behind enticing job offers from the USA, South Korea etc., in order to follow his heart into starting up a hardware product company. He spoke about his belief in taking risks and enjoying work, and how challenges are an important aspect in an entrepreneurial journey. Excerpts from his college life were a major part of his speech and he also talked about AcYut, India's first humanoid robot. He encouraged students to be passionate about their dreams.

Starting with his journey to Caltech, Jenish Mehta, a student of Theoretical Computer Science at California Institute of Technology spoke about various aspects of Theoretical Computer Science and its applications. In surprisingly simple words he explained fascinating concepts such as zero knowledge proofs. He then moved on to say a few words about perseverance and effort, and how we must endure a lot of pain to succeed in the field we are truly passionate about.

Having graduated very recently with a degree in Civil Engineering, Garv Malik could relate really well to the audience. He shared through his good sense of humor, his experience at BITS. Stand-up comedy comes naturally to him and after a lot of experimentation; he managed to find his way into shows and flagged off his career in stand-up comedy. Even though he was not appreciated early on in his career, he didn't give up. Along with building his career as an artiste, he also established Openmics.in to provide a platform for comedians.

Harish Sivaramakrishnan, the voice of Agam, gave an inspiring speech sharing his experiences at

and after BITS. He narrated how he discovered his passion for music and web page designing during his college years. Despite While his dream job offer from Adobe served as inspiration for all the students, his stint at Freecharge as its 4th employee caught the attention of the startup enthusiasts. His life story was summed up

in a single line — "Do what you love in life, for if you love your work, it won't seem like a burden! Rather you'll enjoy doing it." In the end, he sang on public demand and that energized the atmosphere.

Nikita Bharadiya, a young and active alumnus of BITS Goa motivated young BITSians by throwing light on different aspects of her life. She explained how life at BITS Goa transformed her from a silent, shy person to a fearless young woman. She mentioned how she founded UDAAN for empowerment of poor and deprived women, the difficulties she faced and how she overcame those. She narrated the story of her first day at work after graduating from IIM-A, when she realized that though you have good degrees from reputed institutes to your credit you don't gain respect until you work hard and contribute to the company or association that you are working for.

Ajay Chaturvedi was the final speaker at the Summit. Students were very curious to hear the story of the man who had made it so big in the corporate world, only to leave it behind to build his own startup. He shared his experiences at BITS and at Wharton, working as the director of Citi. Finally, his experiences of going to the Himalayas and Kedarnath after hitting a rough patch in his life and how he found his guru there who inspired him to change tracks. From being an investment banker, he became the founder of HarVa- a BPO company empowering rural women. He ended the talk by launching his book-"Lost Wisdom of the Swastika" and answering students' queries.







Coalescence 2015 (05 – 06 September 2015)

The start-up movement is growing fast in our country. To inspire entreprenurship and support start ups CIIE, BITS Pilani K K Birla Goa Campus organized an E-Summit: Coalescence 2015 on September 5 and 6, 2015. CIIE is the entrepreneurial community of BITS Pilani, which aims to create leaders through entrepreneurial thinking.

The aim of the event was to provide a platform for entrepreneurship ideas to receive funding and mentorship from renowned incubators and accelerators and to provide an opportunity to interact with some successful entrepreneurs in various fields.

The final round of the B-Plan competition, Novatia took place with 20 teams in general and social categories. Fizzible Tech Pvt Ltd, Pune and Greensole, Udaipur won the competition in the respective categories. The aim of the event was to provide a platform for entrepreneurship ideas to receive funding and mentorship from renowned incubators and accelerators and to provide an opportunity to interact with some successful entrepreneurs in various fields. incubators which have partnered with us in this regard: Seedfund(Bangalore, Delhi), CIBA(Goa), Tlabs(Delhi), Collaborant(Bangalore), Villgro(Chennai), Leading Angels(Mumbai), Unitus(Bangalore), Ah! Ventures(Bangalore), 91Springboard(New Delhi).

Two workshops were held on the occasion to provide fundamentals of building a real business and on pitching to investors. The resource persons were from well known names in the start up ecosystem: Knolscape and 91 springboard.

Coalescence also held the third edition of its annual conference, ACT 3.0. ACT witnessed some big names from numerous fields who shared their experiences during 05-06 September 2015

- 1.A.Muruganantham-Inventor, Social Entrepreneur, listed by 'Time' as 100 most influential People in 2014
- 2. Vijay Nair-Founder, Only Much louder
- 3. TVF Pitchers –Internet based web series on start up challenges
- 4. Taapsee Pannu- Actress and Entrepreneur
- 5. Rajat kapoor. National award Winning Actor, director and writer
- 6. Hussain zaidi- Investigative journalist, Indian Express
- 7. Rahul Yadav- Co Founder, Housing.com



Rahul Yadav at Coalescence'15

EURAXESS Information Session (25 September 2015)

Department of Economics and International Programmes and Collaboration division jointly organized EURAXESS Information Session on Friday ,25th September 2015 at the campus. The Objectives of the event were:

- 1.To offer understanding of European funding and fellowship opportunities available to Indian researchers including rules of participation and grant management.
- 2.To showcase examples of research cooperation between India and Europe (e.g. France).
- 3. To share experience of BITS-Pilani researchers/faculty in or with Europe (testimonies)
- 4.To promote "EURAXESS-Researchers in Motion" as an innovative tool to researchers and EURAXESS Links India as an attractive networking and career-supporting platform for researchers in India.

5.To facilitate networking opportunities for researchers and academic/research institutions. The session is expected to ultimately contribute to increasing the number of grant applications, under Marie Sk odowska-Curie actions (MSCA) and European Research Council (ERC) under Horizon 2020 (EU Research & Innovation Framework Programme).

Pro-E Creo Training Workshop (25 and 27 September 2015)

Department of Mechanical Engineering conducted a two-day PRO-E Creo workshop during 25-27 September 2015. Cordinated by Mr. Ramkumar faculty at the department, the workshop attracted 75 participants consisting of students, faculty and staff of the campus. coordinated Mr. Abay Prabhu was invited

as a resource person from "KRATOS Engineering & IT SolutionsPvt. Ltd. Pune" to provide hands on training on PRO-E Creo. By attending the workshop, the participants have learned to

- Develop primary knowledge of working drawing using Pro/E Software.
- •Produce orthographic drawing of different machine parts.
- •Develop skill to produce detailed drawings of machines parts from assembly drawing.
- •Develop skill to produce assembly drawings and exploded views
- •Develop an idea to produce cross sectional views or auxiliary views by taking section at appropriate locations.

tiNai Eco Film Festival and National Conference (8-10 October 2015)

Celebrating Landscapes and Waterscapes: Eco Film Festival and Ecocinema

The second edition of tiNai Ecofilm Festival (TEFF) 2015 and National Conference on Ecocinema recently concluded in BITS Pilani K. K. Birla Goa Campus. Inaugurated on 8th October, the event hosted by the Department of Humanities and Social Sciences, was spread over three days, screened 20 ecofilms selected out of 82 entries, conducted a national conference with twenty paper presentations along with two workshops by eminent filmmakers and activists.

The title tiNai refers to an Indian ecophilosophy which integrates nature, culture and sacred, similar to the Greek concept, oikos, meaning "household" or "family."

Prof. Salma Monani, Gettysburg College, USA, and Rachel Carson Fellow, Munich, the Chief Guest of the conference delivered the keynote address on "Ecocinema Studies: Past, Present and Future". Nandan Saxena and Kavita Bahl, National Award winning fillmmakers, Chief Guests for the Film Festival had an in depth interaction of their film Dammed with the audience on the inaugural day after the screening.

