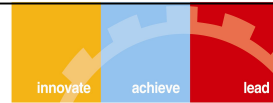




**BITS Pilani**  
Pilani Campus



**Technology Business Incubator**

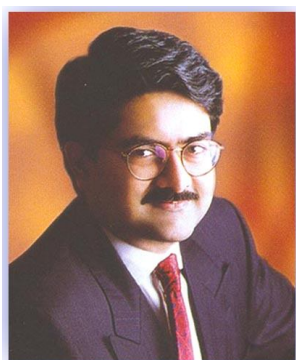




We must become the change we want to see.

- *Mahatma Gandhi*





***Dr. Kumar Mangalam Birla***  
***Chancellor***

# Our Vision

Be amongst the top 3 Technology & Science institutions in India by 2015, and amongst the top 25 Technology & Science institutions in Asia by 2020.



## Message from Vice Chancellor



Work on the three-year project “Vision 2020 | Mission 2012” started in 2009 with the express objective of defining *the* milestones for BITS Pilani to achieve before 2020, and to identify the specific initiatives that BITS must undertake to move towards realizing that vision. I am happy to share with you that we have made significant progress by launching during these past months the many initiatives on our road to becoming a university that excels in teaching *and* research, and one that will be rated amongst the top three technology institutes in India by 2015 and amongst the top 25 technology institutes in Asia by 2020.

Having said that, I must acknowledge that much more needs to be done. In particular, (i) we need to progress, institutionalize and consolidate the outcomes from these initiatives or projects (such as engagement survey or ERP), (ii) we need to quickly conclude on those ideas and initiatives that could not be fully progressed (this includes performance-linked pay, industry immersion), *and* (iii) we need to define a new Mission 2015 that will become the launch pad for BITS to become the #1 destination for potential students, faculty and researchers, and for recruiters (this *may* include innovation and entrepreneurship).

Clearly, what we have achieved in these past few months is no mean task. Needless to say, this would not have been possible without a deep understanding of, and commitment to, what is it that we as a fraternity are attempting to achieve and how we propose to do all that. Creativity, initiative, hard-work and teamwork have been at display these past few months. Participation by over a hundred faculty members from BITS’ four campuses, complete involvement by members of BITS’ leadership team, strong support from friends from ABG group and alumni, and guidance from the Chairman and members of our Board have made this effort an enjoyable and learning experience. On behalf of BITS I wish to thank everyone who has contributed to this effort. I look forward to similar enthusiastic involvement by all stakeholders in launching and making success of Mission 2015.

Bijendra Nath Jain  
Vice Chancellor and Senior Professor



Shan Balasubramaniam



B V Prasad



Sudeept Mohan



Subhash Karbelkar



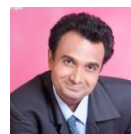
B B Gulyani



A V Kulkarni



R Raghunathan



Rishikesh Vaidya



K Nityananthan



K Kumar



S Karthiyayini



K R Anupama

## Thrust Area: Academic Programs and Pedagogy

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### Mission 2012 Objectives

- Benchmark BITS curriculum (per discipline) against top 3 International universities and incorporate changes where required
- Increase the level of participation of external experts in Instruction and research
- Pedagogy improvements, more laboratory and self - learning components
- Introduce new degree programs in emerging areas
- Strengthen the academic and career counseling mechanisms for students
- Additional Initiatives such as Fine Grained Grading, Student and Peer Feedback and conducting BITSAT abroad



Souri Banerjee



A Vasan



M B Srinivas



M Srinivas



Ajit Pratap Singh



Pravin Singru



N N Sharma

### **Accomplishments**

- Completed benchmarking of 19 Higher Degree and 13 First Degree programmes
- Implementation of new curriculum with increased emphasis on research and improved academic flexibility for First Degree, M. E. and M. Pharm. w.e.f. August 2011
- Restructured Dual Degree programs
- Introduced letter grading for Thesis and Dissertation
- Implementation of 8- level grading scheme w.e.f. August 2011
- Launched enhanced Embryo 2.0 with more courses;
- Increased laboratory components in all programs with lab components commencing from Year 1; Labs being upgraded for superior experience
- Intensified self-learning with 20% of open book evaluation and take home assignments in each course
- Improved student feedback rolled out in all campuses; student and peer feedback is now an integral part of Performance Management System for faculty
- Academic counseling cells for students established in each campus, with visiting professional counselors

