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KIITREVIEV

SPECIAL ISSUE

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7th Annual Convocation 41



Hon'ble Prime Minister of India Dr. Manmohan Singh Inaugurates



3-7 January, 2012 - Bhubaneswar

Weed to make science more relevant for poor: PM 🤧

Children's Science Congress

Women's Science Congress

Nobel Laureate Lectures

Shri Montek Singh Ahluwalia Hon'ble Deputy Chairman **Planning Commission of India** delivers Convocation Address at

> Annual Convocation

6th January 2012







What it Means to Odisha

The 99th Indian Science Congress held in KIIT University from January 3-7, 2012 was not just another Science Conference. It had a greater significance and both the University and the state could get the unique opportunity of showcasing the various facts which can run into hundreds of pages. However, in a nutshell it can be said the 99th Indian Science Congress means so many things to so many people, which include:-

- ☐ The largest ever scientific congregation of the World.
- □ 18,000 delegates and over 2,00,000 people directly or indirectly participated.
- ☐ Who's who of Indian scientific world attended the conference.
- □ Over 500 scientists from abroad including Nobel Laureates attended.
- □ Several new components like Women's Science Congress and Science Film Festival were incorporated in it.
- ☐ Highest ever participation of women in the history of Indian Science Congress.
- □ Several Union Ministers, besides the Prime Minister graced the Congress.
- ☐ The concept of Vigyan Rath to arouse scientific temperament among the youth of the State was introduced.
- ☐ The biggest ever Scientific Exhibition was held for the first time in the state of Odisha.

- ☐ All India level Essay and Quiz competition for Junior and Senior categories with huge prize money was held.
- ☐ Boost to Odisha tourism through Odisha Mandap.
- □ Boost to hotels industry: It is for the 1st time that all rooms of all hotels of Bhubaneswar were booked.
- ☐ Odisha as a favoured destination for holding convention was introduced to the world.
- □ Better exposure for the Universities and educational institutions in Odisha.
- □ Exposed KIIT as having tremendous capability to organize mammoth conference without any difficulty.
- ☐ The 1st ever Indian Science Congress to have cultural evenings every night to showcase Odisha's Art and Culture.
- ☐ Highest ever technical sessions held simultaneously with full attendance.
- □ 35 special lectures and 30 plenary sessions and panel discussions, besides parallel technical sessions on 14 sections.
- □ Largest ever participation in the Children's Science Congress addressed by Dr. A. P. J. Abdul Kalam.



Indian Science Congress 3-7 January, 2012 - Bhubaneswar





Shri M. C. Bhandare His Excellency The Governor of Odisha



Hon'ble Chief Minister of Odisha



Shri Naveen Patnaik Shri Vilasrao Deshmukh Shri Ashwani Kumar Hon'ble Union Minister of Science & Technology and Earth Sciences



Hon'ble Union Minister (State) of Planning, Science & Technology and Earth Sciences



06

Inaugurated by: Hon'ble Prime Minister of India

Dr. Manmohan Singh



The Children's Science Congress

Inaugurated by

Dr. A. P. J. Abdul Kalam

Hon'ble Former President of India on January 4, 2012



The Women's Science Congress Inaugurated on January 5, 2012





Dr. D. Purandeswari Hon'ble Union Minister (State) of Human Resource Development



Dr. Gretchen Kalonii Assistant Director-General for Natural Sciences, UNESCO



Prof. Geetha Bali General President, 99th Indian Science Congress





KIITEE-2012

(KIIT Entrance Examination)

KIIT Entrance Examination (KIITEE) is the All India
Entrance Examination conducted by KIIT University,
Bhubaneswar for admission into following courses of the
University. KIITEE-2012 will be held on
22nd April, 2012 (Sunday) in 120 centers across India

COURSES AVAILABLE

- Engineering
- Medical
- Dental
- Nursing
- Law
- Computer Application
- Biotechnology
- Fashion & Film

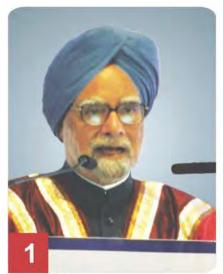
WIITEE 2012 has generated unprecedented response from students from all parts of the country. A record 1,50,000 applications have been received for admission into various academic programmes of KIIT University.

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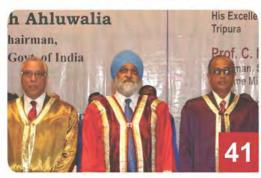
















Intelligent Wireless e-Campus www.kiit.ac.in



Prof. N.L. Mitra takes over as Chancellor of KIIT



Prof. N. L. Mitra, a well known legal academician, has taken over as the Chancellor of KIIT University with effect from 8th January 2012. Prof. Mitra is credited with giving a new direction to legal education in the country. He is associated with many academic institutes of national and international repute as mentor and advisor. He is well known in India and abroad as an eminent academician and academic administrator and has been advisor to leading law schools of the country, including National Law University, Odisha and law school of IIT Kharagpur. He had been the Vice-Chancellor of National Law School of India University (NLSIU), Bangalore and National Law University (NLU), Jodhpur. He has been the Chairman of different important Government of India Committees and has advised Reserve Bank of India and other important bodies. He was welcomed to KIIT Family by the Founder, Dr. A. Samanta and other senior functionaries of KIIT at a special welcome ceremony. Dr. Samanta expressed gratitude to Prof. Mitra for accepting to be the Chancellor of KIIT University and hoped that KIIT will excel in all aspects under his leadership.

Prof. N. L. Mitra received his M.Com, LL.M. and Ph.D. from Calcutta University. He holds certificate in Human Rights from International Institute of Human Rights, Strasbourg, France. Prof. Mitra has been formerly the Vice-Chancellor of National Law School of India University (NLSIU), Bangalore (1997-2001 and National Law University (NLU), Jodhpur (2001-2004). He has been the Chairman of several important Government of India Committees and has advised Reserve Bank of India and other important bodies. He is also member of NLIUO's Governing Council and Executive Council and thus supervises all their academic and administrative activities.

He is a life member of Indian Institute of Public Administration (IIPA), Member of India Law Institute (ILI), former member of the Executive Committee of Common Wealth Legal Education Association (CLEA) and Member of the Legal Education Committee of Bar Council of India (BCI). Member of Legal Advisory Committee-SEBI

Member of the Patent and Copyright law Reforms Committees under Ministry of Commerce and Ministry of HRD respectively

ember of the Banking Law Reform Committee in 1999- 2000

Member of the curriculum development committee of the American Bar Council

Wember of the Bar Council of India

Chairman of Legal Education of the Bar Council of India

dvisor to the Governor of Reserve Bank Financial Sector Reforms

Advised the Ministry of Agriculture on Agricultural Marketing Model Act

Advised Ministry of Finance, Ministry of Corporate Affairs, ministry of Commerce and Industries Ministry

of Women and Child Welfare and Ministry of Environment

eaded the Committee to Bankruptcy and Financial Fraud

Headed the civil action group of post Earthquake Committee in Ahmedabad

Fead a committee constituted regarding farmer suicide in Karnataka

Headed many UGC Committees as one of the senior most Vice-Chancellor

iloted the World Bank environment project for India during 1998-2000

Developed the present education policy of Bar Council of Indian including its regulations

Prafted many of the SEBI regulations

ead a One man committee for legal reform on Security Exchange Board of India

Participated in the drafting of bills on Information Technology

Advisor, IIT Kharagpur, RGSOIPL

Guest Faculty of some Foreign Universities.

Professor Mitra has authored a number of projects, and monographs, including some for the Union Ministry of Commerce, New Delhi. He has been one of the visionaries of GNLU.

Editorial



KIIT REVIEW

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The greatest scientific extravaganza, 99th Indian Science Congress was a tremendous success. This incredible feat once again proved the excellence, skill and the managerial capability of KIIT. Friends apart, the adversaries also could not resist praising the spirit of KIIT in hosting such a mammoth event. Of course, KIIT partnered with NISER academically, but it was the campuses of KIIT where the event was held. The ever willing never-say-no volunteers and the officials were all out to prove that nothing is impossible for KIIT with a leader like Achyuta Samanta to guide. The 99th Indian Science Congress, coinciding with the 60th anniversary of UNESCO-Kalinga Award and a host of other events hosted in KIIT put the University in league with the selected institutes of excellence. There could not have been a better New Year gift from KIIT to the state. Odisha as a state got a tremendous boost because of the congregation of 18,000 of quality people coming from all part of the globe to be a part of the Indian Science Congress. The presence of the Prime Minister, Minister of Science & Technology & Earth Sciences, various top notch scientists and Nobel Laureates gave the state much needed attraction of the world. Tourism got a tremendous boost, so was the hotel industry in the state. The state could not have asked for more. Even when the entire campus was abuzz with sciential atmosphere, KIIT could have its 7th Annual Convocation with no less than Mr. Montek Singh Ahluwalia, the Deputy Chairman of the Planning Commission delivering the Convocation Address. Six eminent personalities including eminent Jurist Ram Jethmalani, Ms. Pinki Anand, eminent scientist Prof. CNR Rao (in absentia), Dr. Narendra Jadhav, Member, Planning Commission and Dr. D. Y. Patil, Governor of Tripura were awarded the highest degree of Doctorate (Honoris Causa). Their acceptance of the degree was a pointer to the quality and excellence of KIIT. Post-Science Congress, KIIT rejuvenated itself more vigorously to set the ball rolling for admission into its various schools. Post-Science Congress, Republic Day celebration was definitely the most colourful because of the presence of our Korean friends from Hanseo University. Close on the heels of the Koreans, KIIT received a delegation from National Formosa University, Taiwan led by its President, Prof. Jenn-Der Lin. Quality has become the middle name KIIT, and no wonder that the 15th Annual e-governance Conference was held here despite being a government function. Prior to this, the 8th edition of ICDCIT was held in the campus. While civil servants from various states, computer wizards from various Universities were busy in the conference, the important dignitaries including the Union Ministers of State Mr. Sachin Pilot and Mr. V. Narayanasamy could not resist the temptation of visiting the 'Eden of the East'-KISS, a protégé of KIIT. KIIT Review, in this issue, has tried to put all those in its pages and I am sure every reader will like it to preserve as a 'Collector's copy'.

Need to make science more relevant for poor: Hon'ble Prime Minister of India, Dr. Manmohan Singh

Hon'ble Prime Minister of India, Dr. Manmohan Singh called for greater alignment of the science and technology sector with the inclusive development needs of the country. Inaugurating the 99th Indian Science Congress at KIIT University on January 3, he said, "It is said that science is often pre-occupied with problems of the rich, ignoring the enormous and in many ways more challenging problems of the poor and the under-privileged. We must also make scientific output more relevant to our stage of development".

The PM laid emphasis on ensuring a major increase in investment in research and development including by industry and strategic sectors along with creation of a new innovation ecosystem. He stressed on expanding basic science infrastructure while enlarging the reach of international collaboration.

Expressing great concern over countries Singh. Indian Science Congress Hon'ble Chief Minister of Odisha Shri 3-7 January, 2012

"Science and Technology for Inclusive Innovation - Role of Women"

like China overtaking India in terms of position in the world of science, he stressed for a need to do much more to change the face of Indian science. "We must strengthen the supply chain of the science sector. While it is true that science and engineering continue to attract some of our best students, many of them later opt for other careers because of relatively poorer prospects in science", said Dr.

Naveen Patnaik eulogised the geniuses of Odisha, who according to him, epitomized excellence in the field of science. Speaking about one such genius Samanta Chandrasekhar's skill in measuring the heights of mountains by using simple sticks, he paid rich tributes to him. He also made a special mention of former Chief Minister Biju Patnaik, who took many pioneering steps in establishing a chain of educational institutions to promote science education. "He provided outstanding leadership in instituting the prestigious UNESCO Kalinga Prize for promotion of science at the global level. Some of the greatest scientists of the world have been the recipients of this prestigious award", said Shri Patnaik.