A workshop on "Photography and Digital Filmmaking" supported by Sony India was conducted by Nandan Saxena and Kavita Bahl on the 08 & 09 October, 2015 and a workshop on "Documentary as a tool for Social Change" was conducted by Saraswati Kavula, a filmmaker, farmer and activist, on 10 October 2015. More than 200 young ecoenthusiasts and students from across India participated in the event from across India.

An international ecodocumentary competition was organized as part of the festival for three categories: Indian Short Ecodocumentary, Indian Feature Ecodocumentary and International Ecodocumentary.

Shifting Undercurrents, Directed by Rita Banerji, won the Best Indian Short Ecodocumentary award followed by Chintan Gohil's A Commons Sense (Best Indian Short Ecodocumentary - Runner-up), The Red Data Book: An Appendix (Best Indian Feature Ecodocumentary) by Sreemith Sekar, Shrinking Shores ((Best Indian feature Ecodocumentary – Runner-up) by Ashish Rao, a French film, Jikoo, a wish (Best International Ecodocumentary) by Christophe Leroy and Adrien Camus and the Taiwanese film. The Lost Sea (Best International Ecodocumentary – Runner-up) by Hung Chun-Hsiu.

Coordinated by Dr.Rayson K Alex and Dr. Reena Cheruvalath of the department, the festival attempted towards enriching the academic and research endeavors pertaining to the fields of Ecocinema and Ecocriticism.



Automotive Research Workshop (10-11 October 2015)

Department of Mechanical Engineering conducted a two - day workshop on "Recent Trends in Automobiles" for students and faculty of all disciplines during 10-11 October 2015. With a total numbers of participants 65. the workshop was served as a comprehensive forum where each student got a live demonstration on engines. Recently used technologies in the automobiles by different automobiles companies like CRDI, VGT, EGR, ECUs, etc., were focused. Conducted by Mr. Yogesh Kalia and his team from Medhaavi Center for Automotive Research, the workshop was coordinated by Dr. Ranjit S Patil of the department.



Number Theory and Cryptography (15-17 December 2015)

The Department of Mathematics, BITS Pilani K K Birla Goa Campus organized a 3-day workshop on "Number Theory and Cryptography" during December 15-17, 2015.

The following mathematicians were the resource persons:

- •Prof. R. Thangadurai, Harishchandra Research Institute, Allahabad (Transcendental Number Theory, Quadratic Seives and Number field Seives, 3 Lectures)
- Dr. Mohan N Chintamani, University of Hyderabad (Number Theory-Integer Factoring, 3 lectures)
- Dr. Vishal Saraswat, C. R. Rao Advanced Institute of Mathematics, Statistics and Computer Science, Hyderabad (Cryptanalysis, 3 Lectures)
- Dr. Prabal Paul, Dr. Alpesh Dhorajia and Dr. Himadri Mukherjee, Department of Mathematics, BITS-Goa conducted tutorial sessions.

As many as twenty students, five research scholars, six faculty members from our institute and three faculty from two colleges of Goa State, participated in the workshop. Lectures were arranged in the morning sessions followed by tutorial sessions in the afternoon all through the workshop. Dr. Prabal Paul coordinated, and Dr Alpesh Dhorajia and Dr. Himadri Mukherjee co-coordinated the workshop. Mr. Jiten Ahuja, MSc-Maths (III yearite) was the student coordinator.



Terra Preta Sanitation & Decentralized Wastewater System (19-21 November 2015)

The 2nd International Conference on Terra Preta Sanitation and Decentralized Wastewater System was held at Birla Institute of Technology and Science Pilani, K K Birla Goa Campus from 19th - 20th November 2015. The conference brought together researchers, scientists and professionals working in the field of Terra preta sanitation and other decentralized wastewater systems. Major sponsoring agencies were German technical Cooperation (GIZ), DST and DBT.



Conference on NEW FRONTIERS IN CHEMISTRY - FROM FUNDAMENTALS **TO APPLICATIONS (17-19** December 2015)

Coordinated by Dr.Mainak Baneriee, Department of Chemistry, the conference covered a wide range of contemporary research areas of chemistry including Synthetic Methodologies, Green Chemistry and Environmental Science, Natural Products and Drug Discovery, Coordination and Bio-inorganic Chemistry, Heterocyclic Chemistry, Catalysis, Materials Chemistry, Supramolecular chemistry, Polymer chemistry, Analytical Chemistry, Computational and Theoretical Chemistry. Chief guest Dr. Bhanu Manjunath, Director, Syngenta Bioscience Private Limited inaugurated the conference which attracted an overwhelming number of participants (250) and invited speakers (25) from all over India. In addition 164 posters were presented. The conference included 10 scientific sessions, 1 panel discussion and 2 poster sessions as detailed below:

Session I: New Reagents and Emerging Methodologies; Session II: Material Chemistry & nanotechnology

Session III: Green Chemistry & Catalysis; Session IV: Theories of Chemistry

Session V: Natural Products & Biomolecules PART I ;Session VI: Analytical & Bioanalytical Chemistry

Session VII: Emerging Trends in Energy; Session VIII: Natural Products & Biomolecules PART II

Session IX: Supramolecular & Polymer Chemistry :Session X: NFCFA-RSC Oral Contest

Panel Discussions: Present Need of Academia and **Industry Engagement**



•Few Distinguished Speakers at the conference were: Prof. Sourav Pal, former Director, NCL Pune, presently at IIT Bombay; Prof. K. L. Sebastian, IISC, Bangalore; Prof. Brindaban Chandra Ranu. IACS. Kolkata: Prof. H. B. Singh, IIT, Bombay; Prof. Asit K. Chakraborti, NIPER, Mohali: Prof. Santosh G. Tilve, Goa University. Goa; Dr. V. Siruguri, BARC, Mumbai; Prof. S. Sampath, IISC, Bangalore; Dr. Satish Ogale, NCL, Pune; Prof. Ashwin Srinivasan, Deputy Director, BITS Pilani KK Birla Goa Campus, Goa.

Trends in Cell and **Molecular Biology (TCMB** 2015) (19-21 December)

The first International conference on 'Trends in Cell and Molecular Biology' was held at BITS Pilani, K K Birla Goa Campus, Goa, India from 19-21 st December, 2015 organized by Department of Biological Sciences. Convened by Dr. Angshuman Sarkar (Secretary), Dr. Sukanta Mondal (Joint Secretary) and Prof. Dibakar Chakrabarty (Treasurer), this conference aimed to provide opportunities and bring together biochemists. molecular biologists, cell and developmental biologists, computational biologists to a common platform to share their research and find global partners for future collaborations. Padmabhushan Professor Asis Datta, inaugurated the event with an inspiring address to delegates and participants from different parts of India and other countries such as USA and Singapore, including distinguished professors, scientists and research scholars. Interesting plenary talks were given by Prof. Vladimir Korzh (Institute of Molecular and Cell Biology, Singapore), Prof. Gopalakrishnakone .P (Yong Loo Lin School of Medicine, Singapore), Prof. Cordula Schulz (University of Georgia, USA), Prof. Adhip P.N. Majumdar (Wayne State University, USA), Prof. H. S. Misra (Bhabha Atomic Research Centre), Prof. Jagat



Kumar Roy (Banaras Hindu University), Prof. Jayanta K. Pal (Pune University), Prof. Indira Ghosh (Jawaharlal Nehru University), and Prof. D. Kar Chowdhuri (CSIR-Indian Institute of Toxicology Research). The conference was mainly supported by DBT, DST(SERB), BRNS and ICMR. With a positive note, this event hopefully provided a fruitful start for updates on cell and molecular biology trends that has made tremendous strides over time.

Informative Events

Campus Tours for students and parents

Based on his visit to numerous universities like Yale and Purdue in USA and inspired by the highly informative, interactive and insightful campus tours organized by student volunteers, Karthik Srinivasan (2012B1A4652G) started campus tours for freshmen and their parents during his second year. He named this initiative FBI or Facilitating BITS Introductions, an interactive campus tour to show parents and new students around campus and give them insights into campus history, academics, research undertakings, hostel life, club activities, etc.