### **On Anvil**

- Expand BITSAT to international locations
- New programmes targeted at B.Sc. input, in interdisciplinary areas
- Strengthening of Humanities and Liberal Arts with introduction of more courses and new degree programmes
- Restructuring of MBA programme
- Review of curriculum with external experts.
- Formation of discipline-wise 'visiting committees'.





A K Sarkar



Ashis K Das



Dalip Kumar



Hemant R Jadhav



Shibasish Chowdhury



Roop Kumar



Vijay Kumar B



Anand Kumar



Anil K Bhatt



Jyoti

## Thrust Area: People

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### Mission 2012 Objectives

- Enabling mechanisms and practices for faculty to be more creative and productive
- Platforms and processes to develop capabilities of on-campus faculty
- Identify leaders at all levels and make everyone empowered with a professional culture in their workplaces
- Develop an open, transparent and improved method to identify and nurture talent for teaching and non-teaching staff and provide a growth path aligned with her/his strength. Strengthen the professional and personal academic counseling mechanisms for faculty.
- Additional Initiatives such as Faculty Hiring / Staffing, Non-Teaching Hiring / Staffing, and Chaired Professorships



Saby John



Aravinda N Raghavan



P K Thiruvikraman

### **Accomplishments**

- Made available multitude of grants and policies – Seed grant scheme (120 Lacs for 10 projects), Research initiation grant (34 faculty), Sabbatical leave policy, share of overheads, standardized relocation allowance, computer equipment replacement, terms / conditions of employment contract and revision of faculty compensation.
- Executed pilot 'Industry Immersion Project' with 11 faculty visiting ABG companies; broader immersion project under development
- Implemented improved 'Performance Management System' for both teaching and non-teaching staff;
- Implemented new robust process for hiring teaching faculty, supported by an external RPO – Round 1 resulting in 2500+ applications, 80 Offers, 63 acceptance and Round 2 resulting in 3828 applications, 63 offers and 43 joined.
- Identified 40 non-teaching positions (CIO, CRDO, Dy. Registrar, Chief Engineer, HR / Placements / WILP Project Managers), hiring work-in-progress
- ERP HR module gone live as of March 2012
- Committed 8 Chairs under 'Chair Professorships' policy with award of 3 Chair and 1 more Chair envisaged

### **On Anvil**

- Identified competencies for Training Needs and leadership training / interventions – survey to be undertaken
- Performance-linked variable pay scheme under consideration



R N Saha



Sunil Bhand



N Rajesh



Aradhana Srivastava



P Nandakumar



Srikanth M



Subit Kumar Saha



N N Ghosh



Rahul Banerjee



Anshuman Dalvi



Navneet Goyal



P Srinivasan

## Thrust Area: Research

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### Mission 2012 Objectives

- Enhance and strengthen research component in First Degree (FD) & Higher Degree (HD) programmes
- Strengthen the Ph.D. programme - the process of admission to thesis completion
- Identify thrust areas for inter-disciplinary and other research. Have mechanisms to motivate faculty to engage in high quality research
- Increase the number of consultancy projects in various disciplines
- Devise mechanisms to project faculty and Institutional research capabilities
- Achieve increased level of external funding; enhanced research collaboration with industries and other institutes
- Additional Initiatives such as policy on IPR, Thesis as an alternative to Practice School and leveraging partnership with industry



