



BITS Pilani - K. K. Birla Goa Campus
Presents

quark
2012

Challenge, Compete, Evolve

THE ANNUAL INTERNATIONAL TECHNO MANAGEMENT FESTIVAL
February 3-5th, 2012

Foreword from the Director



Ever since its establishment in 2004, the BITS Pilani K. K. Birla Goa Campus has become a melting pot of engineering excellence and industrial innovation, synergising the beauty of academic theory with the spark of practical experience. Following a model of curriculum that emphasizes on the academic-industrial linkage, our students are, in their process of learning, exposed to the realities of the professional environment, primarily through our one of a kind Practice School Programs.

A shining example of the implementation of this model is Quark. Quark, the annual techno-managerial and innovation festival of the BITS Pilani K. K. Birla Goa Campus has grown manifold since its humble inception in 2006. Quark achieved a cult status on the national level with its 2008 iteration and made a quantum leap in 2010, when it went international for the first time. The fest has been graced by the presence of distinguished personalities from various fields, the likes of former president Dr. A.P.J Abdul Kalam, Noble laureates Sir Harry Kroto[Chemistry,1996] and Prof. Douglas Osheroff [Physics, 1996], the Father of Wifi, Mr Vic Hayes have graced the Quark dais, in addition to other leading innovators from the emerging sciences.

With a plethora of competitions and exhibitons to challenge one’s expertise as well as palpate ones inquisitiveness, Quark sets the stage for face-offs between the best minds in the disciplines of engineering, science and management. It organizes workshops in various technical and corporate areas, giving participants an opportunity to tread new fields by gaining hands-on practical knowledge from eminent professionals. Quark offers a platform to budding innovators to exchange ideas and showcase cutting edge research through special events such as the Paper Presentation and Open Showcase.

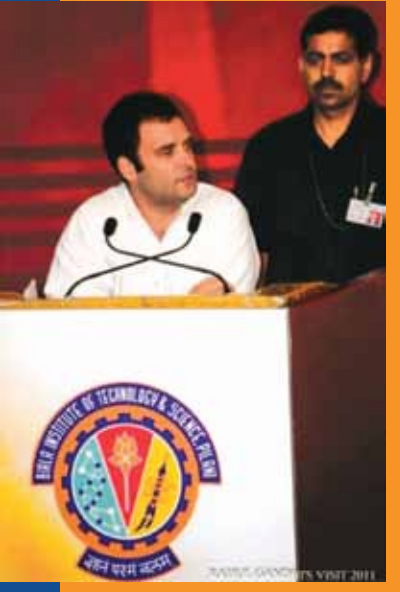
With a strong belief that technology is the answer to the chronic problems plaguing modern society, Quark presents several unique initiatives which focus on Green Energy, Urban Waste Management and related issues. BITS MUN (BITS Model United Nations) is an academic simulation of the United Nations organized as a part of Quark, that seeks to educate participants about civics, current events, effective communication, globalization and multilateral diplomacy. Apart from the on-campus activities, Graviton is an off-campus initiative of the Quark banner, aimed at promoting innovation through events, talks and workshops held across numerous cities of India.

With such a remarkable prelude to it, I hope that Quark 2012 will emulate and perhaps surpass the successes of its predecessors, both in terms of magnitude and ideas. Good Luck!