The basic aim was to make all newly inducted members of the BITSian community to know more about BITS Goa and its culture. Started off with a participation by 200 students and parents, the initiative, during its next edition was able to witness and increase in the number that grew to over 800 students and parents with 8 volunteers working with Karthik Srinivasan.

The 2015 version of campus tours was the most successful of all. With a team of 22highly motivated students, the Campus Tour was able to take almost the entire 2015 batch and their parents (over 1000 people) on campus tours. Karthik and his dedicated team of juniors deserve a special appreciation from the entire BITS community for their dedicated and innovative initiative. With such a wonderful and efficient team, the future editions of Campus Tours are expected to be even more interactive and informative than ever before.



FBI Agents Parth Madan, SairajKhope and AbhijeetRakde with parents after a completed campus tour.

Sursangam 2016 (03-04 October 2015)

Under the coordination of Prof.Radhika Vatsan, 'Srutilaya', the Classical Music and Dance group of BITS Pilani, K K Birla Goa Campus, in association with Indian Council for Cultural Relations (ICCR) organized Sursangam - 2015, a tribute concert to the legendary professor of BITS Pilani University, Prof. Suresh Ramaswamy.

Over the two days, the festival witnessed classical music and dance events as detailed below:

3rd October

- Carnatic Vocal: Vidwan Manasa Nayana accompanied by Pradesh Acharya - Violin, A Radhesh -- Mridangam, S Manjunath - Ghatam
- Bharatanatyam: Vidushi Lalan Desai
- •Carnatic Vocal: Balakrishnan Raghavan accompanied by Sreecharan S.- Mridangam, Hancel Salim -Synthesizer (BITS Goa Alumni and present students).. 4th October
- Rudra Veena: Vidushi Jyoti Hegde, accompanied by Shri. Sanjay Pant Agle on Pakhawaj
- Dhrupad Vocal: Vidushi Aparna Shastri, accompanied by Shri. Sanjay Pant Agle on Pakhawaj
- Hindustani Vocal: Rajat Mishra accompanied by Srinand Gawarikar - Tabla and Pranav Palande -Harmonium (BITS Goa Alumni and present students).





Ebsco Training Program (06 October 2015)

BITS Goa Campus Library is evaluating different online content aggregation and collaboration tools and database services for researchers. EBSCO are leading provider of research databases, e-journals, magazine subscriptions, ebooks and discovery service for the academic, medical and other institutions. They are offering a one-year free trial to our Campus. To understand their products they organized a training session on 6th October. Following areas were covered d uring the session:

- a. Basic and Advanced Search hints and tips to help you do comprehensive and efficient searching!
- b. Working with results (printing, saving, emailing and sharing content)
- c. Creating Online Folder and managing personalized services
- d. Translation and Text to Speech options
- e. Navigating through results and Sorting
- f. Creating Different Alerts set up subject alerts and journal table-of contents alerts to save you time
- g. Personal Preferences
- h. Mobile Site and Mobile Accesses for researchers on the go, we'll show you how you can access these

resources 24x7!

- i. Search History
- j. Help Link and Support Site

The training session was attended by faculty, research scholars and students of the institute.

3rd October

Carnatic Vocal: Vidwan Manasa Nayana, accompanied by Pradesh Acharya - Violin, A Radhesh - Mridangam, S Manjunath - Ghatam.

RBI Outreach Program (11 September 2015)

Reserve Bank of India (RBI) has been conducting an outreach programme, to increase awareness of the roles and functions of the Bank among students. BITS-Goa was among those selected for this outreach programme in the year 2015. A team of officers (headed by Shri Sanjay Hansda) from the Reserve Bank visited the campus on 11 September 2015 and delivered a presentation on the economy, its prospect and challenges and on the working of the Reserve Bank and answered the queries from audience comprised of faculty and students.

RBI Team:

Shri Sanjay Hansda, Director-Department of Economic and Policy Research (DoEPR), Member- Committee on Data and Information Management, RBI, Formerly, Analyst at Bank of England

Other members:

Dr. Saurabh Ghosh, Asst. Adviser, DoEPR Dr. Jai Chander, Asst. Adviser, DoEPR Smt Upasana Sharma, Research Officer, DoEPR

Convocation 2015

"Do what you love to do... It's an amazing era to be in India... Be the architects of the changed India" said the Chief Guest Mr. Naveen Tewari, Founder and CEO, InMobi and alumnus of IIT Kanpur, Harvard and McKinsey and Co in his Convocation address to the graduating students of the Class of 2015 at BITS Pilani, K K Birla Goa Campus. They had gathered in large number with their parents and relatives for the grand convocation ceremony held at the at the magnificent auditorium of the campus on 9th August. Mr. Tewari urged the students to give a massive round of applause to their parents who have made many sacrifices and dedicated their lives for their children's future.

Prof. V. S. Rao, Acting Vice-Chancellor, Prof. Sasikumar Punnekkat, Director, K K Birla Goa Campus, Prof. A.K. Sarkar, Director, Pilani Campus, members of the Senate, faculty members of Goa campus and other distinguished guests along with the graduating students and their family members were present on the joyous occasion.

This year, 673 of our students received their degrees. The three medalists were: Gold medal—Ms. Muthkhod Shridevi Sharangowda, Silver medal – Ms. Pooja Malik and Bronze medal – Ms. Zantye Manali Sunil.

Presenting the Convocation Report 2015, Prof. V. S. Rao, Vice-Chancellor, BITS Pilani reaffirmed the long-term vision to be listed as one of India's top 3 research-led technical Institutes by the academic year 2015 – 16. The Vice Chancellor also talked about big-ticket imperatives as part of BITS Pilani's "Mission 2015", such as faculty and staff development, industry engagement, innovation and entrepreneurship, internalisation, inter-disciplinary research, technology enablement and quality assessment and assurance.

•Chancellor Dr. Kumar Mangalam Birla in his message congratulated the graduating students and their parents and told them to keep a few key points in mind. He talked about the need to leverage on innovation and succeed. The Director of the Goa campus, Professor Sasikumar Punnekkat gave a detailed report specific for the Goa Campus which highlighted the achievements of its faculty and students. Dr. Veeky, Baths convener of the convocation ceremony concluded with the Vote of thanks.







Teaching Learning Centre

BITS Pilani has set up Teaching Learning Centres (TLC) at its four campuses at Pilani, Dubai, Goa and Hyderabad in June, 2015 with a vision to foster a thriving culture for excellence in teaching-learning across its campuses. Two workshops and one guest lecture was organized during 2015.

Events organized

- 1.A workshop on effective teaching and learning was conducted through Mission 2015 of BITS Pilani under Quality Assurance and Assessment Imperative during 18th-20th July, 2015 at KK Birla Goa Campus. Select faculty members from Pilani, Dubai, Goa and Hyderabad campuses of BITS Pilani participated in the workshop. Renowned resource persons from NUS, Singapore, WIPRO Mission 10 X and from BITS Pilani conducted the sessions of the workshop.
- 2.A Guest lecture by Prof. Shreepad Karmalkar, Professor of Electrical Engineering from IIT Madras was organized through telepresence mode through BITS Pilani Pilani Campus on Sep 24, 2015
- 3.A one day workshop for PhD scholars and Teaching Assistants on effective teaching learning was conducted by TLC on Nov, 29, 2015. Around 50 scholars participated in the event.