66 The Prime Minister gave away various ISCA awards for the year 2011-12. Dr. A. Samanta, Founder, KIIT & KISS received Jawaharlal Nehru Prize for KISS, the largest tribal institute of the world, while KIIT Vice Chancellor Prof. A. S. Kolaskar was awarded Srinivasa Ramanujan Birth Centenary Award. 🤏 🦠



(From Left) Dr. Manoj Kumar Chakrabarti, General Secretary (Membership Affairs), ISCA, Prof. Geetha Bali, General President, 99th ISC, Shri Vilasrao Deshmukh, Union Minister of Science & Technology and Earth Sciences, Shri M. C. Bhandare, Governor of Odisha, Dr. Manmohan Singh, Prime Minister of India, Shri Naveen Patnaik, Chief Minister of Odisha, Mr. Ashwani Kumar, Union Minister (State) of Planning, Science & Technology and Earth Sciences, Prof. A. S. Kolaskar, VC, KIIT University and Dr. Vijay Laxmi Saxena, General Secretary (Scientific Affairs), ISCA at the inaugural ceremony of 99th Indian Science Congress.

Hon'ble Union Minister of Science and Technology and Earth Sciences, Shri Vilasrao Deshmukh lauded the efforts of KIIT & KISS Founder Dr. A. Samanta for his efforts in hosting the mega event. "The future belongs to science and to those who make friendship with science", said Shri Deshmukh. He said various revolutions in science including the green revolution, white revolution brought huge recognition to the numerous talented scientists of the nation.

The entire campus of KIIT was abuzz with activities after the arrival of PM with security personnel keeping a vigilant eye on the arrangements. Among others, His Excellency Governor of Odisha Shri M. C. Bhandare, Hon'ble Union Minister of State for Science and Technology Shri Ashwani Kumar, General President of 99th ISC Prof. Geetha Bali, KIIT Founder & Chief Patron, 99th ISC Dr. A. Samanta and NISER Director Dr. T. K. Chandrashekar also were present. Record number of delegates, close to almost 20,000 including renowned scientists from India and abroad, took part in the 99th Indian Science Congress. The Prime Minister gave away various ISCA awards for the year 2011-12. Dr. Samanta received Jawaharlal Nehru Prize for KISS, the largest tribal institute of the world, while Vice Chancellor Prof. A. S. Kolaskar of KIIT was awarded Srinivasa Ramanujan Birth Centenary Award. Besides, two tribal achievers in the field of agriculture - Raita Mudil and Chandra Pradhan - were also felicitated by the Prime Minister for their valuable contribution in conservation of ecology by adopting traditional agricultural practices. General President Gold medal award was given to six eminent scientists including Nobel prize winners Dr. Richard R Ernst, Dr. Rolf M. Zinkernagel and Dr. Kurt Wuthrich; and Polly Rai of UK, Harish Pant of USA, Gertha Fleissner of Germany and M.K. Sridhar of Karnataka.

Speech of Dr. Manmohan Singh, Hon'ble Prime Minister of India at the 99th Annual Session of the Indian Science Congress on 3rd January 2012 at KIIT University, Bhubaneswar

I am delighted to be here in Bhubaneswar for the 99th Annual Session of the Indian Science Congress. Odisha is a most appropriate venue for the Congress as this year we celebrate the 60th anniversary of the UNESCO-Kalinga Prize set up by the Late Shri Biju Patnaik. Indian science owes much to the vision of our early nation builders who gave science a prominent place in our development planning processes. I

congratulate Professor Geetha Bali for choosing, as the theme for the Congress, the role of Science and Technology for Inclusive Innovation with special reference to the role of women.

It was a hundred years ago that Madame Marie Curie, one of the most outstanding scientists of the 20th century, won her first Nobel Prize. To honour her achievements, last year was declared as the International

Year of Chemistry. Marie Curie blazed a trail for women in the world of science. But her work also exemplified her belief that science should, in the end, contribute to tangible social good. She helped to set up X-ray stations during the First World War and established the Curie Foundation which became a major force for the treatment of the dreaded disease of cancer.



Shri M. C. Bhandare, Governor of Odisha exchanging pleasantries with Dr. Manmohan Singh, Prime Minister of India.

I have often spoken about the commitment of our Government to give a boost to the science and technology sector in the country. We have taken several steps towards this end.

- We have greatly expanded the higher education infrastructure for Science and Technology by establishing new institutions.
- Public investment in Research and Development has been growing at 20-25% per year during the 11th Plan period.
- We have funded a number of schemes to rejuvenate research and scientific excellence in universities.
- We have introduced a large number of scholarships; most notably, the Innovation in Science Pursuit for Inspired Research or INSPIRE scheme which gives awards to one million science students.

There is also some evidence that these efforts are beginning to produce results.

Over the last few years, the number of scientific publications by Indian scientists working in India has increased at more than 12% per annum against the global average of 4%. India has moved from the 15th rank in 2003 to the 9th rank in 2010 with respect to the number of publications in peer-valued journals. The university research system is also showing signs of rejuvenation. In 2008, I gave away

incentive awards to 14 universities under the Promotion of University Research and Scientific Excellence (PURSE) scheme. In 2010, 30 more universities have qualified under the same criteria. The University of Rajasthan leads among the top 50 Indian scientific

institutions in citations per paper under international collaboration. We produce, I have been told, 8,900 Ph.Ds annually in science and engineering, three thousand more than five years ago.

The INSPIRE scheme is doing well and is also responding to our concerns about inclusiveness. The enrolment of weaker sections in the scheme is good and 49.6% of the INSPIRE awardees are women. More than 60% of INSPIRE fellows pursuing doctoral research happen to be women. Over the past few decades, India's relative position in the world of science had been declining and we have been overtaken by countries like China. Things are changing but we cannot be satisfied with what has been achieved. We need to do much more to change the face of Indian science. We must strengthen the supply chain of the science sector. While it is true that science and engineering continue to attract some of our best students, many of them later opt for other careers because of relatively poorer prospects in science.

We must also make scientific output more relevant to our stage of development. It is said that science is often pre-occupied with problems of the rich, ignoring the enormous and in many ways more challenging problems of the poor and the under-privileged.

As we head into the Twelfth Plan, there are some objectives we must try to achieve in the Science and Technology sector. First, we must ensure a major increase in investment in R&D, including by industry and strategic sectors.

Second, we must the ensure creation of a new innovation ecosystem.

Third, we must achieve greater alignment of the Science and Technology sector with the inclusive development needs of our nation.

Fourth, we must expand basic science infrastructure.

Fifth, we must encourage greater research collaboration among universities and national laboratories. We hope to use the National Knowledge Network to this end.

Finally, we must enlarge the reach of international collaboration.

As far as resources are concerned, the fraction of GDP spent on R&D in India has been too low and stagnant. We must aim to increase the total R&D spending as a percentage of GDP to at least 2 per cent by the end of the XII Plan Period from the current level of about 1 per cent. This can only be achieved if industry, which contributes about one-third of the total R&D expenditure today, increases its contribution significantly. I sincerely believe that Public Sector Undertakings, particularly those in the energy sector should also play a major role in this expansion. We have to increase public private partnerships and catalyse significantly increased interaction between publicly owned Science and Technology institutions and industry. It is in some ways ironic that General Electric and Motorola have created world-class technology hubs in India, while our own industry has not done so, except perhaps in the pharmaceutical sector. We need therefore, to look at ways of incentivising private Research and Development investment under Indian conditions.

6 6 I congratulate the tribal community of Koraput for the global recognition they have received for their contribution to conserving bio-diversity and developing climate-change resilient farming systems. 🥱 🦠

At present, publicly funded R&D is skewed in favour of fundamental rather than applied research. It is easier to attract industrial funds into applied research areas and a set of principles should be formulated to push such funding and to drive Public-Private-Partnerships in Research and Development. The Biopolis in Singapore is an interesting example of a cluster approach that has brought together 2,000 scientists and researchers in the area of bio-sciences from public laboratories and private industry in one place. In India, we have our own Open Source Drug Discovery project, which is a 'virtual' cluster enabling the creation of affordable and effective solutions which would not be likely with a conventional 'in-lab' approach.

While research generates new knowledge, we need innovation to use this knowledge creatively and productively for social benefit. Our Government has declared 2010-20 as the "Decade of Innovations". We need to give practical meaning to innovation so that it does not end up being just a buzz word. I understand that the National Innovation Council is proposing to set up an India Inclusive Innovation Fund that will drive and catalyse enterprise, entrepreneurship, and venture capital, while targeting solutions for the bottom of the national pyramid.

In this context, it is important that we explore and rejuvenate traditional knowledge systems found all over our country in areas such as agriculture, architecture, handicrafts and textiles. One need go no further than the tribal communities of the Kharia, Santhals, Gonds and Kolhas who live in the deep forest areas of Mayurbhani and have a reservoir of knowledge on medicinal usage of locally available plants.

I congratulate the tribal community of Koraput for the global recognition they have received for their contribution to conserving bio-diversity and developing climate-change resilient farming systems.

An occasion like the present one should be used to revisit a fundamental question: what is the role of science in a country like India? There is no simple answer. But for a country grappling with the challenges of poverty and development, the over-riding objective of a comprehensive and well-considered policy for science, technology and innovation should be to support the national objective of faster, sustainable and inclusive development.

There is much that the scientific community can do to achieve these objectives. Research should be directed to providing 'frugal' solutions to our chronic problems of providing food, energy and water security to our people.

Science should help us understand how to give practical meaning to the concept of sustainable development and green growth. Science should help us shift our mindsets from the allocation of resources to their more efficient use. Technology and process engineering should help us reach the benefits of development to those who need it most. Under the National Action Plan on Climate Change, our government has launched eight National Missions in important areas such as Sustainable Agriculture,

Water, Energy Efficiency, Solar Energy and Forestry. All the Missions have strong components of science and technology. I would urge the scientific community to pool their knowledge and wisdom to contribute to the success of these critical National Missions. Several initiatives have already been taken. The Solar Energy Corporation of India headed by Dr. Anil Kakodkar has been established and is now a functional entity. A National Water Policy is under active preparation. The National Mission on Strategic Knowledge for Climate Change has already identified two centres of excellence at IIT, Mumbai and ICRISAT, at Hyderabad to build capacities in climate science.





Prof. A. S. Kolaskar receiving Srinivasa Ramanujan Birth Centenary Award from Prime Minister Dr. Manmohan Singh.

"In India too women are making a mark in traditionally male bastions and decisively breaking the glass ceiling. Last year, for the first time, three women scientists received the prestigious Shanti Swarup Bhatnagar award."

Increasing food production and nutritional security are critically important and our agricultural scientists should therefore work towards scientific breakthroughs that can enable a second green revolution to become a living reality.

We are examining a proposal to build national capacity and capability in supercomputing which will be implemented by the Indian Institute of Science Bangalore at an estimated cost of Rs. 5000 crore.

The Government is also considering a proposal to establish a Neutrino Observatory in Theni district in Tamil Nadu with a proposed investment of Rs 1350 crore.

The Department of Earth Sciences has launched a Monsoon Mission to improve the predictability of the Indian monsoons.

This year the Nobel Committee recognized the contributions of three extraordinary women who were inspirational agents of change in the struggle for peace, democracy and human dignity in their respective countries.

