# Newspaper Clips
## April 23, 2012

Navbhart Times ND 23/04/2012 p-2

# नेवी की मदद करेगा यह आईआईटी का प्रोजेक्ट

## नये एक्टिव सोनार क्लासिफायर्स पर हो रहा है काम

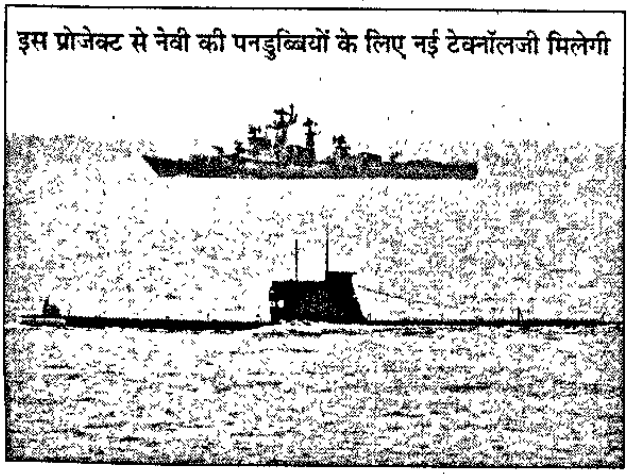
### क्या होगी खूबी

दुश्मन की और फ्रैंडली पनडुब्बियों में फर्क करने में होगी मददगार

आईआईटी दिल्ली और बीईएल मिलकर कर रहे हैं काम

इस साल के आखिरी तक ट्रायल शुरू होने की उम्मीद

इसके बाद नेवी अपने सिस्टम में एक्टिव सोनार क्लासिफायर्स को शामिल करेगी



इस प्रोजेक्ट से नेवी की पनडुब्बियों के लिए नई टेक्नॉलजी मिलेगी

पीटीआई ॥ नई दिल्ली

**आईआईटी दिल्ली** और भारत इलेक्ट्रॉनिक्स लिमिटेड (बीईएल) मिलकर भारतीय नौसेना की पनडुब्बियों के लिए एक नई तकनीक इजाद करने के प्रोजेक्ट पर काम कर रहे हैं। आईआईटी दिल्ली में डिवेलप हो रहे एक्टिव सोनार क्लासिफायर्स दुश्मन की और फ्रैंडली पनडुब्बियों में फर्क करने में मददगार साबित होंगे। इसके लिए ट्रायल इस साल के आखिर तक शुरू हो जायेगा।

आईआईटी दिल्ली के सेंटर फॉर अप्लाइड रिसर्च इलेक्ट्रॉनिक्स के प्रोफेसर राजेंद्र बहल के मुताबिक, बीईएल का एक तकनीशियन आईआईटी दिल्ली में मौजूद है। वह हमसे टेक्नॉलजी ले जाएंगे। इसके लिए हम अभी टेस्टिंग कर रहे हैं। वे हमारे सिस्टम को उनकी मौजूदा सोनार टेक्नॉलजी में शामिल करेंगे। हमें उम्मीद है कि इस साल के आखिर तक इस सिस्टम का ट्रायल शुरू हो जायेगा।

प्रोफेसर बहल ने लेफ्टिनेंट कमांडर अक्षय आर. प्रभु और प्रोफेसर अरुण कुमार के साथ मिलकर यह तकनीक तैयार की है। यह सिस्टम निगरानी करने के साथ ही दुश्मन की और फ्रेंडली पनडुब्बियों में फर्क करने में खासी मदद करेगा। प्रोफेसर बहल बताते हैं कि हमारा डिपार्टमेंट डिफेंस से जुड़े प्रोजेक्टों पर काम करता रहा है। हम नौसेना और डीआरडीओ के स्टूडेंट्स को भी ट्रेनिंग देते हैं। हमारी तरफ से डिवेलप किये गये इस तरह के प्रोजेक्टों का नौसेना इस्तेमाल करती है। उसे हमारे प्रोजेक्टों से काफी मदद मिली है।

### क्या होता है सोनार?

साउंड नैविगेशन एंड रेंजिंग को सोनार कहते हैं। इस तकनीक का इस्तेमाल आमतौर पर पानी में होता है। एक्टिव सोनार सिस्टम के जरिये पानी की सतह पर या पानी के अंदर मौजूद पनडुब्बियों या जहाजों का पता लगाया जा सकता है और उनसे कम्यूनिकेट किया जा सकता है।