GENESIS: CSA INITIATIVE

CSA, in its promote the technical culture of BITS Goa, has initiated a landmark program 'BITS Genesis'. Drawing inspiration from the successfully running MIT Media Labs and FabLabs, the main objective for its creation was to think beyond the boundaries of one's own branch and bring together people from multiple fields of engineering, sciences, arts as well as management. It aims to create a common platform wherein people can come together and ideate and build something beyond their regular academic requirements. While academic proficiency is of paramount importance, a taste of industrial mentorship is also equally important. Realizing this, BITS Genesis aims to provide both short and yearlong internships in startups by entering into an MoU. This initiative will ensure that the students acquire the practical skills and experience necessary for entering the industrial world. Another motive for such industrial collaborations is to secure industry sponsored projects on our campus in the long run.

In order to achieve its objectives, the Genesis team includes the following verticals in its organizational structure: industry involvement, faculty involvement, student guide and publicity. The industry involvement

•vertical, deals directly with the industries to procure internship opportunities. The faculty involvement and student guide verticals work hand-in-hand to assist student projects.

- Activities so far:
- Call for student project proposals and ideas on 2nd September
- A framework to select projects and provide them a platform to avail the assistance in the form of guidance from the faculty as well as seniors proficient in that field
- Prominent talks and seminars: 'Android application, design and development' by Prajyot Mainkar, Founder of Andocid Media; info session on Google Summer of Code (GSoC); a talk by the founders of Project Mudra, a BITSian Startup.
- 2-day workshop on 'Modern underwater systems' jointly with the EEE department
- •As a future goal, Genesis plans to fund selected projects. The foundation for the CSA Kickstarter program has already been chalked out for this purpose.

International Visits

Prof. Meenakshi Raman, Department of Humanities and Social Sciences presented a paper The Everincreasing Demand for Soft Skills at Work Place: A Study on IT Professionals' Perspectives at the ICMIS (International Conference on Management Information Systems) 2015 organized jointly by INFOMS & AIMS International during 18-20 September 2015 in Bangkok.



Dr. Anil K. Pundir, Department of Mathematics participated in the 8th International congress on Industrial Congress and Applied Mathematics (ICIAM-2015) held at China National Convention Center Beijing, China from August 10 to August 14, 2015.

Prof. R P Pradhan, Department of Humanities and Social Sciences presented a paper "Cooperating in the Seas: ASEAN Region Maritime Security, Naval Diplomacy & Game Theory" at the International Conference on ASEAN Community- 2015 organized during 3-4 Oct, 2015 at Thammasat University, Bangkok, Thailand. He also presented a paper "India's Reluctant War with Indians: Cost Analysis of Naxal Violence & Governance Dividend" at the International Conference organized by Asia Pacific Peace Foundation (APPRA) during 09-11 October 2015 at the Asia Pacific Peace Research Institute (APPRA), Kathmandu, Nepal.



Dr. Amol Deshpande, Department of Chemical Engineering presented a paper "Experimental studies on unmixed combustion: packed bed reactor technology for heat transfer applications" at the AIChE Annual Meeting 2015 held in Salt Lake City, Utah, USA during 08-13 November 2015. The paper was coauthored by Prof. Srinivas Krishnaswamy and Prof. Krishnaswamy Ponnani



Dr. Aruna Govada, Department of Computer Science, presented a paper "Hybrid Approach for Inductive Semi Supervised Learning Using Label Propagation and Support Vector Machine" at the 11th International Conference, MLDM 2015 in Hamburg, Germany during

20-23 July,2015. The paper was coauthored by Pravin Joshi, Sahil Mittal and Sanjay Kumar Sahay. Dr.Aruna received a travel grant of Rs.75000/- from Microsoft Research Labs, India to present this paper.



Dr. Vaishnavi Unde, Department of Chemical Engineering presented an e-poster authored by her and Dr. Srikanth Mutnuri, Department of Biological Sciences titled "Indigo production in a fed batch bioreactor using aqueous-solvent two phase system" at the ICEBB-17th International Conference on Emerging trends in Biosensors and Biotechnology organized by WASET- World Association of Science, Engineering and Technology during 24-25 November 2015 in Dubai.



Invited Talks / Workshops

Prof. G. Raghurama, Senior Professor, Department of EEE & E&I was the Chief guest at the Inaugural ceremony of the West Zone Vice Chancellors meet, 2015-16 organised by the Association of Indian Universities (AIU), and hosted by Shivaji University, Kolhapur on 25th November 2015. He also gave an invited talk on 'Digital India', the theme of the meet. This was attended by more than 25 Vice chancellors from different Universities of the West Zone of AIU.



Prof. Dipankar Pal, Professor, Department of EEE & E&I delivered two invited talks: (i) Neural Signal Recording: Challenges and New Opening on 05 September 2015 at the International Conference "Healthy World Conference 2015 – A Healthy World for Happy Life" organized at JNTUK, Kakinada by Jawaharlal Nehru Technological University in collaboration with Western Switzerland University of Applied Sciences and Haute École d'Ingénierie et de Gestion du Canton Vaud – HEIG-VD (ii)

Multi-cuff, Multi-channel ENG Recording, on 21 November 2015 at the National Conference on Advances in Microelectronics, Instrumentation and Communication (MICOM-2015) organized by the BITS Pilani, Pilani Campus.

Prof. Meenakshi Raman, Department of HSS, conducted a two-day workshop on Effective English Communication and Teaching Strategies for the students and Faculty members of Adamas University, Kolkata on 03 and 04 October 2015. About 150 students and 50 teachers participated actively in the interactive sessions.



Prof. Judith Braganca, Department of Biological Sciences delivered an invited talk on 'Advances in Halophilic Archaea' at the Seminar on 'Archaea: Microbes of third domain of life' Dept of Microbiology, P.E.S., Ravi S. Naik college of Arts and Science, Farmagudi. Goa. September 28, 2015

Dr.Indrani Talukdar, Department of Biological Sciences delivered an invited talk A tale of Tesk1 (and other barrier kinases) in somatic cell reprogrammingat NCCS Pune on 19 October 2015

Prof. Dibakar Chakrabarty, Department of Biological Sciences delivered an invited talk on "A Thrombolytic and anti-adhesive metalloprotease from indian mococled Cobra venom" at 5th Annual Conference of the Toxinological Society of India, Nov 21-22, 2015 at Kochi.

Dr. Debasis Patnaik, Department of Economics conducted a two-day workshop on shop on "Interdisciplinarity in Social Sciences" in Chowgule College, Goa on 22-23 Aug2014. The 21 participants including professors were from 6 departments. Dr. Patnaik was an invited panelist for PRME-Plenary for Responsible Management Education organized by Goa Institute of Management (GIM) in Hotel Vivanta, Panjim, Goa on 27th and 28th Nov 2015. He also delivered a 3-hour lecture Series on industrial economy of India to Japanese Students on 12 December 2015 as the Resource Person and Invited Speaker by the Department of Economics, Goa University

Solano Da Silva , Department of HSS coordinated the second project-workshop on the dynamic of Networks in the Urban Environment in relation to Migration in Goa from 14th to 18th December. The workshop involved presentations by experts, field visits and reflective moments. This workshop was a part of the ongoing project on the Language of the Becoming City - which reflects on urban transformations across four urban spaces: Södertälje, Sweden; Goa, India; Cape Town, South Africa and Rio, Brazil



Dr. Shalini Upadhyay, Department of HSS was invited as a resource person and counselor for the 15th Spiritual Convention held between 29 August 2015 and 5 September 2015 in Ahmadnagar. She conducted workshops on Understanding Spiritual Intelligence and Integrating SI with Public Speaking. She also delivered lectures on Management Communication and Public Speaking at Goa Institute of Management for their Health Care Management Programme between 10 Oct 2015 and 9 Nov 2015.