Dr. K. E. Raman
Director,
BITS Pilani K.K. Birla Goa campus

BITS Pilani - Goa: The institute

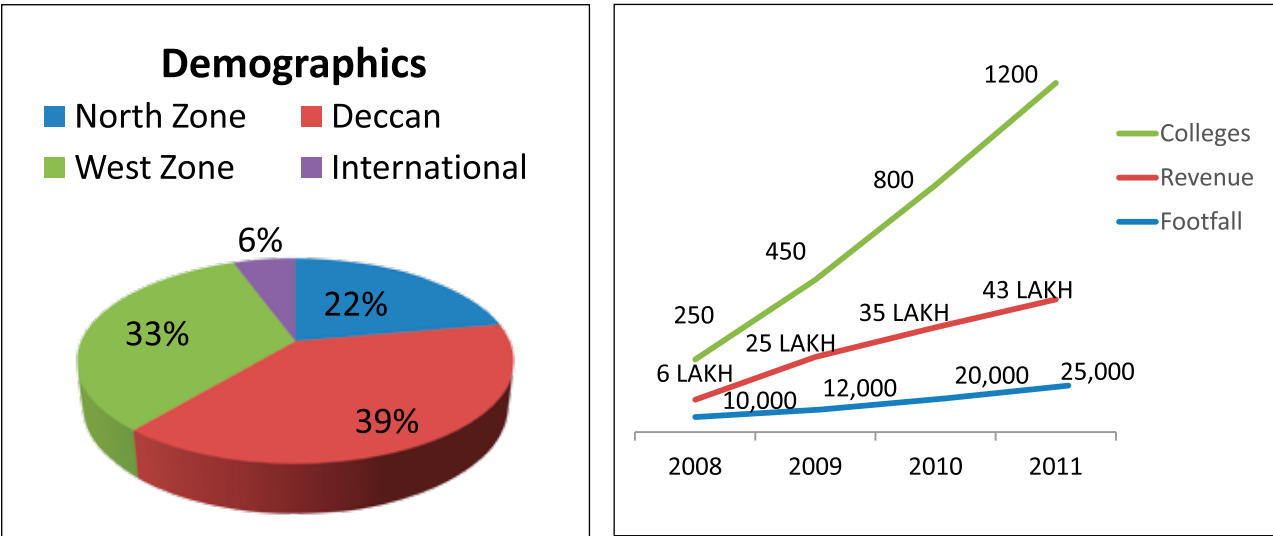
- The country’s highest ranked private university
- Inaugurated in 2004 by Honorable PM Shri Manmohan Singh.
- Renamed after Shri K. K. Birla in 2010 by Shri Rahul Gandhi.
- Unique industry association with over 300 multinationals for The Practice School System



188 acres
2400 students

Introduction

Since its inception in 2006, Quark continues to make excellence a habit and innovation routine; growing at an astonishing rate to become the largest of its kind in the region, and a formidable contender on the national scene.



Figures quoted below are approximates for Quark 2012

30 events
30,000 footfall
1800 colleges

Highlights

- Dr. A. P. J. Abdul Kalam inaugurated Quark 2009
- Mozilla firefox day witnessed a series of guest lectures and events from the Mozilla core team in San Jose, California
- Quark 2010 inaugurated by Dr. Kumar Mangalam Birla
- Curtain Raiser by Pandit Hariprasad Chaurasia
- WiCamp 2010: Wipro's Innovation Camp
Saw a series of guest lectures from various distinguished professional as well as students from all across India followed by an interactive session with the students.



Competitions

Design and Build: With revved up engines, and smooth flying copters, coupled with events from the chemical stream, Design and Build at Quark 2012 is sure to entertain one and all. (Over 2500 participants)

Corporate: This category is for those who enjoy the high stakes - high reward system and are gifted with an uncanny ability to interpret numbers. With events like Intellect and Wall Street Revolution, Corporate shall literally 'give you a run for your money' (Over 2000 participants)

Roboficial: For those who like to invent the future, the buck stops here. Roboficial holds exciting events in image processing, line following and the like. (Over 2000 participants)

Programmers' Inc: Designed for the computer geeks, this category involves events such as Binary Pirates, Geek N Latin etc. Testing the coding abilities with a twist has always been Quark's speciality. (Over 1500 participants)

Spark: "The new rules of Electronics - Build it and plug it - If it sparks, unplug it - If it smokes, turn it off - If it heats up, check it, and plug it back - Don't be afraid of trying something new." For the electronic enthusiasts, Spark presents a plethora of events. (Over 800 participants)

Miscellaneous: Entertainment, the word that defines this category. SUDOKU, Spell Bee, QUARK Open Quiz, MAD (Marketing, Advertising and Design) and The Amazing Race, are sure to give your brains a nice recreation. (Over 1500 participants)



Competitions

Burnout: Burnout at Quark 2011 saw some elegantly designed IC car models pitted against one another in an obstacle race on an extremely challenging race track. An event that successfully merged elements of Mechanical Engineering, Electronics and plain racing skill, Burnout was one of the prime highlights of the festival, drawing excited crowds like none other in droves.