### कैसे काम करेगी तकनीक?

आईआईटी दिल्ली में नये तरह के एक्टिव सोनार क्लासिफायर्स पर काम हो रहा है। इसमें टारगेट से इको होकर लौटने वाली सोनार तरंगों का अनैलिसिस किया जायेगा। इससे टारगेट के साइज, शेप और बनावट का पता लग सकेगा। इससे पानी के अंदर पनडुब्बियों की ताकत बढ़ेगी।

Hindustan ND 23/04/2012 P-6

# आईआईटी और नेवी मिलकर बनाएंगे सोनार क्लासीफायर

**नई दिल्ली।** भारतीय प्रौद्योगिकी संस्थान, दिल्ली और भारत इलेक्ट्रॉनिक्स लिमिटेड (बीईएल) संयुक्त रूप से नया सोनार क्लासीफायर्स बना रहे हैं। यह सोनार क्लासीफायर्स भारतीय सबमैरिन के लिए बनाया गया है। यह दुश्मन के सबमैरीन और अपने सबमैरीन को पहचानने में मददगार होगा।

सेंटर फॉर अप्लायड रिसर्च इलेक्ट्रॉनिक्स के राजेंद्र बहल का कहना है कि हमारे पास बीईएल के टेक्नीशियन है। वह हमारे सिस्टम को अपनी सोनार टेक्नोलॉजी के साथ जोड़ रहे हैं। उम्मीद है कि इस वर्ष के अंत तक इसका ट्रायल शुरू हो जाएगा। इस तकनीक में प्रो. बहल, लेफ्टिनेंट कमांडर अक्षय आर प्रभु और प्रो. अरुण कुमार मिलकर इस तकनीक को विकसित कर रहे हैं। प्रो. बहल का कहना है कि हमारा विभाग रक्षा आधारित प्रोजेक्ट का निर्माण करने में लगा हुआ है। इसके लिए छात्रों को प्रशिक्षित किया जा रहा है। ये छात्र खुद को मास्टर प्रोग्राम के लिए नामित करेंगे।

नए सोलर सिस्टम में इको लक्ष्य पर पर वापस लौट आती है। इनको सोनर पिंग द्वारा इंसोफाइड किया जाता है। इसका विश्लेषण किया जाता है। इससे लक्ष्य का पता करने में आसानी होती है। लक्ष्य के भौतिक गुण-धर्म के आधार पर ध्वनियों को पहचाना जाता है। **(प्र.सं.)**

DECCAN HERALD ND 32.4.12 P-4

# Undergrads keen to take up global internships

**NEW DELHI, DHNS:** Over 100 undergraduate students from various universities in the city showed their interest to take up international internships. A programme was organised on Sunday by AISEC, an NGO to encourage students for students to take up global internships during their summer vacations.

The NGO helps young people realise their potential and make a difference to society.

"Some 300 students from various universities like Delhi University (DU), Indian Institute of Technology (IIT) Delhi, Jamia Millia Islamia, Indraprastha University came to the seminar. Around 100 students had a positive response for internships provided by us," said member of AISEC, IIT Delhi chapter.

The internship has two programmes: Global Internship Programme (GIP) and Global Community Development Programme (GCDP).

"For GIP the firms give accommodation, pocket money and stipends, for GCDP the student has to pay the air ticket, though there is no mention of stipends in the contract, we make sure it is a comfortable stay for the students. Also the whole idea about GCDP experience of work in an international NGO, in GIP the stay extends from three to six months," said the member.

Students found the idea of an internship abroad refreshing. The speakers, Madhu Kishwar, founder editor of Manushi magazine, Shiv Dravid, founder of Viewspaper, an opinion website, spoke on women entrepreneurship, social impact of youth and ups and downs of being a young entrepreneur.

AISEC has partnerships for international internships with Kerney, Trident, Oberoi, ITC, Slideshare, I-megh, Co-globe consultancy. "We have also roped in NGO's like The Earth Saviors Foundation, and Cankids," said the member.

Times of India ND 23/04/2012

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# Hi-tech Navy plans to have only BTech officers

## Wants All Personnel To Have Technical Knowhow

Rajat Pandit | TNN

**New Delhi:** Slowly emerging as a powerful three-dimensional "blue-water" force to protect India's geo-strategic interests, the Indian Navy is now also focusing on creating high-tech "sea warriors".

The naval force, in fact, is steaming ahead with plans to ensure that all its new officers have BTech degrees because of the unprecedented expansion in warship technology. "The advanced platforms we are inducting, with their state-of-the-art weapons and other systems, will require all officers to have cutting-edge technical knowledge," said Navy's assistant chief of personnel (HRD) Rear Admiral P Ajit Kumar.