In India too women are making a mark in traditionally male

bastions and decisively breaking the glass ceiling. The Project Director of the Agni Missile programme is a distinguished woman scientist Dr. Tessy Thomas. Last year, for the first time, three women scientists received the prestigious Shanti Swarup Bhatnagar award, as compared to a total of only 11 women awardees for all the years since 1958 up to then.

I congratulate these creative women scientists. I hope that their examples will motivate other women to take up careers in science, where women are underrepresented.

I commend the Department of Science and Technology for introducing the "Women Scientists Scheme" which has helped more than 2000 women scientists resume careers after breaks arising from family commitments.

The Department of Science and Technology is also formulating another scheme called 'DISHA' which will help women scientists to relocate to other cities. The Department will create 1000 contractual positions tenable in publicly funded institutions for this purpose. A fellowship matching the total emoluments of an in-service Science and Technology professional will be provided when she moves from one station to another. But, we should also take note of the results of a study published last year

that showed that 60% of nearly 2000 Indian women Ph.Ds in science who were surveyed were unemployed. The main reason cited was lack of job opportunities. Only a very small number cited family reasons. This underlines the need for transparency in selection procedures at institutions and also the great importance of gender audits.

This year we celebrate the 125th birth anniversary of the great mathematician, Srinivasa Ramanujan. We have declared 2012 to be the National Mathematical Year to emphasize the importance of maintaining our traditional strength in mathematics.

It is a matter of great pride that the name of another great Indian scientist Satyendranath Bose is associated with an elementary particle that may revolutionise our understanding of subatomic physics.

In the final analysis, the pursuit of science is a process of unlocking the human mind. It is an exploration of the mystery, beauty and method in the universe by stretching the frontiers of our imagination. We need to invoke the power of science in every sphere of our economy and way of life.

I end by quoting Isaac Asimov who said "There is a single light of science and to brighten it anywhere is to brighten it everywhere".







Shri Naveen Patnaik, Chief Minister of Odisha delivering his speech.

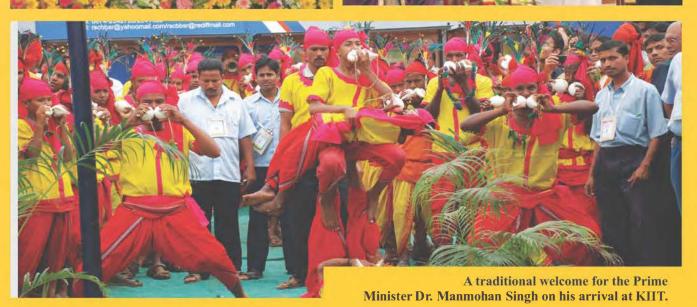


99th ISC delivering the Presidential Address.





Dr. Manmohan Singh, Prime Minister of India felicitating two tribal achievers from Odisha, Raita Mudil and Chandra Pradhan.



Give wings to dreams and fly high - Dr. A. P. J. Abdul Kalam

Give wings to your dreams and fly high, said Dr. A. P. J. Abdul Kalam, the great scientist and former President, while addressing thousands of children assembled in the inauguration of the Children's Science Congress here at KIIT University on January 4 last. The former President while inaugurating the Children's Science Congress, as a part of the 99th Indian Science Congress - 2012, urged the children to be unique and to work with dedication in the field of science and technology. It was his advise to the children to fly high and to give wings to their dreams, appealed the young potential scientists the most. "Children are a big force. The ignited mind of youth is the most powerful resource on the earth, above the earth and under the earth. We have got large youth power which no other democratic country has. If you have great aim in life and acquire the knowledge, it does not matter who you are, you will definitely achieve your goal," he said. The 'missile man' of India said the young students should work on their dreams and take calculated risks in life. "The culture of excellence is not achieved by accident, but through a process in which a nation, an individual and an organization constantly tries to get better." He advised the young scientists to be friends with great books, great human being and great teachers. "Critical thinking gives a path to achieve success. A creative mind has the uniqueness of discovering anything and imagination is the beginning of the creation. Invention and discovery come from creative minds," Dr. Kalam said.

He urged the students to have a mission in life to achieve higher standards. "You have to challenge your brain with difficult thinking and idea. Science is a life time mission. You have to acquire knowledge and work hard to realize your dream." Replying to a question on how he managed to balance science and politics when he was the President of India, Dr. Kalam quipped: "Science needs lots of money and money comes from politicians."



"Children are a big force. The ignited mind of youth is the most powerful resource on the earth, above the earth and under the earth.

We have got large youth power which no other democratic country has."

"You have to challenge your brain with difficult thinking and idea. Science is a life time mission. You have to acquire knowledge and work hard to realize your dream."

The former President faced some difficult questions too, like why India spends so much on missiles and other defence programmes, while so many people sleep on empty stomachs. "I personally feel science is for people who have the capacity to do that and you can select science or humanity," he stated. He also replied to questions on science, space and missile technology. "Earth, Moon and Mars will become economic entities in the next three decades and we will be seeking lot of things from there," he added.

In his address, Dr. G. P. Singh, Head of Dept. of Science and Technology said scientific literates are required to aware the society and practices of scientific methods for better democracy. "We have to sensitize and popularize scientific methods among masses," he observed.

Bhubaneswar MP Dr. P. K. Patasani lauded the efforts of KIIT & KISS Founder Achyuta Samanta for organizing the mega event. Among others, General President of 99th ISC Prof. Geetha Bali, General Secretary (Scientific Activities) Dr. Vijay Laxmi Saxena were present. Later Dr. Kalam gave away young scientist awards to 14 aspiring scientists. Students also displayed some award winning innovative ideas at Science Exhibition held parallel to the event.

Speech of Dr. A. P. J. Abdul Kalam, Hon'ble Former President of India at the Children's Science Congress at KIIT University, Bhubaneswar (Excerpts)

Transform yourself – Unique You (Set a standard: Culture of Excellence)

When I see you friends in the first of week of 2012, in thousands of youth representing different parts of the country who aspire to be remembered for a unique achievement, I have a message for you. To be remembered for, you have to be unique, Unique You. Will you, will you decide in the year 2012, you will become a Unique You.

My greetings to all of you participating in the Children Science Congress. We are in the background of environment rich with history and culture of Bhubaneswar. The great environment leads to creativity. Creativity leads to thinking. Thinking leads to knowledge. Knowledge leads to technology and innovation. I would like to share few thoughts and interact with you friends, on the topic "Transform yourself - Unique You".

When I see you friends in the first of week of 2012, in thousands of youth representing different parts of the country who aspire to be remembered for a unique achievement, I have a message for you. To be remembered for, you have to be unique, Unique You. Will you, will you decide in the year 2012, you will become a Unique You. Let us study together certain unique events by Unique achievers.

Eight unique achievers in inventions and discoveries

Dear friends, Look up, what do you see, the light, the electric bulbs. Immediately, our thoughts go to the inventor Thomas Alva Edison, for his unique contribution towards the invention of electric bulb and his electrical lighting system.

When you hear the sound of aero plane going over your house, whom do you think of? Wright Brothers proved that man could fly of course at heavy risk and

Whom does the telephone remind you of? Of course, Alexander Graham Bell.

When everybody considered a sea travel as an experience or a voyage, a unique person questioned during his sea travel from United Kingdom to India. He was

I will fly and fly "I am born with potential. I am born with goodness and trust. I am born with ideas and dreams. I am born with greatness. I am born with wings. So, I am not meant for crawling, I have wings, I will fly I will fly and fly"

pondering on why the horizon where the sky and sea meet looks blue? His research resulted in the phenomena of scattering of light. Of course, Sir CV Raman was awarded Nobel Prize. Do you know an Indian Mathematician who did not have formal higher education but had inexhaustible spirit and love for mathematics which took him to contribute to the treasure houses of mathematical research? some of which are still under serious study and engaging all-available world mathematicians efforts to establish formal proofs. He was a unique Indian aenius who could melt the heart of the most hardened and outstanding Cambridge mathematician Prof G H Hardy. In fact, it is not an exaggeration to say that it was Prof. Hardy who discovered a great mathematician for the world. This mathematician was of-course Srinivasa Ramanujan for whom every number was a divine manifestation.

"There are three unique friends to make you great; they are great books, great human beings and great teachers. Teachers should have the capacities to nurture the 'creative minds' and 'imagining minds'."

Do you know the scientist who is famous for Chandra Limit which describes the maximum mass (~1.44 solar masses) of a white dwarf star, or equivalently, the minimum mass for which a star will ultimately collapse into a neutron star to black hole following a supernova. Two of his students got the Nobel Prize before him. It is of-course the famous Nobel Laureate Chandrasekhar Subrmaniam.

Friends, there was a great scientific lady who is known for discovering Radium. She won not one, but two Nobel Prizes, one for physics and another for chemistry. Who is she? She is Madam Curie. Madam Curie discovered radium and she was doing research on the effect of radiation on human system. The same radiation which she discovered, affected her and she sacrificed her life for removing the pain of human life.

Whenever I describe to you young friends, scientific historical events, you all jumped. Name of the scientist technologist who created the great event, they are the unique personalities. Young friends, can you join such unique performers of scientific history, you can, definitely you can. Let us study together, how it can be made possible?

Friends, I have, so far, met 12 million youth in a decade's time. I learnt, "every youth wants to be unique, that is, YOU! But the world all around you, is doing its best, day and night, to make you just "everybody else". In the home, dear young fellows you are asked by your parents to be like neighbours children for scoring good marks. When you go to school, your teacher says "why not you become like the first five rankers in the class". Wherever you go, they are saying "you have to be somebody else or everybody else". Now, dear young friends, how many of you would like to be unique yourself.

The challenge, my young friends, is that

you have to fight the hardest battle, which any human being can ever imagine to fight; and never stop fighting until you arrive at your destined place, that is, a UNIQUE YOU! Friends what will be your tools to fight this battle, what are they: have a great aim in life, continuously acquire the knowledge, work hard and persevere to realize the great achievement.

What are the unique qualities of inventors and discoverers?

Also, I would like to give, how you young friends can become a great inventors or discoverers. What is the unique nature of thinking minds of discoverers and inventors of the world. Dear friends, can you all repeat with me. "Inventions and discoveries have emanated from creative minds that have been constantly working and imaging the outcome in the mind. With imaging and constant effort, all the forces of the universe work for that inspired mind, thereby leading to inventions or discoveries". Now there are three unique friends to make you great; they are great books, great human beings and great teachers. Teachers should have the capacities to nurture the "creative minds" and "imagining minds".

To Sir, With Love



As the former President of India Dr. A. P. J. Abdul Kalam drove into the campus of KIIT University to inaugurate Children's Science Congress, he received a thunderous applause from thousands of students, teachers, delegates and young scientists who were present on the occasion.

The sunny radiance of the young faces lit with the pride and happiness of meeting and shaking hands with Dr. Kalam outshone the bright sunshine that spread across the quadrangle. He was here to speak on the topic – "Transform yourself,

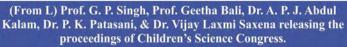


Unique you". Children were impatiently waiting for his arrival. Showing a handmade greeting card, 10 year old Prashant said, "I prepared this New Year card for Dr Kalam and I will present the card to Sir with love."

The session covered a wide range of topics ranging from the Indian Diaspora to personal development. He was asked many science-related questions to which he gave candid replies. He administered an oath to all present, eliciting their promise to work selflessly and single-mindedly to achieve their goal and make the nation proud.

(From L) Prof. G. P. Singh, Prof. Geetha Bali, General President, 99th ISC, Dr. A. P. J. Abdul Kalam, Former President of India, Dr. P. K. Patasani, MP, Bhubaneswar & Dr. Vijay Laxmi Saxena, General Secretary (Scientific Activities), 99th ISC at the inaugural function of Children's Science Congress in KIIT.