Prof. Judith Braganca ,Department of Biological Sciences, Prof. Meenakshi Raman, Department of HSS and Mr.Anmol Srivastava, former President of CSA Goa Campus, on invitation, delivered a presentation on the BITS Model of Education to the students of class XII, their parents and teachers of Jamnabai Narsee School, Mumbai on 27 October 2015. The presentation was followed by intensive discussion and interaction.



Dr.Anita B Agrawal, Department of EEE and E&I, delivered a talk on "Recent Trends in Engineering and their impact on Consumer Electronics" at IFB industries, Goa on 26 December 2015.



Dr. Dhanumjaya, Department of Mathematics, delivered two invited talks: (i) Orthogonal Spline Collocation Methods for the Helmholtz Equation with discontinuous Coefficients at the conference on Computational PDE-2015 held at TIFR-CAM, Bengaluru during 21-23, December 2015 (ii) Orthogonal Spline Collocation Methods for One-Dimensional Parabolic Interface Problem" at the International Conference on "Computational Partial Differential Equations" held at South Asian University, New Delhi during 28-30, December 2015.

Dr. E. S. Kannan, Department of Physics delivered a guest lecture "Nanotechnolgy - Lessons from Nature" at PSGR Krishnamaal College of Women, Coimbatore on 03 September 2015.

Dr.Prasanta Kumar Das, Department of Physics delivered a talk on his recent work on "Noncommutative phenomenology" at the Physics department, Indian Statistical Institute, Kolkata in May, 2015

Dr. Tarun Kumar Jha, Department of Physics, gave a talk on "Light from the dark side of the Universe " at a workshop organized at the BHU, Varanasi.

Dr. R. S. Patel, Department of Physics delivered a talk on "Tunneling Magnetoresistance with Thin Hexagonal Boron Nitride Barriers" at a cluster of topical meetings on Current Trends in Condensed Matter Physics organized by National Institute of Science Education and Research (NISER), Bhubaneswar during 19-22 February 2015.

Dr. Anil K Pundir, Department of Mathematics, delivered lecture series on "Numerical Methods for Solving Integral Equations" in the advanced level workshop on Integral Equations—Solvability Analysis and Application which was held at Department of Mathematics, Jaypee University of Information Technology, Waknaghat, Solan (H.P.) during October 19 to October 25, 2015. He also delivered lectures on "Mathematics using Matlab" under the training program "Making Mathematics Easy for students" organized by Department of Applied Science, National Institute of Technical Teachers' Training and Research (NITTTR), (Under Ministry of Human Resource Development, Govt. of India), Ext. center Goa during October 26 to October 30, 2015. Dr. Pundir chaired a session and delivered an invited talk at the International Conference on "Current Trend in PDEs: Theory and Computations" held at Department of Mathematics, South Asian University, New Delhi, India during December 28 to December 30, 2015. The tile of the talk was "Approximation of the Optimal Control Problem Governed by Parabolic Integro--Differential Equations".

distinguished lectures

| Speaker | Affiliation | Topic | Date |
|---------------------------|--|---|----------------------|
| Dr. Akshat Agarwal | Thermal Management Group, Bell Labs (Alcatel-Lucent), Dublin, Ireland | Research in Fluid Dynamics | 07 August 2015 |
| Mr.Naveen Tiwari | Founder &CEO, InMobi | InMobi: Start Up Journey | 08 August 2015 |
| Varun Anand | Co-Founder and Vice President, MPHRX | Improving Lives Using Technology | 14 August 2015 |
| Mr. Robert Waggoner | author of the acclaimed book, "Lucid Dreaming: Gateway to the Inner Self" | Lucid Dreaming | 18 August 2015 |
| Ankur Kumar | Founder, BigBHK | Starting Up | 20 August 2015 |
| Dr. Swapna Immani | University of Texas at Austin (Dept. of Neurobiology). | Interplay between electrical activity and bone morphogenetic protein signaling regulates spinal neuron differentiation | 20th August, 2015 |
| Dr Gladstone D | Orthopaedic Surgeon, | Consumer protection Act | 27 August 2015 |
| Costa | Goa | | |
| Mr. Karan Gaikwad | Product Manager - Reliance Games | A Career in Mobile Gaming | 28 August 2015 |
| Mr Anup Verlekar | | Volatility in Equity Markets and Its relevance for modern economies | 01 September 2015 |
| Dr. Saurabh Ghosh | Reserve Bank | Economy: its prospect and challenges | 11 September 2015 |
| Dr. M. Michael Gromiha | Dept. of Biotechnology, IIT Madras | Computational approaches for understanding the binding specificity and recognition mechanism of protein-protein complexes | 21 September 2015 |
| Prof. S Karmalkar | Professor, Electrical Engg, IIT, Madras | Improving our Teaching through Feedback and Reflection | 24 September 2015 |
| Dr.Kailash | ABB, Sweden | Solar PV | |
| Srivastava | | | |
| Prof. S. N. Kaul | School of Physics, University of Hyderabad | Fascinating world of manganites | 29 September 2015 |
| Prof. M M Sharma | Former Director, ICT, Mumbai | Innovations in Chemical Engineering | 01 October 2015 |

| Sudhir Ghorpade | Head, Department of Mathematics, IIT Bombay | Affine Grassmann codes: An Introduction | 10 October 2015 |
|------------------------------------|--|--|-------------------------------|
| Dr. Fernando Pinero | Postdoctoral Fellow, Department of Mathematics, IIT, Bombay | An Introduction to Coding Theory with Emphasis on Reed-Muller Codes | 10 October 2015 |
| Dr. Belinda Viegas- Muller | Author and Psychiatrist | The Cry of the Kingfisher: Book Reading | 06.10.2015 |
| Mr.Apoorv Kulshreshtha | Member of Technical Staff, Database Security Development Team, Oracle India Development Center | Data Masking for Privacy Preserving Data Mining | 09.10.2015 |
| Mr.Rishabh Arora | Software engineer, insideview inc, search and infrastructure team | Building a search system using elasticsearch and lucene | 09.10.2015 |
| Dr. Xuhai Tang | Associate Professor, Department of Civil Engineering, Wuhan University, China | Three dimensional simulations for rock fragmentation and discontinuities in porous material | 14 October 2015 |
| Prof. Veerappa Gowda | Dean, TIFR-Centre for Applicable Mathematics | Numerical Methods for Hyperbolic Partial Differential Equations (Lecture Series) | 12-15 October 2015 |
| Dr.Samar Husain | Assistant Professor, IIT Delhi | Language and Machine Processing | 10 October 2015 |
| Prof.Nityanand Vidyadhar Pandey | Assam Central University, Silchar | Employee motivation and excellence in education | 26 October 2015 |
| Mr.Sandeep Datta | Wildlife Photographer | My Wildlife Journey | 20 October 2015 |
| Prof. Rajendra Singh | Physics department, IIT Delhi | Fabrication and characterization of GaN based nano pillars for nanoscale device applications | 24th October, 2015 |
| Professor Nityanand | Head and Dean in Assam Central | Employee Motivation and Multi disciplinary Research | 28 th October 2015 |