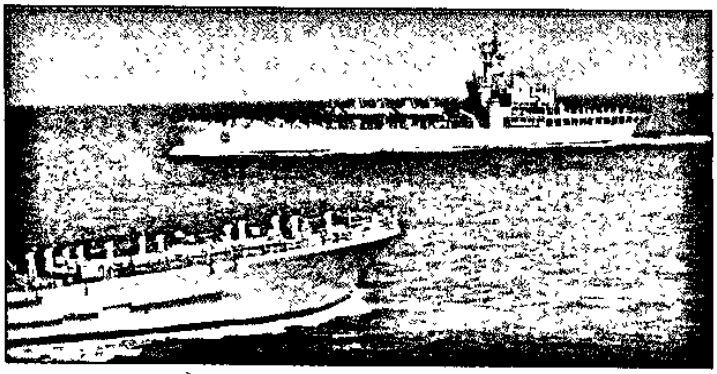
"We already have a large number of MTechs, including in areas like nuclear technology. Moreover, we are also looking to send eight officers abroad every year for MTech in niche areas. Our training pattern is in line with where the First World navies are headed," he added. The Navy's ongoing warship, submarine and maritime aircraft acquisition programme as well as proposed projects in the pipeline will together cost Rs 3,00,000 crore over the next 15 years, as was first reported by TOI earlier.

With the "maritime capability perspective plan for 2012-2027" pegging the number of major warships required at about 150, there are already 44 warships and six submarines on order. Moreover, contracts for another 45 warships, including six new submarines and seven stealth frigates, are in the pipeline. All this will require a strong sea-warrior cadre. "The government has given us lot of manpower sanctions. We have to step up inductions as well as ensure that quality manpower comes in," said Rear Admiral Kumar.

In tune with this, the first direct-entry batch of 70 BTech officers will pass out of the Indian Naval Academy (INA) at Ezhimala (Kerala) in June 2013. Plans are also afoot to get the existing BSc degree curriculum converted to a BTech one for naval cadets at the tri-Service National Defence Academy (NDA) in Kadakwasla (Pune).

"As of now, naval cadets, who come to INA for their 7th and 8th semesters after passing out from NDA, get MSc (Tech) degrees. But they will also get BTech degrees in the near future," he added.

Concurrently, INA is also set for a major expansion at a cost of around Rs 340 crore. From an existing annual capacity of 750 trainees, INA will begin training 1,200 cadets from 2015 onwards.



SEA WARRIORS

### 'India cut Agni V range under Nato pressure'

Continuing its tirade against the successful launch of Agni V, Chinese state media accused New Delhi of buckling under Nato pressure to cut down the missile's range from 9000km to 5000km. The state-run Global Times, which derided the missile even before it was launched, said, "The Manmohan Singh government because of pressure from Nato member countries has kept a slow pace with their IGMP. The Agni V is deemed to be in its final stage whereas, in fact, the IGMP ought to have progressed to develop a range of 9,000 km," it said. PTI

Economic Times, ND 23/04/2012

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# No. of Innovation Varsities' Reduced

## Existing universities too will get special tag after a change in governance structure

**OUR POLITICAL BUREAU**
NEW DELHI

The human resource development ministry has watered down its ambitious plans of setting up 14 new "innovation universities". Not only has it dropped the numerical target, it has now reworked its concept to allow existing universities to be classified as innovation universities after a change in their governance structure. The reworked proposal is likely to be taken up by the Cabinet at its next meeting.

Universities will not only have knowledge clusters, but also build linkages with research institutions and industry. These universities will focus on research-oriented innovations in design, development and delivery.

The Planning Commission, which is also working on some restructuring of the higher education sector as part of the 12th Plan process, suggested the change in the proposal. It now allows for existing universities and institutes to be upgraded to the status of universities for research and innovation after changes in governance structure. The Plan panel had raised objections to the idea of thematic universities, arguing that there are almost no world-class universities set up on a thematic basis. The HRD ministry has made it clear that even the theme-based universities will need to promote inter-disciplinary learning and research.

Over the last two years, there had been talk of setting up innovation universities focused on environment and ecology, culture and sports. However, none of these discussions progressed, even though several universities in the US and the UK expressed an interest in setting up innovation universities. There were apprehensions that resources would flow to the proposed innovation universities while the existing ones would not be helped to perform better. These apprehensions prompted the change in the concept of innovation universities.