Dr. A. P. J. Abdul Kalam inaugurating the science exhibition for children in the presence of Prof. Geetha Bali and Chairman of Bharatiya Jan Vigyan Samiti, Dr. R N Ray.



You educate a woman, she educates a family: Dr Nirupama Rao



(From L) Prof. Geetha Bali, General President, 99th ISC, Dr. Gretchen Kalonji, ADG for Natural Sciences, UNESCO, Smt. Nirupama Rao, Ambassador of India to the US and Dr. D. Purandeswari, Union Minister (State) for Human Resource Development at the inaugural ceremony of the First Women's Science Congress at KIIT University.

Indian ambassador to USA Dr Nirupama Rao stressed on women education and women's participation in science and technology for the growth of the nation. Inaugurating the Women's Science Congress, a part of 99th Indian Science Congress here at KIIT Stadium she said, "You educate a woman and she will educate a family."

The ace Indian diplomat appealed to the society for greater involvement of women in the social sphere of life. "No society can claim to be a part of modern civilisation unless it provides an enabling environment for empowering women and give them equal opportunity," she said.

Expressing her concern over the fact that the number of women scientists in our country was still minuscule Dr Rao questioned, "Is it because of the institutions to which they belong that discourage their involvement in science?" . Further asking why science streams remain largely male dominated

and why there are very few women in national science academies or in decision-making positions in science establishments, the 1973 batch IFS officer advocated for greater presence of women in high-profile institutions of science and technology.

Quoting well-known scientist M S Swaminathan, she prescribed mid-career opportunities for women scientists who quit profession immediately after marriage and self-employment opportunities for women in the ever-expanding field.

Maintaining that the Indian society had always celebrated the spirit of inquiry and the pursuit of knowledge for the advancement of human kind, she quoted former Prime Minister Jawaharlal Nehru as saying, "Our founding fathers recognised the need for promoting the scientific temper and the crucial role of science and technology in creating a modern and vibrant India"

In a personal note Dr Rao added, "My mother was a fountain of knowledge. She

was the one who contextualised the story of Madame Curie for me when I was young. I read the Curie biography for the first time."

Speaking on the occasion Union Minister of State for Human Resource Development Dr D. Purandeswari said women's empowerment cannot be complete without their equitable participation in science and technology as they have special role to play. "Given a scope they can bring a wave of creative and generative energy in the field of science and technology," she opined.

"Today their participation is restricted and limited because of widespread discrimination at the basic education levels and lack of opportunities for pursuing higher studies. In order to expedite the process of development and take our country towards new heights of excellence, it is essential that we take to a process of massive application of science and technology in the realm of womankind," she pointed out.

Talking on "Science and Technology for Inclusive Innovation - Role of women", she hoped it would arrive at meaningful conclusions which could provide appropriate inputs for policy prescriptions in the realm of human progress and growth through the application of science and scientific methods for correcting gender disparity.

The Union minister underlined that India's contribution to the global women's development has been rich, diverse and in many ways unique. "Though the efforts to promote greater equality between men and women can contribute to the overall development of human society, yet despite this highline consciousness and greater awareness of the role of women, no society treats its women as well as its men. Consequently women continue to suffer from diverse deprivations," she told.

Quoting a study by International Labour Organization Dr Purandeswari said women who represent 50 percent of the world adult population, and one third of the official labour force, and perform nearly 2/3rd of the working hours, receive only one tenth of the world's income and

own less than one percent of the world property. "This gender disparity is palpably evident in the education sector which hits inclusive growth very adversely. Science and technology brings economic growth and well-being to people; not only because of the empowerment of women through science and technology, but also because of the enrichment of science and technology through women's participation. Engagement of women at the grassroot is inevitable for worldwide science and technology capacity building," she added.

Inaugural Address by Ambassador Nirupama Rao at the Women's Science Congress at Bhubaneshwar (5 January 2012) - Excerpts



is a great privilege for me to address the "First Women's Science Congress" as part of the 99th Indian Science Congress being jointly hosted by the KIIT University and the National Institute of Science

I compliment the organizers of the Congress for choosing the evocative theme of 'Science and Technology for Inclusive Innovation-Role of Women' for this year's deliberations. I also appreciate the fact that the organizers have brought together so many talented

Education and Research, in

Bhubaneswar. I am very happy to visit

fascinating Odisha for the first time.

women scientists who are to be congratulated for their achievements, and who, I am sure, will inspire younger members of their cohort to attain even higher pinnacles of success.

Human inquisitiveness and the quest for comprehending the nature of the universe around us have engendered science or the study of the unknown. Our very own

Indian civilization has always celebrated the spirit of inquiry and the pursuit of knowledge for the advancement of humankind. It was our first Prime Minister, Jawaharlal Nehru who said in 1947 that the "future belongs to science and those who make friendship with science". Today, more than ever before, there is need to revisit the concept of the "scientific temper" envisioned by Prime Minister Nehru.

Women, as the popular saying goes, "hold up half the sky". The Indian sky still needs many more skilled and aualified women to sustain it, and to disseminate the fruits of progress throughout the country. The number of women scientists in our country is still too few - in fact, this paucity in numbers is a world-wide phenomenon. The question we must ask ourselves is why is there a relative absence of women in science. It cannot be due to the women themselves. Is it because of the institutions to which they belong? This is the question to which I found myself constantly returning as I wrote my speech.

The involvement of women in the field of science is as old as human civilization. An ancient Egyptian, Merit-Ptah (c. 2700 BCE), is the earliest known female scientist named in the history of science. Indian history celebrates the scientific pursuits of its illustrious daughter, Lilavati - a renowned mathematician of the 12th century.

In 1935, the year of the founding of the Indian Academy of Sciences, one of our pioneering women scientists, E.K Janaki Ammal became a Fellow of the Academy. and of the Indian National Science Academy in 1957. The image of the wise woman, the healer and nurturer who has access to the ocean of knowledge is common to many cultures.

Historical evidence and scientific research show that the pursuit of science is gender neutral. Yet, the contribution of women to technology is hidden from history. The moot point is why

scientific streams remained largely maledominated or why there are very few women members in various national science academies or in decisionmaking positions in scientific establishments. This also begs a question whether we are doing enough in India to encourage the participation of women in Indian science, or more importantly, what more should we be doing to make science more inclusive. We cannot afford to

be charged with gender blindness in this crucial field that is so vital for India's development.

It is rightly said that the absence of women from science implies a formidable underused human resource. Gender based disparities have remained the most prevalent form of exclusion globally and perhaps more so in the developing world. The Indian experience is no exception to this state of affairs. Despite global economic turbulence, our

country has done well in terms of economic growth. However, for growth to be meaningful, it must be inclusive and benefit all sections of society. Indeed, no society can claim to be a part of the modern civilized world unless it provides

Historical evidence and scientific research show that the pursuit of science is gender neutral. Yet, the contribution of women to technology is hidden from history. The moot point is why scientific streams remained largely male-dominated or why there are very few women members in various national science academies or in decision-making positions in scientific establishments.

an enabling environment for empowering women and provides them equal opportunities. And, in general, we have to create a culture of science in our country, attain a high scientific literacy rate, empower men and women with the ability to understand scientific terms, concepts and methods and the impact of science on society. Our citizens must be imbued with the spirit of enquiry. Today, we in India have given the world such concepts as frugal innovation, reverse innovation, Gandhian innovation, about getting more from less for more people

"more from less for more" as Dr RA Mashelkar and the late Dr CK Prahalad termed it. We must become leaders in innovation for the whole world innovation with equity and sustainability, as Dr Mashelkar puts it. And in this

> enterprise, women must play a role commensurate with their proven intellectual capacities.

I am confident that the First Women Science Congress will provide an excellent platform to celebrate the achievements of Indian women in science and also deliberate on ways to enhance their participation in science, research and development and decision making processes relating to science. It is time to think out of the box and think big if we are to emerge as global leaders in science and harness the potential of science as an agent

of transformation and development. Let us make a fresh beginning with new initiatives for encouraging the participation and retention of Indian women in science and technology and making them equal partners in all processes of development and governance. This is not only desirable but essential for all round national development and progress.



NOBEL LAUREATE

Lectures at KIIT



Neutralizing antibody responses are induced very late by HIV in humans - Dr. Rolf M. Zinkernagel, Nobel Laureate



While for most acute cytopathic classical childhood infections, tetanus, diphtheria, measles, polio or small pox, our usual in vitro assays ELISA, y-IFN producing T cells or T cell proliferation correlate reasonably well with the immunological memory, neutralizing antibody responses are induced very late by HIV in humans (or by LCMV in mice), observed Nobel Laureate Dr Rolf M. Zinkernagel.

Delivering public lecture on 'Why do we not have a vaccine against HIV or TB' at the 99th Indian Science Congress, Zinkernagel said this common feature applies to several human persisting viral infections, including HBV, HCV, HIV (and many parasitic infections) even as HIV-1 infections induce quick and very good ELISA positive responses.

"If a neutralizing antibody arises and viraemia re-emerges, then often neutralizing antibody escape mutant viruses get selected. This indicates that only a multi-specific type of vaccine may eventually control such infections. Since this may include up to 10,000 or 100,000 variations for HIV (or 1,000 for influenza virus), such a vaccine will be very difficult to develop," he said.

The Nobel laureate said there is good evidence that only persisting and re-encountered antigen maintains the specific neutralizing antibody. "This antigen-dependent protection is a far cry from the immunological memory and its relationship to vaccine mediated protection to become plasma cells. Therefore impact of antigen dependent protection via activation of B cells or effector T cells impinges on our understanding of protective vaccines, particularly against chronic persistent types of infections," he maintained.

Zinkernagel who got the Nobel Prize in Physiology or Medicine for

1996 along with Peter C Doherty said vaccine strains that tend to persist, such as BCG, loose protective capacity once the vaccine strain has been eliminated by the host. "On the other hand attenuated vaccine strains may regain virulence under certain circumstances (e.g. HIV-1 or SHIV) suggesting that development of sufficiently attenuated but not too much attenuated vaccine strains may be either extremely difficult or impossible".

He added that the parallels between successful vaccines against acutely cytopathic and potentially lethal virus infections versus the absence of such vaccines against chronic persistent types of infections reveals a ve



NOBEL LAUREATE

Lectures at KIIT

Academic institutions can shape global future-Dr. Richard R Ernst, Nobel Laureate



Prof. Richard R Ernst, a Swiss Physical Chemist who was awarded the Nobel Prize in Chemistry in 1991, in his Public Lecture on January 4 emphasized the importance that academic and academic institutions carry in shaping a beneficial global future for all. They are the educators and motivators of the future leading heads in politics, business and academia.

He emphasized on the new spirit which should be developed and spread within academic community or society that would be based on co-operation, foresight and compassion to counterbalance the deadly money-mindedness and egomaniac cravings for materialistic goods that lead to present global disarrays. Quoting Philosopher Hans Jonas, Prof. Ernst agreed that the task to educate future generation of leaders lie with us. Speaking about all human beings are researchers by nature, he said that research had been indispensable for understanding nature on the one hand, and for stimulating industry on the other.

Research is indispensable for sustainable development, saving resources, improving health and reducing gap between the rich and the poor, he said. In a tone of anguish, he emphasized that while the world enjoys the fruits of scientific discovery in one end, in the other it is suffering because of continuance to rather catastrophes works, environmental damages, self-solveness, greed, corruption, crime and poverty. Prof. Ernst reminded us the teachings of Sufi teacher Nawab Jan-Fishan Khan who said "the candle is not there to eliminate itself". This refers to academic responsibility decide our own ivory tower.