MATKA: God Like Gaming: Unleash the Gamer inside you and get ready with your gear. This QUARK a three day action packed extravaganza awaits you. Meet gamers from all across india at M^K i.e. the gaming competition of QUARK .See the top notch players, battle it out for amazing prizes and fame. Over 200 of the nation's best clans fought it for the title of 'The Ultimate Gaming Champion'.

Open Showcase: Open Showcase provides a platform to exhibit innovative models/projects which may be working or non working, in various disciplines like Computer Science and Information Systems, Electrical, Electronics and Instrumentation, Chemical and Mechanical, Civil and Architecture, Pure Sciences and Management.

Androimeda: The world is moving to the handset size. Quark 2012 bring to you for the first time an event for the App Junkies. So take a leap into app development and may we see a few Angry Birds and Fruit Ninjas at BITS Goa!



Competitions

BITSMUN: BITSMUN is a platform for the best minds in the country across different age groups to look at the world from 192 different perspectives. It is the epicenter if imagination and innovation. At this stage, all about making the world a better place.

More than 2000 students from across India, The Subcontinent, Dubai and Australia were part of BITSMUN 2011 and we expect participation to increase two fold for the summit of 2012.

Robokombat: Destroy Survive Win

..."When India's deadliest battle bots take to one another with all they have, Flame, Flipper, Saw and Axe, carnage and annihilation are at their MAX!" HISTORY SET TO REPEAT ITSELF

With the History of 200 teams participating last quark, this Quark, ROBOKOMBAT is all set to get bigger, better and deadlier. Expect nothing less than the ultimate robowarfares as teams nationwide go nip and tuck. The lethal combination of engineering and arrant intention of destruction is all laid to put the arenas on fire, nothing but more sparks orbiting around the arenas.

NO MERCY, NO CLEMENCY, JUST ONE SURVIVOR



Initiatives

Quark has always harnessed a vision of developing and guiding the future generation. In context, Quark 2011 presented initiatives and competitions that directly targeted the chronic problems of today's modern society. The innovative solutions to the same were explored through various guest lectures on sustainability, environment and energy consumption; environmental exhibitions, and events like **Bhagirath**, **Gangreen** and **Eco-Architect**. These initiatives were a suitable platform for the socially conscious to come together and eke out implementable solutions to the various hurdles. With an enthusiastic level of participation, Initiatives proved to be a great success, promising to build on its confident start in the future.

Graviton is an initiative by the students of BITS Pilani Goa to reach out to students from all across the country through workshops, guest lectures and events. Graviton aims to be a floating festival which unlike other events is in play throughout the year. Graviton witnessed a participation of over a 1000 in quality workshops like Ethical Hacking and Robotics from all across the country.



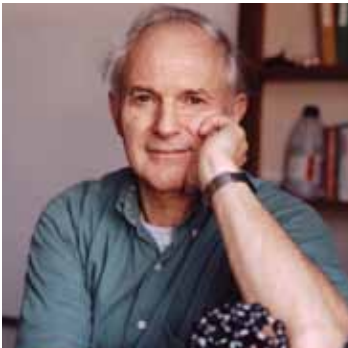
BrainoPiad: The age of talent has shifted from 18 to 15. Its time we look forward to the schools for more encouragement. We bring with us Brainopiad, an Olympiad to find the best brains of India in school and reward them for their rigor for competition.



Urja: Save Today Survive Tomorrow, an initiative to promote renewable energy resources and conserve energy was launched by the BITS community in 2010.