Suman Kapur



P Yogeeswari



Sai Jagmohan



S Ramachandran

## Accomplishments

- Strengthened First Degree and Higher Degree programme with embedding project / laboratory component and introducing project courses such as study, design, experimental and special projects
- Transformed Ph.D. programme through decentralization, separate advertisement for admissions and introduction of co-supervisor concept resulting in doubling of applications and admissions
- Motivated faculty for increased research output - enabled 34 faculty through 'Research Initiation Grant', sanctioned seed grants for 10 projects and implemented policy to grant access to faculty 60% of overheads in sponsored R&D
- Initiated 'Industry Immersion Scheme' in 2011 with fruitful interactions (resulting in projects) with few ABG industries, GAIL etc.
- Constituted and appointed Chief Research Development Officer (CRDO) for interfacing with Industries and agencies
- Significantly enhanced number and values of proposals submitted and funding received – INR 6.32 Cr approved in 2009-10 while INR 10.31 Cr approved in 2010-11, 18 Projects worth of INR 1.95 Cr received from ABG, 10 departments received support from DST while 2 departments received support from UGC
- Introduced financial assistance at HD level and under consideration at FD level

## On Anvil

- Identify thrust areas for each department across campus to proliferate inter-disciplinary R&D
- Formulated approach for showcasing faculty and campus R&D capabilities
- Prepared IPR policy draft, to be reviewed and implemented



G Sundar



V S Shekhawat



Manoj S Soni



K K Singh



G Venkiteswaran



Raghunath Rathabole



K Venkata Subramanian



Ramesh Kumar

## Work Integrated Learning Program (WILP)

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### Mission 2012 Objectives

- Engage on-campus faculty to 'own' WILP programmes
- Enable off-campus faculty to contribute more effectively to BITS' industry partnerships
- Increased use of technology in content development & delivery
- Evaluate programmes for their returns to BITS
- WILP program and content review



Shailendra Singh  
Shekhawat



S P Vimal



B R Murthy



Vijay Kumar B



Mukesh K Rohil



Suneel Kumar

### Accomplishments

- Improved engagement of faculty across campus in WILP programme being governed by a cross-campus committee
- Improved ICT infrastructure with new lecture recording studios in Pilani and Goa. Use of LMS, increased lecture delivery stations
- Identified and initiated activities such as student feedback, online fee payment, online advertisements, standard instruction and evaluation – with measurement of impact on enrolment and student performance through these initiatives

### On Anvil

- Streamlined managerial and teaching responsibilities for off campus faculty - a number of administrative positions formed , hiring being done, and career growth being discussed
- Analyze portfolio of programmes and dis-engage where BITS Pilani academic involvement is low
- Curriculum / content review and redesign; engagement of external experts for the review of select courses
- New offerings like certificate and diploma programme under review;



Surekha Bhanot



K M Raghavendra



T K Datta

N K Miller Jothi



R P Pareek



Srinivas  
Krishnaswamy

Abhijeet K Digalwar



Radhika Vatsan



Kanan Ramaswamy

## Thrust Area: Campus Life

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### Mission 2012 Objectives

- Better social bonding; improved quality of life on Campus
- Sustainable environment practices
- Integrated community development



P N K Rao



Poonam Goyal

### Accomplishments

- Conducted University-wide engagement survey among teaching and non-teaching staff and student community with the help of Gallup.
- Survey finding shared with stake holders, identified and actioned on top priorities across campuses
  - *Pilani Campus*
    - Library / Sports / Labs / Medical Center upgraded
    - Hired HR Manager / Chief Engineer / Hostel Superintendents;
  - *Goa Campus*
    - Medical Center / Library / Sports facilities upgraded
    - Improved campus security
  - *Hyderabad Campus*
    - Medical Center / Laboratory / Library / Sports / Children care facilities upgraded
  - *Dubai Campus*
    - Medical / Library facilities upgraded
    - Implemented concession fee for staff children
- Sustainable Environment Practices
  - Energy saving Initiative launched, Campus level practices introduced
  - Tree plantation drive initiated
  - Dubai: Increased green cover across campus – recognized by the electricity authority for energy conservation

### On Anvil

- New medical and children education policies under deliberation;
- Examined existing staff profile for retraining and promotions