Therefore, the responsibility is with us to build bridges based on tolerance and responsibility between science and the public, rich and the poor, developed and the developing countries and between religions. Research and teaching are not the academic obligations of researcher, rather it is important to have foresight and planning for the future. We need a changed world and for

that we have to change ourselves. Quoting from Mahatma Gandhi, he said "we must be the change we want to see". Science without conscience ruins the show said Francois Rabelis and we must not forget that. He advised the scientific community to become both founders of society and not to forget the strong and positive words that the Philosopher Carl Pepper said in 1993 "optimism is our duty. We all are jointly responsible for what will come". The Public Lecture today was attended by delegates from all sections of science and the students to hear the brilliant speech made by a great scientist like Prof. Ernst who could show the other side of a scientist to convince that science is for the people. Dr. Richard R Ernst was awarded Nobel Prize for his contribution towards the development of Fourier transform nuclear magnetic resonance spectroscopy while at Varian Associates, Palo Alto and the subsequent development of multi-dimensional NMR techniques. He studied and served in Eidgneossi sche Technische Hochschule in Zurich. Though retired now, he is still pursuing his research.



NOBEL LAUREATE



Lectures at KIIT

Food security in time of climate change is a major concern- Dr. Kurt Wuthrich, Nobel Laureate

Taking a cue from the Prime Minister, Nobel Laureate Professor Kurt Wuthrich, who deliberated on "Basic Research and Human Daily Life", emphasised on the importance of basic research, its application and its effect in a holistic way. Holding an umbrella in one hand which gives protection against rain and a water bottle in the other to drink is an important point in applied research. The focus areas of this mega event missed an important point, according to the professor, care for the age of the population. Food security during this time of climate change is a major concern. Professor Wuthrich currently maintains a laboratory both at the ETH Zurich and at the Scripps Research Institute in La Jolla, California.

Earlier, the Chairperson for the lecture introduced the speaker by describing his pioneering work in the development of nuclear magnetic resonance spectroscopy for determining the three-dimensional structure of biological macromolecules in solution which earned him the prestigious Nobel Prize. Without delving any more into his academic pursuits, he told the audience about his other interests like French theatre, movies, literature and the like. He played soccer till the age of 50.

He basically delved into his own research of NMR (nuclear magnetic resonance) in structural biology. Structural biology is the science of analyzing and determining the three-dimensional shape of the molecules of life. There are two main classes of biological macromolecules: nucleic acids (DNA, RNA) and Proteins. Some of the artistic drawings of structure determination were depicted on the slides. Some selected protein functions include protection (hair, skin), catalysis (enzymes), and regulation (hormones) and transport (hemoglobin).

Structure determination of a macromolecule is originally connected to basic research. Cyclosporine A had saved a large

blood looks red, without whose function there is any life. Protein 3D structure Determination could be seen in the X-ray diffraction with protein crystals since 1957 and NMR with protein solutions since 1984. Blood doping could be related to hemoglobin research which connects research to human daily life. Brownian motion and NMR in solution have a connection through research. The transverse relaxation-optimized spectroscopy started off in 1997.

number of lives. Hemoglobin, the protein which makes the



Practical application of science is utmost important. It is the job of scientists and other people related to science to link basic research and human daily life. He concluded by saying, "It is extremely important in all countries, in Switzerland, US, India and everywhere else, that we emphasize the education of new generation of scientists and engineers who could carry useful practical application of science", said Wuthrich.

Curtains Down on 99th Indian Science Congress

The ultimate objective of any scientific pursuit is to improve quality of life of people, said Shri M. C. Bhandare, H.E. Governor of Odisha at the valedictory ceremony of the 99th Indian Science Congress at KIIT University on January 7. "Despite tremendous progress in the field there is a sizeable section who struggle to meet basic needs like food, shelter and healthcare," he observed.

Asserting that modern research should address these problems, he said, science must have innovativeness, foresight and vision to make it a boon for the society. Quoting Nehru, he said, "Science alone can solve the problem of hunger and poverty, insanitation and illiteracy, of superstition and dreading customs." He reminded of country's rich legacy of science from Aryabhatta to Srinivasa Ramanujam and from CV Raman to APJ Abdul Kalam.

It was a great honour for Odisha to host the 99th Indian Science Congress after a gap of 34 years, he said, while expressing gratitude to KIIT, NISER and Dr. A. Samanta, Founder, KIIT & KISS and Chief Patron, 99th ISC for making it happen with elegance and style. The Governor conferred Pride of India Expo Award to 14 organisations in seven different categories. While NALCO bagged the award for most innovative expo, DRDO was adjudged exhibitor of the year. Best poster awards were also conferred to 28 presenters in 14 different sections of the Science Congress.

Six winners of National level Essay and Quiz competition (senior and junior level) were also awarded. The senior category topper received a prize money of Rs. 5 lakh, while topper in junior category received Rs. 4 lakh. Speaking on the occasion, Dr. P. K. Patasani, Hon'ble MP, Bhubaneswar commended KIIT and Dr. Samanta for

Crediting KIIT for remarkable conduct of the event, Prof. Geetha Bali, General President, 99th ISC remarked, "There was nothing where we felt something could be done in a better way."

Ambience at KIIT was very conducive and all comforts were provided, she said. Terming 99th ISC a very satisfying experience, she expressed happiness that all deliberations were vibrant.



Dr. B. Hari Gopal (Dept of DST), The Prime Minister's Emissary receiving the ceremonial Vigyan Jyot from Shri M. C. Bhandare, The Governor of Odisha. The Prime Minister will be the General President of the Centenary Session of Indian Science Congress next year.

excellent organization of this mega event. "The state is proud of him," he added. The 99th ISC was attended by a record 18000 delegates. Total number of delegates from abroad was 250, said Prof. Geetha Bali, General President, while informing that the session saw 35 special lectures and 30 plenary sessions and panel discussions. There was a healthy participation from women scientists in the science congress, which had 'Science and Technology for Inclusive Innovation – Role of Women' as its theme.

Crediting KIIT for remarkable conduct of the event, she remarked, "There was nothing where we felt something could be done in a better way." Ambience at KIIT was very conducive and all comforts were provided, she said. Terming 99th ISC a very satisfying experience, she expressed happiness that all deliberations were vibrant. She also thanked NISER, which was academic partner of KIIT in hosting the event.

Centenary session of the science congress is scheduled to be held in Kolkata, with the Prime Minister as its General President. The Prime Minister's emissary Dr. B. Hari Gopal of Department of Science and Technology received the ceremonial Vigyan Jyot from outgoing General President, Prof. Bali.

Dr. Samanta expressed gratitude to Prof. Bali and all functionaries of Indian Science Congress Association (ISCA) for their cooperation in making the event a grand success. Prof. T. Ramasami,, Secretary, DST delivered the welcome address. Among others, Prof. A. S. Kolaskar, VC, KIIT, Dr. Vijay Laxmi Saxena, General Secretary (Scientific Affairs), 99th ISC, Dr. Manoj Kumar Chakraborti, General Secretary (Membership Affairs), Dr. A. K. De, Executive Secretary, Dr. N. B. Basu, Treasurer and Dr. A. K. Nayak, Registrar, NISER were present on the occasion.

"We all are proud of KIIT, NISER and Dr. Achyuta Samantaji, the founder of KIIT for taking all pains to make it happen with elegance and style at Bhubaneswar which is fast becoming a prime centre in the pursuit of scientific knowledge and quality education."

Speech of His Excellency Shri Murlidhar C. Bhandare, Governor of Odisha at the Valedictory Session of the 99th Indian Science Congress at KIIT University, Bhubaneswar on 07.01.2012 (Excerpts)



It is indeed a matter of great pleasure for me to address this impressive gathering of eminent scientists and technologists from across the country on this valedictory session of the 99th Indian Science Congress being held at KIIT University in collaboration with NISER, Bhubaneswar. Like all good things coming to an end, 99th Indian Science Congress is coming to an end today. I am sure the distinguished delegates of this mega scientific event of the country must have enjoyed their stay in this beautiful Temple City of Bhubaneswar and as they return back they will have their bag full of fond memories.

The vision of our successive Prime Ministers from Pandit Jawaharlal Nehruji to Dr. Manmohan Singhji has benefited the Science Congress to a great extent to work with renewed spirit in post independent period and spearhead its noble objectives and mission for the progress and development of India through science and technology. It is a great honour for the State of Odisha to host this prestigious event after a gap of 34 years. The occasion is also memorable as it coincides with the celebration of the 60th Anniversary of UNESCO Kalinga Prize which was instituted by legendary late Biju Patnaikji, former Chief Minister of Odisha, Founder-President of Kalinga Foundation Trust and a great son of the soil.

Visitors especially students have had a great time having live interactions with the scientists and aetting alimpse of the technological might of the Defence Research & Development Organisation in strategic sector of national security. The Science Congress has surely provided the excitement of scientific challenges to the young creative minds. I am happy to note that India Pride Exhibition and the Odisha Mandap were big attractions for visitors of all age. I commend the steps taken to make 99th Indian Science Congress a grand success and truly memorable. We all

are proud of KIIT, NISER and Dr. Achyuta Samantaji, the founder of KIIT for taking all pains to make it happen with elegance and style at Bhubaneswar which is fast becoming a prime centre in the pursuit of scientific knowledge and quality education.

On the subject of science my mind immediately goes to the rich legacy and tradition of scientific pursuit in our country. Starting from Aryabhatta to Srinivasa Ramanujam, C. V. Raman, Acharya Jagadish Chandra Bose to APJ Abdul Kalam, India has many renowned as

well as promising scientists and similarly, the State of Odisha has renowned scientists like Samanta Chandra Sekhar, Dr. Prana Krushna Parija to name a few who have international fame for their outstanding work and achievement. The ultimate objective of any scientific pursuit is to improve quality of life of the people. Our scientists have explored science and technology and put those to use in various areas of development. It is an irony that despite tremendous progress of science and technology we still have a sizeable section who struggle to meet basic needs like food, shelter and healthcare. Modern research has therefore, to be done to address these pressing problems.

It is an irony that despite tremendous progress of science and technology we still have a sizeable section who struggle to meet basic needs like food, shelter and healthcare. Modern research has, therefore, to be done to address these pressing problems.

The science that we work with today must have the innovativeness, foresight and the vision to guide the technology that we would be developing which would make science a boon for mankind and not a tool for destruction and disaster. 21st Century is about the management of all knowledge and information and our scientists have to bring value addition to that knowledge for the benefit of mankind. I am sure, the deliberations at this Indian Science Congress will provide good feedbacks to the next Indian Science Congress as it celebrates its centenary.

Science and technology can become a tool for the society - Dr. Kasturirangan

The Science Policy for Twelfth five-year plan will encourage the development of India's agriculture, education, health and social welfare through government spending, Chairman of Planning Commission K Kasturirangan said while delivering lecture on 'Science Policy Making' at the 99th Indian Science Congress on January 3. "It is also expected to create employment through manufacturing sector and harness the young talent pool, encourage participation in research and increase industry-academia interaction,"he said.

"We hope to bring a paradigm shift to science and technology. In a fast growing nation like ours the policies will not achieve their target, if a society will not be informed. What is best depends upon when, where and for whom it is used for," he said. Emphasizing the role of Science he said, "Science and Technology are rampantly advancing. Together these can become a tool for society. Therefore, it has to occupy a centre stage and new science and technology policy has to be innovative to accelerate the growth."

Kasturirangan emphasized that the 12th plan would focus on transforming India from Poor Economy Status to Middle Economy Status country and by the end of the plan period it aims to achieve remarkable growth in per capita.

Dr. V. M. Katoch, Secretary to Govt. of India, Department of Health Research Director General, and Indian Council of Medial Research was of the opinion that 'Health for all is objective'. He admired Prime Minister Manmohan Singh's comment on monsoon launching system and said that major emphasis should be given to address the issues related to climate change and earth system. "A strong interdependent policy should be implemented which will bring about a structural reform," he said.