Guest Lectures

History has it that genius inspires genius.
Igniting minds since the very inception of Quark, the guest lectures give a taste of a world of knowledge and learning which is much beyond what we have already experienced. Quark 2011 witnessed enlightening talks by notable speakers, including:



Sir Harry Kroto

1996 Nobel laureate in Chemistry for the discovery of C60 Buckminster Fullerene



The Mozilla Core Team

Quark 2010 witnessed the presence of **Michelle Baker**, Chairman and Arun Ranganathan, Mozilla Group along with the core developers of the Firefox browser



Vic Hayes

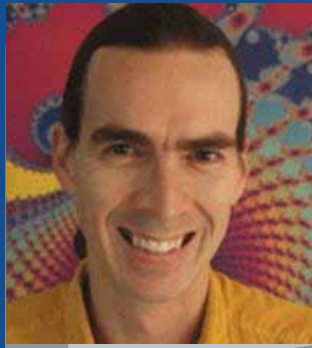
The 'Father of Wi-Fi' and chair of the IEEE working group for wireless LAN

Guest Lectures



Douglas Osheroff

1996 Nobel Laureate in Physics for the discovery Super fluid phase of He



Jonathan Wolfe

Fractal Connoisseur and Founder, Fractal Foundation, New Mexico, USA



Chris Csikszentmihályi

Research Scientist from MIT Media Lab gave a presentation during Quark 2010



Ravikiran Aranke

Ex-MD, Red Hat

Workshops

Quark, offers the inquisitive minds a platform to placate their scientific thirst and tread new fields under the guidance of the best professionals, through its numerous Workshops. Through the workshops, students keep abreast with the latest technological breakthroughs and gain hands-on experience in new areas. Quark '11 had workshops on 'Development of applications on win7' by Microsoft, 'Parallel Computing Architecture' by Nvidia, among others from different spheres of science and management. In the run upto Quark '12, workshops on 'Underwater Robotics', 'Ethical Hacking' and 'Remote Controlled Cars' were conducted as Pre-Quark events, which garnered enthusiastic on-campus participation. Some of the workshops conducted in the past include:



CUDA workshop By NVidia



PSoc workshop By Cypress Semiconductors

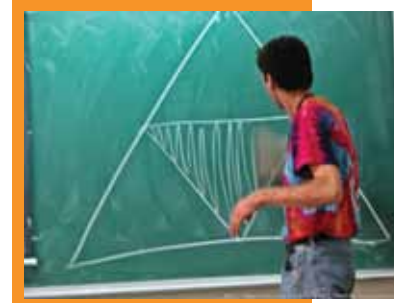


App workshop By Microsoft



Six Sigma workshop By KPMG

Fractals workshop By Jonathan Wolfe



Conference

The BITS Green Conference, 2012

An initiative on the part of Quark 2012, BITS Pilani K. K. Birla Goa Campus.

While it is now common knowledge amongst the educated class that the fossil fuel reserves available to us have a fast-approaching expiration date, measures being taken to prevent or in the least mitigate the oncoming crisis are still being termed as under-developed or under-scaled.

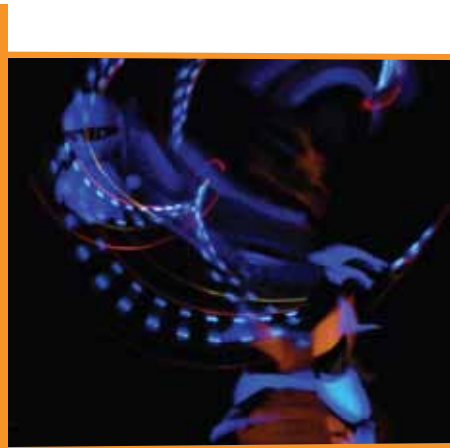
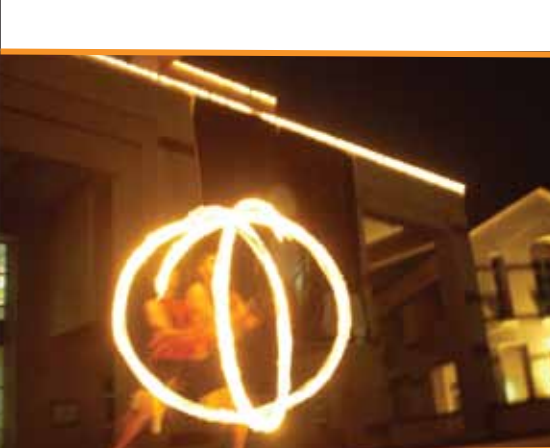
Aimed at working towards making renewable energy a more viable commodity for the masses, BITS G-Con will touch upon various aspects of both research and mass-production in the related fields, in addition to acting as a platform for the exhibition of existing and burgeoning student-research under the scope of alternative energy sources. The conference will not only play host to enlightening talks and demonstrations from distinguished authorities involved in the day-to-day development of the field, but also include lectures from relative novices who have recently shown unmoving commitment towards the development of a better tomorrow. With a plenitude of exciting performances, informal events and discussions, it thus promises to hold its own amongst its various counterparts which often turn out to be monotonous and non-interactive affairs.