| Dr. Subhodeep Sarker | University of Veterinary Medicine, Vienna, | To be, or not to be two sites: that is the question | 17 November 2015 |
|---|---|---|---------------------|
| Saikei | Austria | about antidepressant binding! | 2013 |
| Smt. G. Rohini Devi | Retired Associate Director DRDO, | High Temperature Carbon Composite Materials | 17 November 2015 |
| | Hyderabad | | 2013 |
| Dr. Ravi Chandra | Scientist F & Team Leader, Centre for Materials Characterization and Testing, International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), Hyderabad. | Study of mechanical properties at the sub-micron scale | 19 November 2015 |
| Dr. L Venkatakrishnan | Head, Experimental Aerodynamics Division, National Aerospace Laboratories (NAL), Bangalore. | Challenges in Computational and Experimental Aerodynamics including Studies in Intake Aerodynamics | 21 November 2015 |
| Prof. Dharam Vir | PhD Texas A&M | Neutrino oscillations and | 24th November, |
| Ahluwalia | University | Dark matter. | 2015. |
| Dr. Deepak Sharma | Regional Applications Manager, TSI-India. | Introduction to Hot Wire Anemometry and Laser based diagnostics tools for Experimental Fluid Mechanics | 26 November 2015 |
| Dr. Himansu Sekhar Nanda | King Abdullah University of Science and Technology, Saudi Arabia | Controlled insulin delivery from collagen scaffolds of controlled pore structure for skin tissue regeneration | 4 December 2015 |
| Dr. Madhukar Gupta | Additional Secretary, Department of Public Enterprises, Ministry of Heavy Industries, Govt. of India | State Owned Enterprises & Possibilities of Collaboration with Institutes of Higher Learning | 29 December 2015 |
| Padma Vibhushan Shri G. Madhavan Nair | Former Chairman, ISRO | 'Indian space missions: Challenges, technologies and innovation potential | 31 October 2015 |
| Jonathan Barlow | Musicologist | The development of instruments in north India | |

achievements

Prof. Meenakshi Raman, received the Outstanding Paper Award for the paper "The ever-increasing demand for soft skills at work place: a study on IT professionals' perspectives" co-authored by Anjani Srikanth Koka (2010PHXF804P) at the International Conference on Management Information Systems (ICMIS) 2015, AIMS International, 18-20, 2015, Bangkok.

Priyadarshini Pai (2012PHXP007G) research scholar in the department of Biological Sciences recieved the FEBS Journal poster prize at the 2015 NextGen Genomics, Biology, Bioinformatics & Technologies Conference, Hyderabad, October 2015. Poster title: Identification of catalytic residues in enzymes using support vector machines. Link:

http://onlinelibrary.wiley.com/journal/10.1111/%28ISSN %291742-

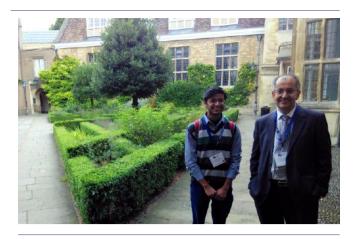
4658/homepage/febs journal poster prizes.htm

Medha Tripathi (2013PHXF102G), part-time research scholar in the department of HSS under Dr.Reena Cheruvalath, has received the Erasmus Mundus scholarship 2015 under the program "Namaste". Prof. Dr. Martin Valcke, HOD, Faculty of Educational Sciences, Universitieit Gent is her promoter for pursuing her research during Nov. 2015 - May 2016.

Souryendu Das 2012A3PS240G and Sunandan Gokhroo 2012A3PS688G published a research paper , "Microstrip Patch Antenna at 7GHz for Satellite Communication" in the International Journal of Engineering Technology Science and Research. Engineering Technology Science and Research. Link: http://www.ijetsr.com/images/short_pdf/1447833754_9-11_TESM206_ijetsr.pdf

Ankur Omar, (2012A8PS296G) presented a paper "Improving data extraction efficiency of cache nodes in cognitive radio networks using big data analysis" at IEEE Sponsored "Next Generation Mobile Applications, Services and Technologies" conference (NGMAST 2015) held at the University of Cambridge, Cambridge, UK in september 2015. Ankur received two grants from BITSAA: BITSAA International Travel.

Grant http://www.bitsaa.org/?page=partial_travelschol
http://www.bitsaa.org/?page=paperpublication



Rajesh Tilwani (2012A8PS343G), published a paper, "Energy savings potentials in buildings through energy audit- A case study in an Indian building" in IEEE Journal, co-authored by Dr.C.Sethuraman, Senior Scientist, CSIO, Chennai. The paper was presented at TAP 2015 IEEE International Conference held at Amrita University, Kollam on 26th June 2015.

S Chetak (2012B4AA4522G) presented a paper "Can Retail Investors Gain on Analysts Stock Recommendation Journalists vs Brokerage Houses: Evidence from An Emerging Market" at the 23rd Securities and Financial Markets Conference in Kaohsiung, Taiwan, during 11-12 Dec. 2015. This paper was the outcome of his internship at IIMB under Prof. Jayadev and currently it is under review by the Journal of Financial Markets [JFM], world's leading journal in the field of finance.

"Computational Partial Differential Equations" held at South Asian University, New Delhi during 28-30, December 2015.



Akash Gandhi (2013A1PS760G) and his team members Aditya Chindhade (2013A1B1223G) and Jitendra JasnaniS (2013A1PS509G) won the best paper presentation award for their paper "Reduction in Energy consumption of Air Handling Units using rotary desiccant dehumidifier" at SCHEMCON'15, held in

Pune during 12-13 September 2015. This paper was an outcome of their project on "Dehumidifier". The sowcased the same project in ChemTech Students' Outreach Programme, Mumbai, an exhilarating exhibition collaborating academia, industries and the research fields from across the globe. The project has also won the 3rd position in Quark'15 Open Showcase. Bangkok.

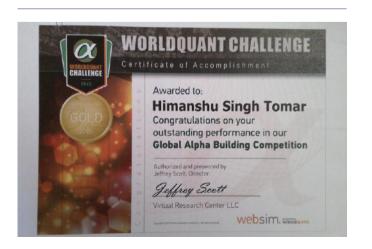
Yash Verma (2013A7PS023G)) reached Gold level within a week in WorldQuant Winter Alphathon and stood 3rd WORLDWIDE. As a result, he was offered RESEARCH CONSULTANCY contract with the firm (part time job) with 6-LPA pay and was awarded a bonus of \$1000 for winning the third position. The competition was from 01 November 2015 to 03 December 2015. Over 3000 students around the world registered for the competition.

Abhishek Tiwari (2013A7PS810G) has been selected for the 12-week Mitacs Globalink Research Internship program to be carried out in Canada in summer term of 2016. He will work on a project "Multicore Scheduling and Synchronization" under the guidance of Professor Dr. Alex Aravind

At the University of Northern British Columbia – Prince George.

Himanshu Singh Tomar (2013A8PS700G),

coordinator, Wall street Club, won all India Rank One and Eighth rank worldwide among 5000+ contestants from 50+ countries in "WorldQuant Challenge Summer Alphathon 2015". It is a global challenge by WorldQuant LLC to build trading algorithms for trading in US equities market. Through the competition (October 2015) he secured a One year Contract as Part Time Research consultant from WorldQuant LLC with a bonus of 1000 USD and 6,00,000 INR (Six Lakh rupees) as stipend for a period of one year.



Shivansh Tripathi (ID 2010B2A8655G) stood first in the merit list in UPSC Combined Defence Services examination (All INDIA RANK). He has been selected for training at both Indian Military Academy (IMA) and Indian Naval Academy (INA).

B. Rachith Aiyappa (2014B5A4469G) won the Mens Singles Lawn Tennis event conducted by Cidade De Goa in association with the Goa State Tennis Association (GSTA). It was all All Goa Ranking tennis tournament conducted in Feb 2015. For more details: http://www.goainfomedia.com/rachith-aiyappa-wins-mens-finals-cidade-de-goa-open-tennis-tournament-2015/



The following students ,The following students have made our campus proud by their excellent scores (percentile) in CAT 2015
Abhishek Desai (Mech) 99.91
Siddharth Sridhar (99.92)
Anadi Mishra (99.87)
Abhi Jain (99.46)
Sahil Bhatla (99.05)
Arpit Sarda 98.67 Percentile in CAT 2016.

Debasis Patnaik has been appointed as the external Pre PhD FRC Member, Department of Commerce, Department of Economics, Goa university.

Meenakshi Raman has been appointed as the external member of the Department Research Committee, Department of Humanities and Sciences, NIT, Goa.