Dr. Samir K. Brahmachari, Director General, Council of Scientific and Industrial Reform (CSIR) said though a lot of plans and policies have been made, they lack people's support as the latter want their implementation and execution in ground level. He said, "We

need a new way of University system with excellence and high value. Indian Science is divisive. So we should mix up science with technology," he stated adding that special programmes should be initiated for school dropouts. Dr. M. Rajasekharan Pillai, Vice Chancellor, IGNOU, New Delhi dwelled upon the challenges of science policy making and said that unbalanced innovation will be of no use for any society and the potential of science and technology still remain untapped for a common man.

Dr. Balakrishna Pisupati, Chairman, National Biodiversity Authority (NBA) in his presentation said that there should be a link between 'sciences of biodiversity with policy of biodiversity'. He also advocated that policy should be made through public private partnership.

Dr. T. Ramasami, Secretary, Department of Science and Technology (DST), Govt. of India focused on the policy that should stand for the people. "Time has come for a shift from public policy for science to science policy for

> public," he said. Dr. Ramasami was also of the opinion that youth should be given importance while making science policy and hoped that it would be implemented before the Indian Science Congress meets at Kolkata on its centennial edition next year. Prof. Ramamurthi was convener of the Panel Discussion.



Dr. K. KasturiranganMember, Planning Commission of India



Dr. V. M. Katoch Secretary to Govt. of India, Department of Health Research & Director General, ICMR



Dr. Samir K. Brahmachari, DG, CSIR



Dr. S. Ayyapan Director General, ICAR & Secretary, DARE



Dr. M. Rajasekharan Pillai Vice Chancellor, IGNOU



Dr. T. Ramasami Secretary, DST, Govt. of India



Dr. Shailesh Nayak Secretary, Ministry of Earth Sciences, Govt. of India



Dr. Balakrishna Pisupati Chairman, NBA

Science Exhibition

Defence models magnetise students

The 99th Indian Science Congress was a memorable experience for thousands of school and college students who thronged the exhibition ground to see various models of missiles and technology demonstrations. The DRDO exhibition at this mega event has been a big hit.

For Puja Pende, a student of Vidya Pratishthan at Baramati in Maharashtra it was like a dream came true. "Pictures of Agni, Prithvi and other missiles were familiar to me, but seeing their life-size models was a different experience. I feel proud when I see our defence research projects", she said. The exhibition presents science and technologies in strategic sector for national security and it is exciting for young, creative minds with scientific temper. DRDO scientists from over 25 laboratories are present for interactions with visitors, especially students.

A science student was overwhelmed after seeing the radars. He said, "I want to pursue a career in guidance technologies like radar in relation to their military application and I am keen in joining the DRDO. I am sure one day I will." Not only for students, the DRDO exhibition also caught the fascination of their parents and teachers. Chief Controller for Life Sciences and International Cooperation at DRDO Dr W Selvamurthy said DRDO is doing a number of activities and the exhibition is helpful for visitors in understanding the activities of the defence Institutes. "Nearly 85 percent of NBC defence inventory held by the Indian armed forces has been developed by DRDO. It has developed the interceptor missile that allowed India to join an elite club of five nations possessing such advance technology," he added.

The main attractions of this exhibition are strategic and tactical missiles Agni, Prithvi, Nag, Akash, BrahMos and Astra. The other models that cover the entire extent of research and development included India's Light Combat Aircraft-Tejas, UAVs NISHANT and Pilotless Target Aircraft (PTA) Lakshya, bridging systems Sarvatra and BLT T-72, autonomous underwater vehicle, torpedoes like Varunastra and decoys. DRDO is also exhibiting bio-digesters that are used to solve human waste disposal problem in high altitude regions. The technology developed by the country's premier defence research and development organisation was used to decompose biological waste generated by soldiers deployed in regions of Siachen and Ladakh.







Dr. R. Chidambaram, Principal Scientific Adviser to Govt. of India.



Dr. V. M. Katoch, Secretary, Dept. of Health Research & DG, ICMR, Govt. of India, Shri L.S. Satyamurthy, Vice-President, Telemedicine Society of India and Dr. B.N. Mohanty, Prof. of Surgery, SCB Medical College, Cuttack at Plenary Session on Health Care Without Borders-The Telemedicine way.



Dr. K. Narayana Gowda, Vice Chancellor, University of Agricultural Sciences, Bangalore.



Dr. N. Chandrasekharan CEO & MD of Tata Consultancy Service



Dr. Harish C Pant, Neuronal Cytoskeletal Protein Regulation Section, Laboratory of Neurochemistry, NINDS, USA



Dr. Jiri Grygar, Institute of Physics, Czech Academy of Science speaking at the Plenary Session on Frontiers in Atmospheric Sciences.



Dr. Devendra Agarwal, Dept. of Biomedical Sciences, Creighton University School of Medicine, USA .





Smt. Geeta Varadan, Director, ADRIN, ISRO, Hyderabad speaking at Women in Science session of Women's Science Congress.



Dr. Chitra Rajagopal, Associate Director, CFEES.



Dr. Qamar Rahman from Department of Biological Sciences, University of Rostock.



Dr. Tessy Thomas, Project Director, Advanced Systems Laboratory, Hyderabad speaking at Women in Science session of Women's Science Congress.



Dr. Polly Roy, London WCIE, United Kingdom and Prof. Indira Nath, ICMR at Women in Science session of Women's Science Congress.



Dr. Nabanita R. Krishna, Director, Directorate of Management Information System and Technologies, DRDO Bhawan.



Dr. Shashi Bala Singh of Defense Institute of Physiology and Allied Science.



Dr. H.S. Sharma, Laboratory of Cerebrovascular Research, Department of Surgical Sciences, Uppsala University, Sweden and Dr. Jamboor K. Vishwanatha, Director, Texas Center for Health Disparities, University of North Texas Health Science Center, Texas at Plenary Session on Nanoscience and Diagnostics.



Dr. Sarah Dunlop, President, Australian Neuroscience Society delivering her special lecture.



Dr Peter Thalau, J.W. Goether University, Germany delivering Special Lecture on Magnetoreception in birds.



Dr. Ghanshyam Pandey, Professor of Psychiatry, University of Illinois, Chicago speaking at Plenary Session on Tackling Neurodegenerative Diseases.



Dr. A.N. Singh, WHO Professor, Queens University, Canada speaking at Plenary Session on Nanoscience and Diagnostics.



Dr. K. Muralidhar, Professor, Dept. of Zoology, New Delhi speaking at Penal Discussion on Science Education in Rural Areas.



Dr. P.K. Seth, CEO, Biotech Park, Lucknow speaking at Plenary Session on Tackling Neurodegenerative Diseases.



Dr. K.S. Jagdish, R.V. College of Engineering, Bangalore speaking at Plenary Session on Green Building Technologies.



Dr. W. Selvamurthy, Distinguished Scientist & Chief Controller, Research & Development, Govt. of India, New Delhi





Dr. Thomas Hartung, Director of the Center for Alternatives to Animal Testing (CAAT), Baltimore at Plenary Session on Animal Alternatives in Teaching and Testing.



Dr. M. A. Akbarsha, Dorencamp Chair, BDU, Tiruchirapalli speaking at Plenary Session on Alternatives to Animals in Education, Research and Testing.



Dr. Ronald J. Herring, Cornell University, New York at Plenary Session on Agricultural Biotechnology in India-Scientific, Regulatory and Societal Challenges.



Dr. Vinita Sharma, DST, GoI at the valedictory function of Women's Science Congress



Mr. V. K. V. Ravichandran, Farmer, Tamil Nadu at Plenary Session on Agricultural Biotechnology in India-Scientific, Regulatory and Societal Challenges.



Dr. Gerta Fleissner, J.W. Goethe University, Germany delivering Special Lecture.



Dr. C.S. Prakash, Director, Center for Plant Biotechnology Research, College of Agricultural, Tuskegee University speaking at Plenary Session on Agricultural Biotechnology in India-Scientific, Regulatory and Societal Challenges.

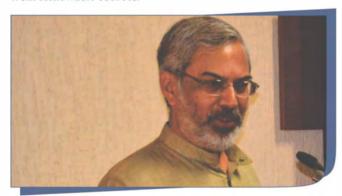


Dr. Ashok Kumar, VC, CSJM University, Kanpur delivering Public Lecture.





Dr. Hoysall Chanakya, Centre for Sustainable Technologies, IISC, Bangalore speaking at Plenary Session on Clean Energy from Renewable sources.



Dr. Kartikeya Sarabhai of Centre for Environment Education at Panel Discussion Education for Sustainable Development.



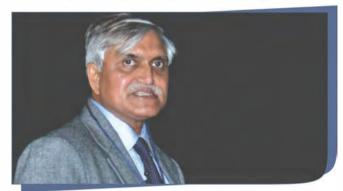
Dr. Ramamurthy Rallapalli, Former Vice Chancellor, SV University, Tirupati.



Dr Hari S Sharma, Amsterdam speaking at plenary session



Smt. Arti Ahuja , IAS, Commissioner-cum-Secretary, Women and Child Development Department, Govt. of Odisha at the valedictory ceremony of Women's Science Congress.



Dr. M. K. Mishra, VC, Lucknow University delivering Special Lecture.



Dr. Y. B. Ramakrishna, Chairperson, Bio-fuel Board, Govt. of Karnataka at Plenary Session on Clean Energy from Renewable sources.

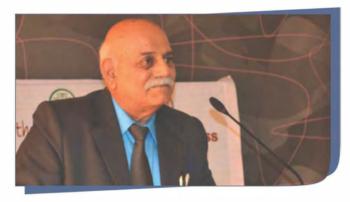


Dr Lindsay Brown, Australia speaking at plenary session





Dr N G Hegde, BAIF, Pune speaking at plenary session



Dr Rajashekar speaking at plenary session on Rural Livelihood and Livestock Management.jpg



Dr Padma Saxena of DAV College, CSJM University, Kanpur at Science for Women session of Women's Science Congress



Prof K Rudramma Devi of Osmania University at Science for women session of Women's Science Congress



Dr Navrati Saxena speaking at plenary session on Energy and Sustainability for a Greener Tomorrow.



Dr Vijay Laxmi Saxena, General Secretary (Scientific Affaits) ISCA speaking at valedictory ceremony of Women's Science Congress



Dr. Mukulika Hitkari of DGPC College, CSJM, Kanpur speaking at Science for Women session of Women's Science congress



Dr. Veena Goswami, Dean, School of Computer Application, KIIT University

Opportune time to rethink on food production and research methods: DG, ICAR



materials technology, molecular plant breeding, genetically improved grains, is changing our agriculture and spearheading a remarkable silent revolution, which is shaping our country's progress through this decade of innovation.

He stated that we needed to look differently at our priorities in food and this is an opportune time to re-think the food production and research methods system. Also, the maintenance of the system can be carried out within the village and information systems as Kisan Mobile Sandesh and Agropedia need to be developed more thereby creating indirect employment.

"We need to look

differently at our

priorities in food and this is an opportune time to re-think the food production and research methods system.

Also, the maintenance of

the system can be carried out within the village and information systems as Kisan Mobile Sandesh and Agropedia need to be developed."

He expressed his concerns about natural resource base, impact of climate change on production, ground depletion, and imbalance in food grain. "We have to act as clearing house of research and general information relating to agriculture, animal husbandry, home science and fisheries and to institute and promote transfer of technology programmes", said Dr. Ayappan.