V R Vinayaka Rao



M S Dasgupta



K S Sangwan



B K Rout



M Madhijagan



T G Thomas



D M Kulkarni



S Swaminathan



Bharat Deshpande

## Thrust Area: Infrastructure and Facilities

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### Mission 2012 Objectives

- Modernization and upgrading of all infrastructures in all campuses to be best in class
- Upgrade the external and internal Hardware and Software Platforms and network connectivity (ICT) in all the campuses and have enhanced bandwidth and interconnectivity between the campuses



Mangesh Bedekar



S P Regalla

## Accomplishments

- Physical Infrastructure
  - Pilani Campus: Launched 'Project Parivartan' with a total budget spend of more than INR 400 Crore
  - Hyderabad Campus: Planned completion of various works by 2013 – new library completed and new Auditorium under construction
- Appointed a CIO and delivered a spectrum of ICT facilities such as,
  - MPLS connectivity (for ERP) and high bandwidth across campuses with redundancy of internet service providers
  - Network Security and availability in individual campuses
  - Google as a centralized e-mail and file storage solution
  - Centralized website solution
  - Disaster recovery (DR) set up at Hyderabad Campus
  - Basic projection facilities in class rooms and lecture theaters
  - Hi-Configuration laptops & UPS along with a five year replacement policy for computing devices;
  - Cisco tele-presence implementation undertaken with Alumni support.
  - Conducted Round-table / workshop with external experts to deliberate on future direction of ICT at BITS Pilani

## On Anvil

- Physical Infrastructure
  - Expansion and Modernization works to be planned as a part of new growth plan for Goa Hyderabad and Dubai campuses



Chittaranjan Hota



Arya Kumar



Rajesh Mehrotra



Srikant Routroy



Champak Baran Das



Gajendra Singh Chauhan



Maneesha Bhagchandani



Shazi Shah Jabeen



Gaurav Dar



J V Rao



Meenal Koushik



Meenakshi  
Raman

## Thrust Area: University Administration

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### Mission 2012 Objectives

- Strengthen data collection and feedback mechanism in all spheres of university functions
- Improve the brand image of BITS by finalizing and adopting a 'Brand profile' for BITS and propagating it by effective internal and external communication
- Review & redesign administrative systems and processes
- Form an office of alumni relations and create a charter (mechanism) for directed engagement of Alumni in Institute's growth with a Goal of a Rs 50 Cr. Endowment by 2012.



I Sreedhar



Priti Bajpai



Joy Anuradha



Vidya Rajesh



G Vijaya

### **Accomplishments**

- Brand-consistent University website launched in December 2011
- ERP implementation initiated in 2010 for all University-wide functions. HR module gone live as of March 2012;
- Implemented and institutionalized comprehensive BITS brand - identity guidelines with initiatives such as new style guide, new and improved website, continuous favorable media coverage
- Established Alumni affairs office in 2009 and conducted first Global Meet of Alumni in partnership with BITSAA with 1200 participants; also formed the Alumni Advisory Council with first meeting conducted in Q1 2012 and second meeting in Q3 2012
- Rolled out \$1.55 million worth BITS Connect 2.0 to connect all campuses with Cisco Tele-Presence

### **On Anvil**

- ERP modules - Campus Solution and Finance module implementation underway
- Review & redesign of administrative systems and processes deferred to 2013



G Raghurama  
Champion of Thrust  
Area: Academic  
Programs & Pedagogy



Kris Ramachandran  
Champion of Thrust  
Area: People



V S Rao  
Champion of Thrust  
Area: Research &  
Consultancy



R K Mittal  
Champion of Thrust  
Area: Campus Life



K E Raman  
Champion of Thrust  
Area: University  
administration &  
Infrastructure



G Sundar  
Steering Team member



R N Saha  
Steering Team member



Manoj Fitkariwala  
Steering Team member

### Special thanks to



LK Maheshwari  
Professor Emeritus-cum-Advisor



M Ramachandran  
Ex-Director, Dubai Campus



Manish Dave  
Mission 2012 Project



Sachin Arya  
Mission 2012 Project

## Message from Thrust Area Champion .....

Dear all,

The last 3 years have been a memorable journey for us . In the history of BITS, these years will be remembered for many of the initiatives we have taken that led to transformational changes in BITS.