Dr. Dhanumjaya P. and Dr. Manoj Kumar Pandey Department of Mathematics were conferred with Ahlfors Seminar Award-2015 (departmental) on 20 August 2015 by Prof. G. Raghurama. Who also delivered a short inspiring speech on "Need of scholarly activities in a department".

Significant Projects

Projects Sanctioned during June 2015 - December 2015 :

| S. NO. | PRINCIPAL INVESTIGATOR & NAME OF THE DEPARTMENT | TITLE OF THE PROJECT | FUNDING AGENCY AND AMOUNT (RS. IN LAKH) |
|-----------|--|--|---|
| 1 | Dr. A. Amalin Prince Dept. of EEE &IE | FPGA Based Fuzzy Logic Picomotor Controller for Laser Beam Pointing Stability Correction | Department of Atomic Energy, Board of Research in Nuclear Sciences (DAE- BRNS) 24.46 |
| 2. | Dr Veeky Baths Dept. of Biological Sciences | Home automation and smart wheel chair based on electroencephalography (EEG) signals produced in the brain | Cognitive Science Research Initiative CSRI (DST) 38.95 |
| 3. | Prof. Meenal Kowshik Dept. of Biological Sciences | Lanthanide doped hydroxyapatite based nano- materioals for theranostics applications: Sensing, Imaging, and Therapeutics | Department of Science and Technology (DST) 35.07 |
| 4. | Dr. Venkateswan S.Thimmakondu Dept. of Chemistry | Structure and energetic of C7H2 and C9H2 Isomers:Quantam Chemical studies | Science and Engineering Research Board (SERB) 23.23 |
| 5 | Prof. Sunil Bhand Dept. of Chemistry | Bio- Sensory Computing for Detection of Pesticide in Tea | Tea Board, India 5.50 |
| 6. | Prof. Sunil Bhand Dept. of Chemistry | Novel micro biosensor device for heavy metal analysis in vegetables | UGC- DAE Collaborative Research Scheme 1.00 |
| 7 | Dr. R. P. Pradhan Dept. of Economics | Agenda 2020: India's Maritime Infrastructure, Governance & Naval Diplomacy | Indian Council of Social Science Research (ICSSR) 15.00 |
| 8 | Kinjal Banerjee | Observational Signals of Quantum Gravity in CMB | SERB, Rs. 3.24 Lakhs |

Additional Competitive Research Grant for new Faculty funded by BITS, Pilani (2015-16)

| | | | Amount |
|---|---------------------------|---|--------|
| Principal | | | Rs. in |
| Investigator | Department | Title of Research Proposal | lakh |
| Dr. Asima Shaukat | Chemical Engineering | The role of rheology in defining the tribological (lubrication) behavior of biogreases | 8.00 |
| Dr. Indrani Talukdar | Biological Sciences | Role of alternate splicing modulators in differentiation of embryonic stem cells into specific lineages | 8.00 |
| Dr. A. Amalin Prince | EEE &I | Design and Analysis of MEMS Switches for the Arc-less Operation and Control of Electric Energy Processing Systems | 7.50 |
| Prof. Santonu Sarkar and Prof. Ashwin Srinivasan | CS &IS | Applications of High Performance Computing to Software Engineering and Data Analytics | 14.00 |
| Dr. Ranjit Patil | Mechanical Engineering | Effect of Novel Design Cyclone Separator on Heat Transfer Characteristics of Pressurised Circulating Fluidized Bed Heat Exchanger | 2.50 |

MoUs

Five Memoranda of Understanding have been signed by BITS Pilani K K Birla Goa Campus in 2015 with external organizations:

- 1. University of Tartu, Estonia (18 April 2015)
- 2. University of Limoges, France (12 May 2015)
- 3. CSIR-NIO, Goa (23 July 2015)
- 4. Siemens Technology Services Pvt Ltd, (Sept 09, 2015)
- 5. The University. of Perpignan France. (Oct, 26 2015)

Under the MoUs, the fields of common research interests and allied activities between the two institutions were discussed. It was decided to enter into collaboration in the areas of education, training and research; organize regular exchanges of information and of scientific and teaching documents; develop exchanges of students and faculty.

WAVES 2015 ESCAPE REALITY

A normal wave is one which rises and then falls down after a certain time. But the Waves of Bits Pilani Goa is showing no signs of falling any time soon. Started with very humble beginnings in 2006, this festival is giving serious competition to cultural fests all over the country and has started to be counted among the best in just 10 years of its inception.

The festival has been organised magnificently over the years so the Waves organizing committee had its hands full trying to match the standards set by their predecessors. They promised to "Escape Reality" and that they did and in such style, not only matching the standards set but more often than not going beyond them and overdoing of what was expected from them. The tenth edition of the festival was held from 6-8th November' 2015 with a footfall of over 35 thousand. With electrifying performances from many artists and a number of new events set to be introduced this year, this Waves proved why it is considered to be the fastest growing cultural fest of India.

The inauguration was held on 5th November in the auditorium with Sanil Sachar as the chief guest for the event. Expectations were undoubtedly high from the inauguration with the famous mime club of the campus. They did not disappoint and put on another performance which was met with a standing ovation. Coupled with the Kala club bringing out their brushes and ERC putting on another encore worthy light and sound show, this was one inauguration people will not forget in a hurry.

There were a number of new events introduced this waves including couple dance (Jumele), photography events like Shutter Island, a number of film events like Time Lapse, Reverse Flash, literary events like Poetry Slam and even a stand-up comedy event, Show me the Funny. Coupled with the already existing successful events like Sizzle, RangManch, DhinChak, Indian Rock, Lexomnia and others and you have an event line up so diverse that it would be hard for anyone to compete.

The big three, Natyanjali, Mr. and Miss Waves and FashP were again the major attractions with more competition than ever seen before in the festival. The nights were organised such that there was something for everyone over the course of three days. The famous DJ Paroma performed along with the band Lost Stories performing their famous song Tomorrowland on the first day. The

excitement went up another notch with the South African band AKING performing on the second day. And the windup was perfect with Salim Sulaiman enthralling the audience with their amazing performance on the last day. A better end to the festival could not have been asked for. Natyanjali was taken away very convincingly by H.R. College by their ground breaking performance. The FashP event once again saw a huge crowd emerge and the excitement was running high with Sanjana Ganeshan judging the event. Mr and Miss Waves is one of the most awaited events and this edition did not disappoint with plenty of entertainment and noteworthy performances. The winners of the event were Delzad and Sabhyata both from H.R. college. A number of colleges participated in the festival including H.R. College of Commerce, Christ University, etc. The competition was tough and neck to neck till the very last with H.R. College winning in the end though by a margin of only a hundred points. They took away all the Big three events which was in the end enough to see them through to the coveted trophy.

The students of BITS Pilani Goa were not far behind showing their brain power in various quiz events, such as the Waves open quiz, Vices, Lone Wolf, etc. snatching up a number of positions in almost all of them. A number of informal events were organised throughout the campus to keep the people engaged into the spirit of the festival. For the night owls there was the rock music competition SeaRock with teams coming in from all over the country.

Overall, this was undoubtedly one of the best Waves ever seen by anyone. The heights being achieved by this festival seem to increase with every passing year along with the expectations for the same. The next year's organizing team surely has some really high standards expected from them.



Sulaiman performing at Waves 2015



Students performing during Natyanjali

Nirmaan

- Nirmaan had a remarkable gamut of activities executed through its operational wings responsible for the activities related to knowledge, health and employment:
- Projects around the slum community of Zari and recently expanded into Birla.
- Project Teach Zari, aimed at students of primary classes ensured a healthy attendance and helped build a conducive environment for the students in the past year.
- Project Shiksha, provides training to the students of 5th grade for JNV scholarship exam. The Career Counselling project organized workshops in various schools around Goa and provided career guidance to hundreds of students in the last 6 months.
- Project POSHAN provides food supplements to the students of government schools. It has reached over 60 children in the last semester alone.