Further elaborating on the issue he said that we have to undertake and promote consultancy services in the fields of education, research, training and dissemination of information in agriculture, agro forestry, animal husbandry, fisheries, home science and allied sciences. "It will help us to look into problems relating to broader areas of rural development. However, in this endeavour, the generation of ideas is critical. Central to the ideation process is 'Right to Food' and the Science policy has to be people participating", pointed out Dr. Ayappan.

On the strengths of India he said the nation has drought accessing monitoring system, which will be upgraded for drought proofing agriculture. He also informed the audience about improved productivity in dry land farming, bioengineering measures for soil-conservation, integrated nutrient management, integrated farming system and water budgeting.

"These strengths need to be harnessed to address the basic needs of people and to transform India into food-secured nation", asserted Dr. Ayappan.

Dr. S Ayyapan, Director General, Indian Council of Agriculture and Research (ICAR) & Secretary, DARE described the importance of scientific research in the field of agriculture and the challenges it is facing presently.

While speaking on 'Feeding Crores Forever' on the second day of the 99th ISC, he said that the work of the scientists in the areas spanning pesticides, a gricultural machines, rural development, renewable energy sources,



Telemedicine: Moving bytes instead of bodies



Dr. V. M. Katoch Secretary to Govt. of India, Department of Health Research & Director General, ICMR

The new National Knowledge Network (NKN) will enhance connectivity thereby improving the platform for telemedicine in the country. Many medical institutes both in the private and government sectors have already established telemedicine facilities. We need to have a very strong referral chain and telemedicine can prove effective for establishina a referral system in healthcare. It is also essential to establish an orderly consultation and resource deployment systems. The medical education and research system needs to be strengthened. A lot of data is available right from primary health centres to tertiary care hospitals and it is necessary to analyse this data. These were some of the views expressed by Dr. V. M. Katoch, DG ICMR during his keynote address at the plenary session on Healthcare without borders—the telemedicine way at the 99th Indian Science Congress.

The session was chaired by Mr. L.S. Satyamurthy, Vice President, Telemedicine Society of India. The panellists of the session included Dr. Remilla Murthy, Deputy Director, Business Development, Antrix Corporation Limited, Dr. B.N. Mohanty, Professor of Surgery, SCB Medical College and Prof. K. Ganapathy, President, Apollo Telemedicine Networking Foundation. Dr. Remilla Murthy noted that government's share in

"The National Knowledge Network will enhance connectivity thereby improving the platform for telemedicine in the country. Many medical institutes both in the private and government sectors have already established telemedicine facilities."

healthcare delivery market is 20% and the remaining 80% is with the private sector. However, the rural healthcare system is predominantly government controlled as the low returns are not attractive enough for the private sector to invest in rural healthcare. So, the government has to increase either the infrastructure or the 'infostructure' to meet the increasing demands. Dr. Murthy said that ISRO initiated the telemedicine programme in 2001 in distant and rural areas to supplement the general healthcare infrastructure. Mode of tele-health services included tele-consultation, continuous medical education, and telemedicine for primary healthcare, disaster management support and for telemedicine applications in cardiology, radiology, pathology, ophthalmology and so on.

The Chairman of the session, Mr. L S Satyamurthy, Vice President, Telemedicine Society of India, in his address said that the telemedicine in the country has come a long way during the last decade. Awareness about telemedicine has been created and now there is a demand for setting up telemedicine facilities. However, there are challenges to be met. These include lack of a business or revenue model and the lack of sustained efforts on this front by some of the state governments.

Dr. B. N Mohanty in his lecture presented a summary of the first decade of Indian telemedicine initiatives and its impact. He said that owing to telemedicine, there has been an enhancement in the quality of healthcare by way of tele-consultation, tele-follow up, pre-referral screening and remote treatment planning.

Dr. M. S. Swaminathan, Chairman, MSSRF

Celebrating the indigenous knowledge and conservation ethics and harnessing transformational technologies should be the focus of the 'Year of Science' in India, said Prof. M.S. Swaminathan. Delivering his lecture, Commemorating the Year of Science at the 99th Indian Science Congress at KIIT University, the noted agriculture expert and policy maker, sought to give a clear focus by saying that in the 'Year of Science' the country should concentrate on marrying traditional knowledge and participatory research, with local communities as primary stakeholders as well as partners.

Prof. Swaminathan cited the examples of the traditional agricultural system of Koraput in Odisha and the below sea level farming system perfected by inhabitants of the Vembanad region in Kerala. He said local communities in

'Year of Science' should focus on traditional knowledge & transformational technologies: Prof. M. S. Swaminathan

several parts of the country had been conserving indigenous knowledge for centuries at their own cost and it was high time that sufficient encouragement, support and incentives were extended to the custodians of our traditional knowledge. From 3000 varieties of rice we are now down to 300 varieties due to genetic erosion.

He cited the example of a rural woman who had been conserving a large number of varieties of rice, each coming good for a particular health problem. Similarly, he mentioned communities that had been breeding farm animals and maintaining their varieties, all at their own cost. Prof.

"From 3000 varieties of rice we are now down to 300 varieties due to genetic erosion. Practices that conserve

and maintain a large number of varieties need to be encouraged."

"Concept of sea water farming, which consisted of growing halophytes or salt-tolerant plants along the coasts, is being practised in India as well and a genetic garden with almost 1500 species would soon be ready."

Swaminathan said these practices needed to be encouraged, appreciated and supported.

The devastating 2004 tsunami was a wake-up call focusing attention on the significance of sacred groves as a genetic shield against sea-level rise. The local communities had become conscious of the role of a speed-breaker that such groves played against the fury of tsunamis and cyclones and were now keen on conserving and multiplying them.

Prof. Swaminathan also talked about sea water - a precious social resource that made up 97% of the world's water resources. But the question is how to use it. He mentioned the concept of sea water farming that consisted of growing halophytes or salt-tolerant plants along the coasts. This concept was being practised in India as well and a genetic garden with almost 1500 species would soon be ready, he said. This would be an important resource for scholars, students and also for posterity. Prof. Swaminathan cited ICT as an example of a transformational technology that had now made possible agroecological information even on mobile phones. He cited the example of the Jamsetji Tata National Virtual Academy whose young volunteers have been operating village knowledge centers where they provide information to villagers in easy language. Similarly, fisheries were getting transformed with information being provided to fishermen on wave length and location of fish.

Reiterating his argument towards the end of his lecture, Prof. Swaminathan said that the 'Year of Science' would do well to build on traditional knowledge systems, which should be strengthened for health care and conservation, and also focus on transformational technologies.

Dr. A. P. J. Abdul Kalam asks KISSians to work

for better India



Dr. A. P. J. Abdul Kalam, Hon'ble Former President of India

Hon'ble Former President of India Dr. A.P.J. Abdul Kalam shared his 'Vision 2020' with the KISSians. He said students should be competent to work for better future of the country and make the society happy. Addressing 15,000 students of Kalinga Institute of Social Sciences (KISS), the largest tribal institute of the world, he said though India has already made distinctive progress in all dimensions, there are still many challenges which hamper growth.

He outlined his vision of India as a nation where agriculture, industry and service sector work together, a nation where there is equitable distribution and effective access to energy and water. He also wanted to see a society without social and economic deprivation. Terming corruption as the main problem, Dr. Kalam said, "We have to work together to eradicate poverty from the country and see India as a nation where there is no torture of women and children," he said. He boosted the confidence of the students saying that each one has enough potential to chase the dream. But only thing they have to do is to set the goal and act accordingly.

"Students should aim big as having small aim is a crime. Secondly, they should constantly acquire knowledge from all sources and work hard. Lastly, the students should not let the problem be the captain, rather they should captain the problem". KISS, a protégé of KIIT, provides free education, residence, food and all basic necessities to 15,000 poorest of the poor tribal children. Tribal

students of the institute have surprised everyone many times by their outstanding performance in academics and sports. It is widely regarded as a very successful example of tribal empowerment through education.

Earlier, Founder of KIIT & KISS and Chief Patron, 99th ISC, A Samanta extended a warm welcome to Dr. Kalam to the campus. The meeting was presided by President, KIIT and KISS, Saswati Bal.

accordingly. "Students should aim big as having small aim is a crime. Secondly, they should constantly acquire knowledge from all sources and work hard.



Dr. A. P. J. Abdul Kalam being accorded a traditional welcome in KISS campus.



Dr. A. P. J. Abdul Kalam addressing 15,000 tribal students



'Make Sanskrit compulsory at school level'

Dr. J. B. Patnaik, His Excellency the Governor of Assam advocated making Sanskrit compulsory at school level on 3rd January 2012. He was at KIIT University to inaugurate an exhibition on 'Science & Sanskrit', organised by Sanskrit University, on the sidelines of the 99th Indian Science Congress. Dr. Patnaik is also the Chancellor of the Rashtriya Sanskrit Vidyapeetha - a centre of excellence for traditional Sastras - at Tirupati.

The exhibition exhibited various 'slokas' and 'shastras' related to fields like Physics, Chemistry, Zoology, Mathematics, Agriculture, Geology and Gemology. A book on 'Ancient Indian Mathematics' and a calendar on ancient science were released on the occasion by Dr. Patnaik. After going round the exhibition, he said: "Sanskrit is not just limited to 'slokas' and 'shastras', but is the language of Science".

"Sanskrit has long been the base of several branches of knowledge and the Government today should make the language compulsory for school-level education," he said adding it will strengthen the foundation of students' careers. Dr. Patnaik further said spirituality and science go hand in hand. Dr. A. Samanta, Founder, KIIT & KISS, Dr. Hare Krishna Satapathy, Vice Chancellor, Rashtriya Sanskrit Vidyapeetha and Vice Chancellor, OUAT, Dr. D. P. Ray were present on the occasion.

Dr. J. B. Patnaik, His Excellency the Governor of Assam & Chancellor, Rashtriya Sanskrit Vidyapeetha inaugurating the exhibition on 'Science & Sanskrit' in the presence of Dr. Hare Krishna Satapathy, Vice Chancellor, Rashtriya Sanskrit Vidyapeetha, Dr. A. Samanta and other dignitaries.



Fifth Science Communicators' Meet

The Fifth Science Communicators' Meet - Vigyan Sancharak Sammelan (VSS) – was held as a component of 99th Indian Science Congress – on 4th and 5th January 2012. The meet was inaugurated by Dr. D. Balasubramanian of L.V. Prasad Eye Institute (LVPEI), Hyderabad. An initiative for Science communicators for professional growth, the Meet focused on the theme "Science and Technology for Inclusive Innovation". Outstanding academics, activists, journalists, film makers, scientists, communicators, etc., participated.

The 5th Science Communicators' Meet came to an end on January 5. Prof. Chittaranjan Das, Chairman State Environment Impact Assessment Authority, Odisha highlighted the importance of taking science and technology to the rural women. He urged that the innovative ideas used by women in their day-to-day life needed to be identified and opportunities should be implemented with the help of science and technology.

Prof. Geetha Bali, General President, 99th ISC said, "Women are great educators and that's why women can access the children and other women." The two day technical sessions were attended by around 25 scientists, professors and teachers from Amravati, Bangalore, Bhopal, Bhubneshwar, Chennai, Delhi, Jaipur, Kolkata, Kanpur, Nagpur, Patiala, Sagar. The participants were presented with the certificate of participation and mementos.