The Sam Pitroda-headed National Knowledge Commission had suggested that each of the 14 varsities be earmarked ₹200 crore annually.

Hindu ND 23/04/2012 p-13

# Now, top universities offer free courses on the Web

## Courses are taught through weekly new videos and quizzes

Paromita Pain

**LOS ANGELES:** Some of the top universities in the U.S are offering free courses on the Web not just for individual students but also for other universities to adopt.

Earlier this year, MIT announced its engineering course that comes with a certificate on completion. Universities like Stanford are offering free online courses as well.

Stanford Engineering Everywhere (http://see.stanford.edu/) has modules on Programming Methodology, Programming Abstractions, and Programming Paradigms, as a part of a three-course Introduction to Computer Science which is taken by most Stanford undergraduates and was developed to reach out to students globally.

Built under the Creative Commons licence that allows for free use and adaptation of the material, colleges too can use them to supplement classroom instructions.

Last year, a free online class on artificial intelligence (https://www.ai-class.com), conducted by Sebastian Thrun, Research Professor of Computer Science at Stanford University, and Peter Norvig, Director of Research at Google Inc, attracted over 58,000 students from around the world. The class ran from October 10 to December 18, 2011. Students who successfully completed the course were given a statement of accomplishment. From high school learners to retired people, the age groups were widely varied. Though the enrolment for this course is closed for now, the course material can be accessed at https://www.ai-class.com/overview.

For those who want to learn how to build search engines and web application engineering, courses taught by Sebastian Thrun are available at http://www.udacity.com/. There are teams of voluntary translators, the videos are available in languages other than English as well. Two classes, the CS101 Building a Search Engine and CS373 Programming a Robotic Car, will soon be offered on the site.

While the courses are taught through weekly new videos and quizzes, exams are personalised to prevent cheating.

Coursera (https://www.coursera.org/) is another interactive learning program that has subjects from various universities such as the University of Pennsylvania, Princeton and University of Michigan. The website runs various modules along with subjects as varied as "introduction to sociology" to "the ways vaccines work," with the mandatory computer sciences lessons between lessons.

Started by Andrew Ng and Daphne, two Stanford computer scientists, whose free internet courses attracted a wide audience, Coursera has an innovative student's platform where students from different parts of the world post answers to questions asked.

Some of the courses do not have set durations. So the students can pace the modules themselves, which helps in gaining in-depth knowledge about a subject or even find out what a particular topic might involve. For example, students interested in studying pharmacology would want to look at the module of "Fundamentals of Pharmacology" in Coursera from the University of Pennsylvania to understand what greater study of the field might entail.

# Career avenues and skill sets for education sector

## The education sector has grown in the last decade with increasing number of local and overseas players who have come up with innovative education solutions

**Murlidhar Nambiar**

THE KEY determinants for employability of an individual include moving self sufficiently within the labour market through knowledge, skills and attitudes and the way they present themselves to their employers. The high growth sectors in India are currently facing an acute shortage of employable graduates, thereby hampering the fast paced advancement of these sectors. Young people make 19% of the population and, despite the growing demand for skilled employees, the unemployment rate is at 50% for youth across the country.

As per the industrial requirement, there is huge gap between the number of students graduating per year and the employment they get after the completion of their course. Vocational education has duly received added impetus through the additional allocation made to the National Skill Development Council and the efforts in vocalisation of secondary education. Skilling the workforce is of urgent importance in the current scenario. Two greatest concerns of employers today are finding good employees and training them. The difference between skills needed on the job and those possessed by the applicants sometimes called the skill gap is of concern to HR managers and business owners looking to hire competent employees.

Education sector has grown in the last decade with increasing number of local and overseas players who have come up with innovative education solutions. The government has been crusading education reforms with the RTE, Sarva Shiksha Abhiyan (SSA) and ICT in education. In the last decade the allocation and spending for the education sector has gone up many-fold, which shows the seriousness of the government towards education initiatives. Skilling the workforce is of urgent necessity in the current scenario to meet the challenges. The four parties who need to play a role in addressing this critical challenge are the government, educational institutions, the industry and the students themselves who need to better understand the changing role of technology and innovation in driving transformation. None of the four can make this work in isolation as it will take a well coordinated approach to make this work.

The role of ICT in education is well recognised the world over. If we look at it from the perspective of employability, then the first information revolution in India was about the successful export of IT services where we leveraged low-cost developer resources. The second revolution is about the need to learn how to use IT to power job creation and to leverage IT to accelerate education where we can actually educate 500-million-plus youngsters below the age of 20 and the remaining 500 million, many of whom who actually need further enhancement of their professional capabilities.