‘An aurora is a natural light display in the sky particularly in the high latitude regions.’ Aurora at BITS Goa are the spectacular professional performances during the three nights of Quark where the amalgam of technology, innovation and entertainment mesmerize the audience and leave them at awe. Undoubtedly the biggest crowd puller, Aurora proposes to be bigger than ever before, this Quark.

Previous editions of Quark have seen performances by:

- **Feeding the Fish (Performers at the Athens Olympics, 2004)**
- **The Carnival of Divine imagination**
- **Launch of Acyut: India’s first indigenously developed humanoid by BITS students**
- **Fire Shows**
- **Enthralling performances of Mime, Drama, Dance and Music**



- Largest of its kind for an educational institution in the country.
- Seating capacity of 2200
- 2000 decibels of pure sound
- Equipped with formidable 24'-18' projection screen which can be used to show commercials.
- Host to a variety of professional performances like FEEDING THE FISH and THE CARNIVAL OF DIVINE IMAGINATION
- Forms a venue for various special events and showcase during the festival.
- Ideal for product display

Branding opportunities:

- Screening of Advertisements on the Projector Screen
- Dropdown flexes (25 x 4ft)
- Ideal for product showcase and launch
- Host to Customized promotional events and informal events



B-Dome (Outdoor)

- Face of the Campus and the Festival
- Capabilities of a mega outdoor stage with maximum brand exposure
- In clear visual proximity from Lounge and the Food courts.
- Hosts Event finale for crowd pullers and special showcase outdoor events and performances.

Branding opportunities:

- Presence in Backdrops of 20ft by 20ft during the Quark nights
- Vertical drop down banners and flexes of 25 ft by 4 ft flanking the stage area
- Space for setting up corporate stalls during nights for direct interaction with students and participants



Lecture Theatre & Library Complex

Lecture Theatre

- Totally 4 Lecture theatres on campus
- Seating capacity of up to 500
- Equipped with a 10'-8' projection screen and high quality AV system.
- Hosts several Workshops and Guest lectures throughout the year, including those at the festival.
- Ideal for discipline specific showcase of technology, lectures by companies, workshops on varied topics.

Library Complex

- Has been a host to numerous corporate stalls and product showcase
- Previously Hosted student project showcases with entries from across the country.
- Location for many informal and crowd gathering events
- In close proximity to the Food Court and Computer Centre



Partner With Us

Why Partner Quark 2012?

- Name and Logo synonymous with one of India's largest technical festivals
- Extensive Brand exposure
- Opportunity to witness some of the brightest technical minds in action
- Enhance corporate interactions
- Opportunity to customize Events as per your needs to suit your requirements
- Quark is not restricted to just 3 days of the festival but conducts workshops throughout the year (under the Pre Quark and Graviton Banner), thus providing widespread Brand

Exposure

- Opportunity to establish a long term association with the campus through the Practise School Internship system
- Quark boasts of not just the finest local participation but also an impressive international quotient of participants and lecturers



Brand Visibility

Brand visibility Sponsorship Opportunities:

Pre- Festival

- Association with the name of the festival.
- Logo presence on posters sent to over 1000 colleges reaching out to more than 1.4 million students.
- Logo presence on corporate invites sent to over 1000 corporate professionals
- Presence on the official QUARK website- www.bits-quark.org