Mission 2012 has been an enriching experience. We worked as a team, learnt many new things together. We built on our strengths. What is remarkable is the passion and commitment with which the teams worked. Everyone in BITS, being part of Task force or otherwise, contributed to Mission 2012 with enthusiasm.

It is not easy to change our mindsets overnight. But we were successful in questioning our long held beliefs, let go those whose time has passed, and embrace new ones.

We have achieved quite a few and missed some. But to quote Vincent van Gogh, "Great things are done by a series of small things brought together."

We still have much to do. Our determination and hard work will take us to the heights that we aspire for.

Personally, being the convener of the task force for preparation of Vision 2020 document and then a member of the steering team of Mission 2012 has been a rewarding experience. To each one of you, a big "Thank you" for being a part of this journey.

With warmest regards,

Raghurama G

## Message from Thrust Area Champion .....

Dear Colleagues,

Thank you one and all, for welcoming and accepting me into your midst, as we walked and continue to walk on this expedition. Walking side by side with you, laughing with you, arguing and disagreeing with you, changing my own strong views, trying to change yours, eating endless dahi-samosas and drinking countless cups of chai with you, and together realising most of our goals, has been a rejuvenating and personally enriching experience. Thank you very much!

My sincere congratulations for what you have achieved! You have reason to be proud. A journey has an end; an expedition is constant discovery. You have shown that it is possible for a 50-year-old institution to believe in renewal, to undertake the hard road to that renewal, and tirelessly keep walking on that road. The reward is the satisfaction that you contributed to this renewal that is happening around us and on your watch.

Our vision for 2020 is lofty; but attainable if we redouble our belief, our resolve, and our collective effort. Becoming one of the Top 25 Science and Technology Institutions in Asia is an attainable milestone on this expedition. Restlessness with the status quo, a deep belief that we can constantly renew ourselves, and the BITS spirit to keep setting higher standards and goals will get us there!

My best wishes to each one in the BITS community for the journey ahead. I look forward to the opportunity of continuing this journey with you. To paraphrase Robert Frost: *we have miles to go before we sleep!*

Warmest personal regards

Kris Ramachandran

## Message from Thrust Area Champion .....

Dear all,

The new BITS policy of promoting excellence in research and consultancy as envisioned in Vision 2020 has given a big fillip in strengthening research programmes, motivating faculty and generating the right awareness in both academic circles and industry. As part of Vision 2020, various efforts have been incorporated to further strengthen the Ph.D. programmes. Initiatives have been taken to simplify various processes ranging from admission to graduation and decentralization of decision making. Dynamic measures have been taken for publicity through advertisements and enhanced financial assistance. And they have definitely yielded excellent results in terms of increased number of applications and admissions.

With a view to motivate existing faculty members and attract new talent, several novel policies like seed grant, research initiation grant, sabbatical, industry immersion etc have been introduced. Further, a new incentive of sharing 60% of the external grant overheads towards faculty development has been announced. This measure in particular has helped faculty to attend various national and international conferences and use some of the funds for their research activities and professional development.

One of the important recommendations of the task force is to appoint a Chief Research and Development Officer for business development and for enabling the faculty members in formulating research projects for public and private enterprises and continuous monitoring of the proposals thereby increasing the sponsored research and development grants. This initiative has indeed boosted the number of Sponsored Research and Development projects submitted and consequent rise in the funds generated in last 2-3 years.

In future, we should aim to further leverage our linkages with industry more effectively in obtaining Sponsored Research and Consultancy projects. In order to accomplish this task a good research profile of the campus-wide faculty, needs to be prepared and displayed. There is a paradigm shift needed from the publications mode to patents, processes development and problem solving mode. We need to tap the private and public sector industries for sponsored research projects in addition to government funding agencies. We need to formulate our IPR policies and pronounce it to the funding agencies and faculty.