There is a shortage of capacity in the Indian education system. India today needs at least 1,500 universities, but has only 370. There are more than 550 million young people in need of education but do not have educational institutes to go to. India also needs a good number of IIT level engineering colleges, reputed B-schools and medical schools. A million good schools are also required. Quality and scalability has to go hand in hand. There would be an increasing need for skilled manpower with enhanced quality to man these institutions in the coming days. It is an accepted fact that the country's education sector needs greater autonomy with more inclusive private sector participation. Building a workforce with higher order skills is an important part of improving the climate for investment, acquiring a competitive edge and generally maintaining an engine of growth.

There are a large number of openings in the education sector. We need people who have the required qualification with skills in terms of analytical, verbal and interpersonal skills. Language and soft skills are equally important. In the education sector there are far greater opportunities for taking on responsibilities early on and to see the individual impact on the performance of the organisation. We look at people with conceptual skills, verbal skills, interpersonal skills and technical skills. The organisation helps in enhancing employability through imparting required skills on the job. The education sector is considered as a sunrise industry but has huge employability gaps. Thus the importance of promoting digital learning across the country, providing access, equity and quality of education, knowledge creation, innovation in the ecosystem and capacity building. The key challenge is to emphasise on lifelong learning and relevance, removing barriers and scaling up resources.

Tools such as Tutor Vista and Pearson Education Services provide all possible solutions for the education sector through online tutoring, retail education, ICT solutions for schools and engineering colleges, content development for schools, corporates and NGOs, IT and management of schools. Some of the common skill sets required for different domains in the education sector are sales and marketing, operations, counselling, content development, instructional designing, flash programming, PHP, My SQL, Dot net, Action Script, IT infrastructure etc. There is an ever increasing demand for good faculty members with post graduate qualifications and relevant experience in different subjects for content development, online tutoring and at Pearson schools spread across locations. We also have requirements for administrative staff, wardens and transport supervisors for our upcoming schools in different parts of the country. As we are executing government projects in different states in both the SSA and ICT areas there is a need for good number of IT skilled instructors and coordinators in rural areas with the required qualifications and skill set for imparting IT education and hardware knowledge.

*The author is head, HR, Pearson Education Services*

Business Line ND 23/04/2012 p-1

# *Have work experience, get easy admission to B-schools*

**Shobha Roy**
*Kolkata, April 22*

Students with prior work experience have an edge in B-school admissions. An improved "class-room experience" and perceived ease of placements, are primary reasons behind the trend.

Official sources in Indian Institute of Management (IIM) in Kolkata, Lucknow and Rohtak and, XLRI Jamshedpur confirm that the share of such students has increased to 60-70 per cent of the batch size. The ratio was as low as 30-40 per cent till about two-to-three years ago.

According to Professor Amit Dhiman, Chairperson, Placement, IIM-Calcutta, the 2010 batch, which was just placed, had 34 per cent freshers and 66 per cent students with work experience. "There has been a rise in the number of students joining IIM-C with prior experience. While a majority of these students have an average experience of 10 months-to-two years, close to 15 per cent of them had work-experience of more than 36 months," he said.

Apart from an increase in students with work experience, there has also been a rise in the average tenure of such professional experience.

According to Prof Soumendranath Bagchi, Chairperson, Admissions, XLRI, the average experience tenure has increased from 10 months to 2-3 years. Only five per cent of the institute's students are freshers.

**QUALITY OF CLASS**

According to Mr Pranit Upadhyay, Student Placement Co-ordinator, IIM-Rohtak, students with diverse work experience enrich the class experience.

"A majority of the learning at B-schools happen through peer learning and it helps to have a batch of experienced people as that opens up scope for debate and discussions," he said.

Close to 60 per cent of IIM-Rohtak's first batch (2010-12) had students with prior experience, which has gone up to 70 per cent for the 2011-13 batch.

"People with experience have clear aspiration and better communication skills. Internationally, freshers cannot get into a B-school. We are trying to move towards that," Professor Rajesh Aithal, Chairman, Placement, IIM-Lucknow, said.

**LATERAL PLACEMENT, BETTER SALARY**

With the increase in share of students with work experience, management schools are placing more stress on lateral placement, where candidates are offered roles depending upon the nature and duration of their experience.

The average pay package for students with experience is comparatively higher than that of a fresher, Mr Upadhyay said.