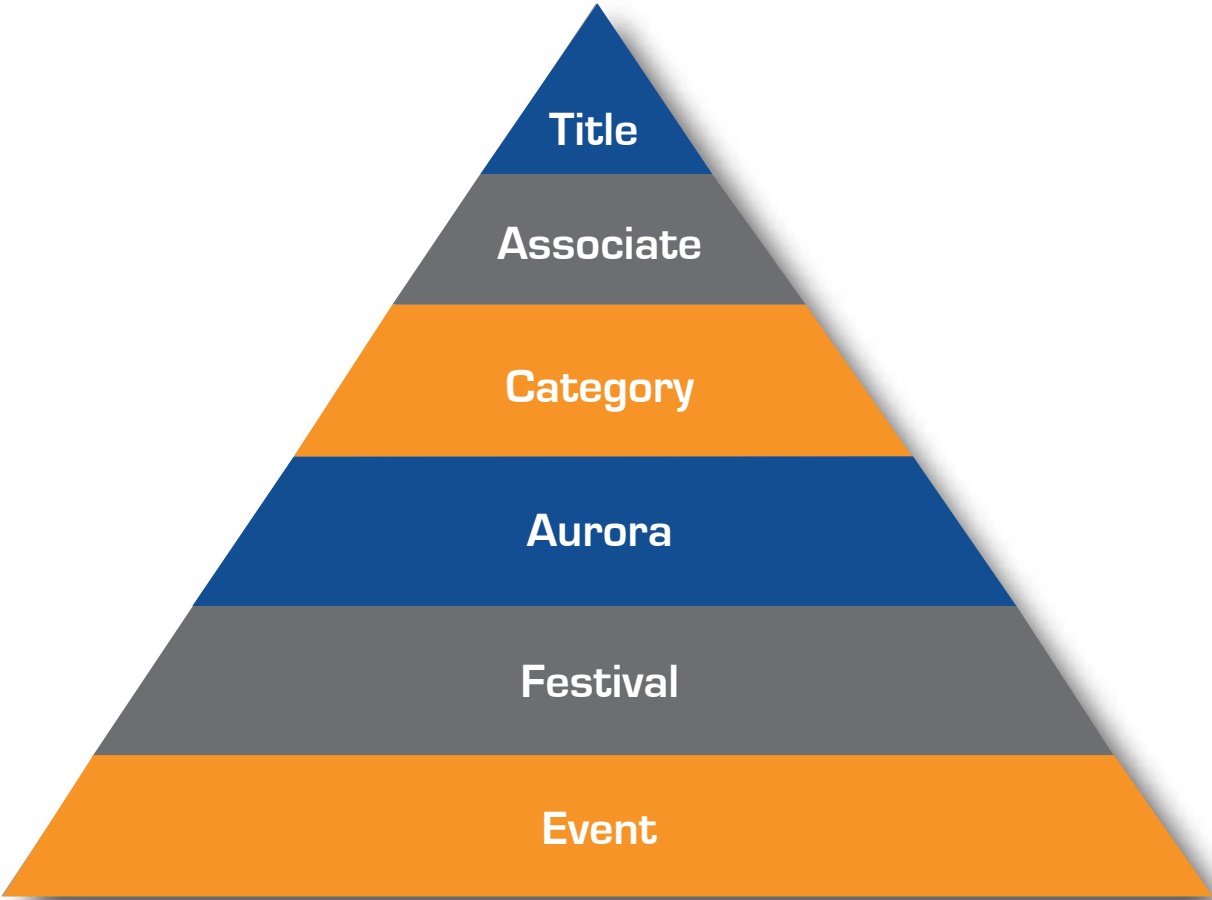
During Festival

- Banner space in the Campus of BITS, Pilani-Goa Campus.
- Advertisements on Screens in Lecture Theatres, Auditorium and Outdoor Venues.
- Regular compere mentions of all our sponsors.
- Logo presence on passes and schedules; and on/around the mascot of QUARK.
- Distribution of publicity material through Stalls allotted for the purpose.
- Advertising space in festival newsletters during all three days of QUARK.