The flexible research policies, good laboratory infra-structure as well as the adequate financial assistance will motivate a good number of faculty and students to dedicate themselves to research programmes on campus and help in reaching our Goals of Vision 2020.

Regards

V S Rao



## Message from Thrust Area Champion .....

*Mission 2012 was one of its kinds*

*Oh! what an innovation they did Find !*

*Went thru the Grind*

*to develop a CHAMPIONS Mind !*

*Indeed a Marvellous Experience*

*All Opined !!*

I echo and reverberate the feelings of all of us that it was an enthralling and unique experience.

"They will have to find the right balance between continuity and change, will have to find innovative and contemporary ways without ignoring or even destroying old and time-tested practices and tools that worked and still work" - Peter Ferdinand Drucker. Continuity and Change, both are inevitable.

The six thrust areas originated through a massive collective experience of all at four campuses and the strong core team with Campus Life being the oxygen in the blood impacting the rest! Through Thrust Areas, many innovative ideas have been injected, which has led to finding a right balance between continuity and change.

In a service organization like ours, it is the leadership, which is a key function. This function leads to the concept of striving for excellence in every endeavour that it undertakes, which in turn leads to benefitting every member of the community and all stakeholders. I am sure with a great team like ours with Dr. Kumar Mangalam Birla at the helm, will help us achieve new highs and be one among the best in world.

The entire lot of Campus Life Task force members and leaders, bubbling with enthusiasm, have done their bit in making things happen from Engagement Survey to speed breakers on the campus roads.

Imperative issues pertaining to campus life from medical policy to education facilities for staff children are in final phase with decision makers. The accomplishment of the two taskforces in meeting the goals has been a grand success. No words can convey the experience. Great teamwork and execution!

Taskforce members, who created extraordinary bonding not only within but also with faculty, staff and student members. I am sure this bond will be cherished for years to come. I feel privileged and proud to be a part of this team.

i am falling short of words how to thank all who worked in the thrust area Campus Life, and look forward to work and contribute towards the 'Better Campus Life'.

Let us all together strive hard to make the next phase most successful one.

Wishing everyone all the very best,

R K Mittal

## Message from Thrust Area Champion .....

Dear all,

The 'University Administration' Part of Mission 2012 focuses on the importance of information flow between various subsystems in the university. In order that well informed decisions can be taken based on hard data, it was decided to integrate all existing systems in various divisions and campuses into a centralized database. People soft ERP system was chosen for this purpose with Wipro as the integrator. When fully implemented in all the four campuses, this would be the first of its kind in an Indian university covering all aspects of university administration from admission to graduation for students and from recruitment to retirement and beyond for faculty and staff. Considerable progress has been achieved mainly due to the cooperation of all process owners. This has been a learning experience for BITS which was hitherto dependant on internal resources for implementing such a project.

External interface for the university with its various stakeholders is equally important. A task force on branding has brought about a refreshing change in its front face by adopting brand guidelines in all its communication including its website with the help of an external resource.

Alumni, being a valued stake holder of the university, got the full attention of another task force. Relationship with alumni has been brought into a more formalized track.

Under the 'Infrastructure' part of Mission 2012, Each campus team has been engaged in the task of lab upgradation and supporting infrastructure needs. They have been deriving valuable inputs from other task forces on curriculum redesign and research.

While 'Project Parivarthan' has already been launched for upgradation of Pilani campus, the blue print for growth at other campuses is on the drawing table.

Looking at the vast scope of penetration of ICT in all aspects of modern university education, a separate task force has been concentrating on upgradation and the future road map of ICT infrastructure, keeping in mind the quantum leaps happening in technology like cloud computing.

With warmest regards

K E Raman





**“Anyone who has never made a mistake has never tried anything new.”**

*- Albert Einstein*

**“..... vision has no boundaries and knows no limits.  
Our vision is what we become in life.”**

*- Tony Dungy (American Football player and coach)*





**BITS Pilani**  
Pilani | Dubai | Goa | Hyderabad



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