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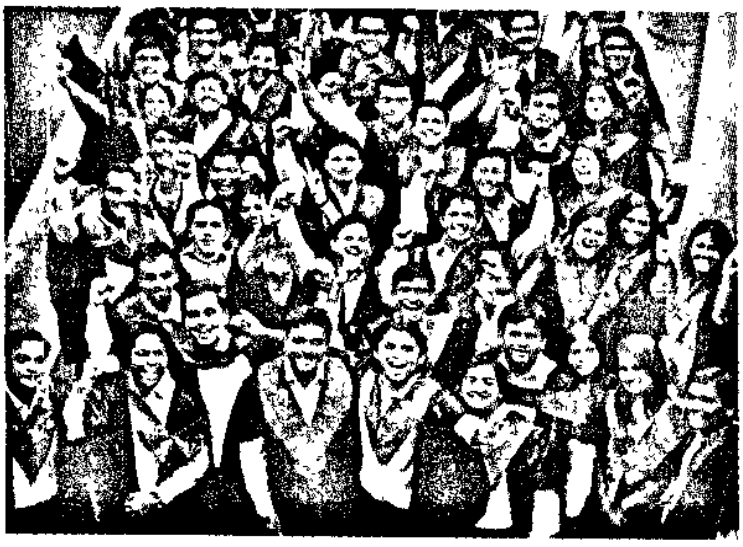

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# India 7th nation with ICBM tech

**How is a missile different from a bomb?**

A missile is simply a highly sophisticated bomb. Once dropped, a bomb is completely governed by the laws of ballistics, meaning the only force that acts upon it after its release is the force of gravity. It can be made more accurate and fast by attaching a propulsion system to it. A bomb with a propulsion system is called a rocket. A rocket can be made further destructive if it can be guided and controlled and then it becomes a missile. Missiles are classified in many ways. Based on the target they can be classified as surface to surface missiles (SSM), air to surface missiles etc. Based on their working principle they can be categorized as ballistic and cruise missiles and based on their purpose as strategic and tactical missiles.

**What is the difference between ballistic and cruise missiles?**

A ballistic missile is used to hit a predetermined target. It is launched in such a way that it burns most of its fuel to attain the desired velocity in the first phase, which is also called the boost phase. The missile can only be guided during the powered phase of flight. Although it's easy to detect a ballistic missile, it's almost impossible to intercept it. Unlike a ballistic missile, a cruise missile is a small pilotless aircraft that carries an explosive warhead. These missiles have wings and engines, but are built in a more economic way. A cruise missile is steered by an inertial navigation system (INS), which is also used by airplanes. A cruise missile can be made so accurate that it can be aimed at any specific place like a door or window of a building.

**What are strategic and tactical missiles?**

Ballistic missiles are categorised according to their range, which is the maximum distance measured along the surface of the earth from the point of launch of a ballistic missile to the point of impact of the last element of its payload. In the US, they are divided into four classes: Intercontinental Ballistic Missiles or ICBM (over 5,500 km), Intermediate-Range Ballistic Missile or IRBM (3,000 to 5,500 km), Medium-Range Ballistic Missile or MRBM (1,000 to 3,000 km) and Short-Range Ballistic Missile or SRBM (up to 1,000 km). The Russian system, on the other hand, classifies them as strategic (over 1,000 km), Operational-Strategic (500-1,000 km), Operational (300-500 km), Operational-Tactical (50-300 km) and Tactical (up to 50 km). Till now, the US, Russia, China, UK, France and Israel were the only countries with ICBM technology. Although Agni-V is a little short of the American definition, with its successful launch India has joined this elite club.

# BARC TO SET UP CENTRE AT NIT-SILCHAR

**Press Trust of India**
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**KARIMGUNJ (ASSAM):** The Bhabha Atomic Research Centre (BARC) will set up a centre at the National Institute of Technology-Silchar to promote research initiatives.

"BARC will set up its unit to enable teachers, scholars and students here to undertake more in-depth research and exploratory works in science and technology," the director of the Silchar unit of NIT, NV Deshpande, said here on Sunday. He said that senior nuclear scientist Anil Kakodkar would be the chief guest at the NIT-Silchar's convocation on June 17. Kakodkar is a former director of BARC and former chairman of Atomic Energy Commission (AEC).

NIT-Silchar is a premier institute of higher education in Lower Assam's Barak Valley. BARC is India's premier nuclear research facility based in Mumbai and is a multi-disciplinary research centre with extensive infrastructure for advanced research and development, covering the entire spectrum of nuclear science and related areas.