Post-Festival

- Logo presence on the next year's Marketing Brochure which reaches out to over 300 corporate houses.
- Logo presence on the next year's website in "Previous Sponsors" section.
- Logo and Company integrated Event profile on the Lookback eBrochure sent to all Sponsors and over 500 companies.

Sponsorship Categories



Sponsorship Avenues

	Title Sponsor	Associate Sponsor	Category Sponsor	Aurora Sponsor	Festival Sponsor	Event Sponsor
Branding Space On Campus	■ ■ ■ ■ ■	■ ■ ■ ■	■ ■ ■	■ ■	■ ■	■
Visibility During Special Nights	■ ■ ■ ■	■ ■ ■	■ ■	■ ■ ■ ■ ■	■ ■	
Visibility During Events	■ ■	■	■ ■ ■ ■			■ ■ ■ ■ ■
Branding Space On Website	■ ■ ■ ■ ■	■ ■ ■ ■	■ ■ ■	■ ■ ■	■ ■	■ ■
Preference For A Customized Event/Guest Lecture	■ ■ ■ ■ ■	■ ■ ■ ■	■ ■ ■	■	■ ■	■ ■ ■
Media Presence (For Festival)	■ ■ ■ ■ ■	■ ■ ■ ■	■ ■ ■	■ ■	■ ■	■
Media Presence (During Festival)	■ ■ ■ ■ ■	■ ■ ■ ■	■ ■ ■	■	■ ■	■
Media Presence (Post Festival)	■ ■ ■ ■ ■	■ ■	■ ■	■	■	■

Media

National Media:

Extensive coverage in newspapers like the **Times of India**, **The Business Standard**, **The Hindu** and magazines like **T3**, **Chip**, The Sunday Indian apart from radio coverage on **BIG fm**.

Local media:

Covered by all Major Local Newspapers and TV channels like Goa Today, Navhind Times, Gomantak Today, and Goa 360

Online Media:

Solid online presence through our website and Online events. Interaction and information through all major social networking. Interaction and information through all major social networking sites and frequent online press releases.

Quark 2012 shall for the first time see the release of a 'Tech Blog' where the focus is on the article, not just on the festival. Technology evangelists and writers shall contribute articles and write ups based on recent findings, discoveries and fun-to-do facts about science and its beautiful facets to cater to an audience across the globe.

Campus Publicity:

Through on-campus publications like the BITS Herald and publicity packages like posters, invites, interactive CD and PR calls to over 1500 colleges.

The Business Standard
press releases

BITS Herald

Tech Blog

Times of India

BIG fm

Campus Publicity

Goa 360

Online Media

Navhind Times

radio coverage

The Hindu
Gomantak Today
Campus Publicity

Tech Blog
Online Media

BIG fm

social networking

Goa Today



Times of India

Local media

Campus Publicity

National Media

India's second humanoid robot unveiled at Quark



Goa Today
Online Media



facebook



Goa Today

THE NAVHIND TIMES

invites Posters
Campus Publicity

Acknowledgements

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Prof. Bijendra Nath Jain (Vice Chancellor, BITS Pilani University)

Prof. K. E. Raman (Acting Director, Bits Pilani-K.K. Birla Goa Campus)

Prof. Suresh Ramaswamy (Faculty Coordinator, Quark 2011)

Dr. A.P.J. Abdul Kalam (Former President of India)

Manjula Rao (Head Programmer, British Council, Mumbai)

Dr. N. P. S. Varde (Director, Goa Energy Development Agency)

Varun Awasthi (President, AIESEC, Pune)

Sri. Rajeev Chandra (National Information Officer, United Nations Information Centre)

Kshemendra Narain (Head, Sales and Marketing, Belden, South Asia)

Shri. S Ananthasayanam (Director (Finance), Goa Shipyard Limited)

Dr. S. K. Saxena (Director General, DGFASU, Ministry of Employment and Labor)

Sri V. Raghu Ram (Regional Manager, National Research Development Corporation)

Dr. Vallabh Bapu Damodker (Founder Chairman, Green triangle Society)

Previous Sponsors



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