- A SHG was formed with over 20 women being trained in varied crafts
- Project Kadam to train students holistically through various activities; A well-received street play for the people of Birla and Zari was organized
- Project Ignite in partnership with Bhumi, an NGO working in the field of education gives BITSians who are not Nirmaan volunteers get an opportunity to teach and interact with students of St.Agnel's Orphanage every weekend
- Collaboration with the well-known NGO Child Rights and You (C.R.Y.) to organize an enlightening session for the volunteers
- The Nirmaan All Chapter Meet held at the campus
 Joy of Giving Week, the nationwide

 philanthropic event which was christened DaanUtsav
 this year was organized at a pan-Goa level by
 Nirmaan from 02-08 October. Visit to various
 orphanages and old age homes; events for children
 from various orphanages and nearby slum
 communities; a pan-Goan event where school
 students around Goa communicated their gratitude to
 the service folk in the form of thousands of handmade greeting cards which were distributed by the
 volunteers to the fire-fighters, policemen, cleaners and
 railway officials in Goa





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. Varinder Singh | Mechanical | Reviewed an article for Journal of |
| | Engineering | Manufacturing Technology Management |
| | | (Emerald). |
| Prof. Utpal Roy | Biological Sciences | Reviewed the manuscripts of the following |
| | | international journals: Microbial |
| | | Pathogenesis (Elsevier), Microbial Cell |
| | | Factories (BIOMED), |
| | | Bioresources and Bioprocessing (Springer), |
| | | Journal of Applied Microbiology and |
| | | Transactions of Tianjin University |
| Prof. Judith | Piological Sciences | (Springer) |
| Braganca | Biological Sciences | Reviewed manuscripts of the following international journals: Ecotoxicology, |
| Brayanca | | International Journal of Biological |
| | | Macromolecules and Journal of Proteome |
| | | Research |
| | | ricocaron |
| Prof. P. M Singru | Mechanical | Reviewed 4 papers each for the ASME's |
| | Engineering | International Mechanical Engineering |
| | | Congress and Exposition (IMECE) held in |
| | | Housten, USA, Nov-13-19,2015 and the |
| | | 17th National and 2nd International |
| | | conference on Machines and Mechanisms, |
| | | 2015. Reviewed one paper for Journal of |
| | | Advances in Vehicle Engineering |
| Prof. Meenakshi | HSS | Reviewed 2 papers for the AIMS |
| Raman | | International Journal of Management, |
| | | Houston, USA. |
| Dr.Debasis Patnaik | Economics | Reviewed papers for the Journal of Applied |
| | | Manpower Research. |
| Mr. Tirthara: DACL | CC % IC | Deviewed peners for (i) Committee |
| Mr. Tirtharaj DASH, | CS & IS | Reviewed papers for (i) Computer Methods and Programs in Riemedicine |
| | | Methods and Programs in Biomedicine, Elsevier (ii) Journal of Information |
| | | Processing Systems (iii) 20th WMSCI- |
| | | 2016, Florida, USA. (iv) IEEE Workshop |
| | | on Computational Intelligence (WCI-2015), |
| | | on Johnpulational intelligence (VVOI-2013), |

New Faculty

| 0., | N. a. a. a. | Danimatian | Danamanana | Data of | December 200 |
|-----|----------------|-------------|------------|-----------|----------------------------|
| Sr. | Name | Designation | Department | Date of | Research areas |
| no. | | | | Joining | |
| 1 | Dhanya Ram V | Assistant | Chemical | 24 August | Process Control, Modeling |
| | | Professor | | 2015 | & Simulation, Process |
| | | | | | Identification |
| 2 | Rajagopal | Assistant | Chemical | 26 August | Fluid Dynamics, Thin Film |
| | Vellingiri | Professor | | 2015 | Flows, Wetting |
| | | | | | |
| 3 | Vivek P | Lecturer | EEE & E&I | 0 9 Nov. | Estimation & Filtering, |
| | Chandran | | | 2015 | Modern Control Theory, |
| | | | | | Vehicle Hybridization |
| 4 | Vinay Budhraja | Assistant | EEE & E&I | 16 | VLSI & Solid State Devices |
| | | Professor | | December | |
| | | | | 2015 | |
| 5 | Sandesh | Visiting | Mechanical | 17 August | Thermal Engineering |
| | Surendra | Assistant | | 2015 | |
| | Chougule | Professor | | | |
| 6 | Tirtharaj DASH | Lecturer | CS&IS | 04 August | Machine Learning, |
| | | | | 2015 | Evolutionary Computing, |
| | | | | | Applied Computer Science |
| 7 | Rizwan | Lecturer | CS&IS | 17 August | Software Systems |
| | Parveen | | | 2015 | - |
| 8 | Varun Kumar | Lecturer | CS & IS | 04 | Machine Learning & |
| | | | | September | Computer Vision |
| | | | | 2015 | |
| 9 | Soumyadip | Visiting | CS & IS | 28 | Formal verification |
| | Bandyopadhyay | Faculty | | September | |
| | | - | | 2015 | |
| 10 | William Henry | Visiting | HSS | 16 | English Literature |
| | Spates | Associate | | October | - |
| | · | Professor | | 2015 | |
| | I. | 1 | l . | | |

editorial team

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|--------------------------|--------------------------------|
| Prof. Meenakshi Raman | mraman@goa.bits-pilani.ac.in |
| Dr. Judith Braganca | judith@goa.bits-pilani.ac.in |
| Dr. Shalini Upadhyay | shaliniu@goa.bits-pilani.ac.in |
| students: | |
| Mr. P. Bharath Srinivas | bharath.95@gmail.com |
| Mr. Atharva Vaidya | f2015223@goa.bits-pilani.ac.in |
| Mr. Prathamesh Bodhankar | f2014679@goa.bits-pilani.ac.in |



mediaspeak

"



Classical music and dance festival: Sursangam 2015, a two-day classical music and dance festival, will be held on



October 3 and 4 at 3.30pm at the BITS Pilani Goa Campus Auditorium, Zuarinagar,

that Ecotlin Festival
Department of Humanities and
Social Sciences, BITS Pilani,
KK Birla Goa Campus will be
organizing the second edition
of thai Ecofilm Festival (TEFF
2015) at BITS Goa Campus.
As part of the festival the following events are organized for all those who are interested in ecology and ecological बिट्स किलानी प्रवेश प्रीध

THE REST

Conference on 'Advances in Robotics

Film festival: The department of Humanities and Social Sciences, BITS Pilani, K K Birla Goa Campus is organizing a three day ecofilm festival, tiNai Ecofilm Festival (TEFF) and a National Conference with the theme 'Celebrating Landscapes and Waterscapes' from October 8 to 10 2015 at BITS Pilani,

K K Birla Goa Campus.

"Srutilaya" a classical music and dance group of BITS Pilani KK Birla Goa Campus in association with Indian Council for Cultural Relations (ICCR) will be presenting 'Sursangam - 2015', a Classical Music & Drama Festival on October 3 and October 4 at the Auditorium, BITS Pilani, Goa Campus, Airport Road, Goa at 3.30 P.M. On October3 Bharatanatyam dance recital by Vidushi Lalan Desai and Carnatic vocal recital by Vidwan Manasa



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

NH 17B, Zuarinagar-403726 Goa, India

humanities, screening of International, National and Regional Ecofilms (October 9 and 10, 2015), International

workshop on Photography & HDSLR Filmmaking (October 8 and 9, 2015) by National

vard-winning filmmakers, andan Saxena and Kavita Bahl.

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