Apramita Chand Tops in National level Essay & Quiz Competition Organised by KIIT

Indian Science Congress has been organizing various competitions among the young scientists besides holding Children Science Congress as a component of it. Despite all the efforts, there was no mechanism to involve everyone in the country, and in the process creating interest in the study of science particularly among the youth. With this background, National level Essay and Quiz Competition was an ambitious initiative of KIIT to involve every school and every college in the 99th Indian Science Congress. The essay and guiz competition was organised on subject relating to science and society. The competition was held in two categories. Children from Class-8 to Class-12 were placed in the junior category, whereas students from Class 12th to postgraduate level (M.A., M.Sc., etc.) were placed in senior category. Each and every school, college and university were informed and the final competition on the basis of the result of State-level competition was held in KIIT. Prize money of Rs. 5 lakh, Rs. 4 lakh and Rs. 3 lakh were fixed for the senior and Rs. 4 lakh, Rs. 3 lakh and Rs. 2 lakh for junior category. The total amount of the prize money and the expenditure of the studies was more than Rs. 1.5 crore. Incidentally, it was the biggest expenditure for popularizing science by any institute.

Apramita Chand, a student of M.Sc. Chemistry PG, Utkal University, won the first prize in All India Senior level Essay and Quiz competition, which was organized by KIIT University as prelude to the 99th Indian Science Congress. She bagged the prize money of Rs. 5 lakhs.

Kaushal Agarwal la of Assam stood second, while Richa Kumari of Karnataka won the third prize in the essay competition. The 2nd and 3rd prize winners got 4 lakh and 3 lakh respectively.

In junior category, Rohit Sharma of Himachal Pradesh won the first prize, while Roshni. H Channal of Karnataka and Urja Narayan of Jharkhand stood second and third respectively. They got Rs. 4 lakh, 3 lakh and 2 lakh respectively.

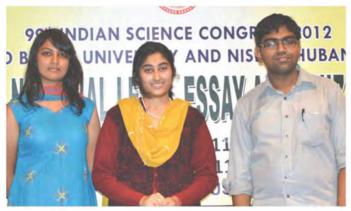
The final round of essay & quiz competition was organized in Bhubaneswar, where only scrutinized participants from all states took part. The award ceremony took place during the 99th Indian Science Congress. In October, Shri Vilasrao Deshmukh, Hon'ble Union Minister of Science & Technology and Earth Sciences had inaugurated the District-level and National-level essay competition at KIIT during October last. Congratulating the winners, Dr. A. Samanta, Founder, KIIT & KISS said it is a pride for Odisha that a girl from the state won the essay competition.

NATIONAL SENIOR ESSAY & QUIZ COMPETITION FINAL ROUND WINNERS

Apramita Chand, Odisha -- First Kaushal Agarwalla, Assam -- Second Richa Kumari, Karnataka -- Third

NATIONAL JUNIOR ESSAY & QUIZ COMPETITION FINAL ROUND WINNERS

Rohit Sharma, Himachal Pradesh -- First Roshni. H Channal, Karnataka -- Second Urja Narayan, Jharkhand -- Third



(From L) Richa Kumari, Karnataka (Third), Apramita Chand, Odisha (First) & Kaushal Agarwalla, Assam (Second), winners of National Essay & Quiz Competition (Senior Level) organised by KIIT University.



(From L) Roshni. H Channal from Karnataka (Second), Rohit Sharma from Himachal Pradesh (First), Urja Narayan from Jharkhand (Third), winners of National Essay & Quiz Competition (Junior Level) organised by KIIT University.

Odisha Mandap

The 99th Indian Science Congress provided the right scope to project Odisha in its proper perspectives. Translating an innovative idea mooted by KIIT & KISS Founder Dr. A. Samanta into reality, a separate Odisha pavilion (Odisha Mandap) was raised in KIIT campus over 5 acres of land, to showcase Odisha and all its aspects to national and international delegates attending 99th Indian Science Congress. Decoratively designed, this Mandap showcased the rich cultural heritage of the state. Steps were taken to create an ambience of rural Odisha where shops sold handloom, handicrafts and all other things for which the state is proud of. To give an Odishan look, all the stalls were made up of thatched roof and the Sand Art created in the venue captivated visitors. Designated space for both the government and non-government agencies was provided for displaying their contribution for making Odisha the most happening state. Separate stalls to show case Tourism and Culture were put up. Various cultural activities performed in an open air theatre round the clock provided the people to have an idea about Odisha's rich cultural heritage.

The Odisha Mandap at the 99th Indian Science Congress were both ethnic and modern looks. Made up of thatched structures, the 43 stalls decorated the science congress in a different way. The huge sand architecture gave a glimpse of the rich cultural heritage of Odisha. "Utkalika", a handicrafts and art textile emporium under Government of Odisha, was one of the many stalls showcasing the traditions and heritage of the state. Sarala Pattnaik, the assistant manager says, "We sold articles worth Rs. 1.5 lakhs. Women constituted the major chunk of buyers."

The stalls of the tribal handicraft showroom "tribes India" under the government of India was all-inclusive in producing varied handlooms. Padmashree Pandit Sadasiva Rath Sharma, research scholar, Jagannath temple designed a beautiful architecture depicting various aspects of the Lord with the theme of "the symbol of cosmic harmony". 'Odisha Mandap' could not be imagined without a stall of the Odisha Tourism Department. Scenic, serene and sublime, Odisha is completely apt which is being vigorously propagated through the efforts of this department in promoting tourism. The colorful sand art was designed on the theme of "the temple city" which showcased, other than some beautiful temples of the city, numerous gods and goddesses. Talking about deities, one could not turn a blind eye towards Lord Jagannath who was depicted in the centre of the art.











CSIR Science Experience Hall at KISS



Dr. Samir K. Brahmachari, Director General, CSIR inaugurating Science Experience Hall on KISS premises.

Kalinga Institute of Social Sciences (KISS) in collaboration with Council of Scientific and Industrial Research (CSIR), New Delhi has established a Science Experience Hall on KISS premises. Dr. Samir K. Brahmachari, Director General, CSIR inaugurated the Hall on 3rd January 2012 in the sidelines of 99th Indian Science Congress. Dr. A. Samanta, Founder KIIT & KISS, Dr. B. K. Mishra, Director IMMT and many other dignitaries of CSIR and KIIT & KISS family were present on the occasion.

The objective of this venture is to educate the teachers, scholars and students of KISS on various aspects of science and technology and to keep them abreast of technological developments occurring in India and other nations of the world. This would be facilitated through online communication, video conferencing, various activities happening nationally and internationally directly with national institutions, laboratories, and professionals of repute in various fields.



Dr. Samir K. Brahmachari addressing 15,000 tribal students of KISS.



Dr. Samir K. Brahmachari going around Science **Experience Hall at KISS.**

Celebration of 60th Anniversary of UNESCO Kalinga Prize



(From L) Shri B. C. Patnaik, President Kalinga Foundation Trust, Ms. Gretchen Kalonji, ADG of Natural Sciences, UNESCO, Shri Naveen Patnaik, Hon'ble Chief Minister of Odisha, Shri Pyarimohan Mohapatra, Hon'ble MP, Rajya Sabha, Prof. Trinh Xuan Thuan, Professor, Dept of Astronomy, University of Virginia, USA at the celebration of 60th Anniversary of UNESCO Kalinga Prize.

The 60th anniversary of UNESCO-Kalinga Prize was celebrated at KIIT University on 4-5 January 2012. Shri Naveen Patnaik, Hon'ble Chief Minister of India honoured Prof. Trinh Xuan Thuan, of University of Virginia, USA and Prof. Yash Pal, eminent scientist with the prestigious Kalinga Chair in a ceremony held at KIIT University on the sidelines of 99th Indian Science Congress. Both Prof. Thuan, a Vietnamese National, and Prof. Yash Pal are the recipients of UNESCO Kalinga Award-2009 for popularisation of science.

Recalling his legendary father Shri Biju Patnaik's contribution to encourage, scientific temper, the Chief Minister said Shri Biju Patnaik was instrumental in instituting the Kalinga Prize at the international level with the help of UNESCO to honour scientists for their contribution towards popularising science among common people. Shri Naveen Patnaik recalled how his father in 1951 initiated steps to create Kalinga Prize which was being given annually since 1952. Shri Biju Patnaik always wanted internationally acclaimed scientists to come to India and interact with the young students, he remembered. Speaking on the occasion, MP and Chairman of the reception committee, Shri Pyari Mohan Mohapatra said Biju Babu had instituted the prize for the promotion of science at the young age of 36. Admiring India's efforts in promoting science and technology, Prof Thuan, who is known for his contribution to the field of astronomy, said Vietnam should follow India's innovative scientific programmes in achieving sustainable growth.

Director General of UNESCO selects the prize winner out of nominations received by a four-member international jury. UNESCO Kalinga Prize had so far been given to 66 eminent personalities from 23 countries. The prize winners include seven Nobel laureates and five Indians. Winner of the UNESCO Kalinga Prize gets a cash of \$20,000, UNESCO Albert Einstein Silver Medal and a citation. As part of the 60th anniversary of UNESCO Kalinga Prize, 11 former winners of the coveted prize were felicitated by the Chief Minister at the conference attended by Gretchen Kalonji, Assistant Director General of UNESCO, Paris and Yoslan Nur coordinator of UNESCO Kalinga prize.

One Eminent educationist and writer Dr. Gokulananda Mohapatra received the first Kalinga Sammana for Popularising Science among common people. Governer of Odisha, Shri M. C. Bhandare gave away the award at the valedictory function held marking the 60th anniversary of UNESCO-Kalinga Prize at KIIT University on January 5. Mohapatra, a retired professor of Chemistry, has the distinction of being the first Odia novelist to write on scientific topics. The octogenarian has penned more than 70 science fictions and science books in Odia for children such as, Krutrima Upagraha, Pritibibahare Manisha, Candrara Mrityu, Nishabda Godhuli, Madam Curie, Nila Chakra Bala Sapare and many more. He has also received the Orissa Sahitya Academy Award for science literature and several other prizes including PK Parija Samman.



UNESCO KALINGA **PRIZE**



Prof. Yash Pal (India) UNESCO Kalinga Prize Laureate-2009.



Prof. Dr. Jayanta Vishnu Narlikar (India), UNESCO Kalinga Prize Laureate - 1996.



Mr. Jiri Grygar (Germany), UNESCO Kalinga Prize Laureate-1996.



Professor Peter Okebukola (Nigeria), **UNESCO Kalinga Prize Laureate – 1992**



Dr. N. K. Sehgal (India), UNESCO Kalinga Prize Laureate 1991.



Prof. Trinh Xuan Thuan (Vietnam), **UNESCO Kalinga Prize Laureate – 2009**



Professor Jean Audouze (France), **UNESCO Kalinga Prize Laureate-2004**



Dr. Jorge Flores Valdes (Mexico), **UNESCO Kalinga Prize Laureate - 1992**



Dr. Julieta Fierro Gossman (Mexico), UNESCO Kalinga Prize Laureate-1995



Prof. D. Balasubramanian (India), UNESCO Kalinga Prize Laureate-1997



Prof. Ennio Candotti (Brazil), UNESCO Kalinga Prize Laureate 1998



Prof. Tahar Gallali (Tunisia), Jury



Prof. Shemowandiga (Kenya), Jury



Prof. Alexander Boksenberg (UK), Jury



Prof. (Dr.) Sigrid Falla (Colombia), Jury



Dr. Yoslan Nur (UNESCO Official)

Dr. K. K. Talwar, Chairman, Medical Council of India (MCI), New Delhi on National Academy of Medical Sciences (At KIIT University on January 4, 2012)

I express my gratitude to Prof. Geetha Bali and Prof. M. S. Swaminathan for this opportunity. Last year also we had a similar session in the Indian Science Congress in Chennai. We had discussed science academies and society's policy making issues.

The National Academy of Medical Sciences was established 50 years ago. We are going through our Golden Jubilee year. It was formed in 1961. Some of the objectives with which it was formed were:-

- The promotion of knowledge of Medical Sciences in India and its practical application to problems of national welfare.
- The recognition and encouragement of merit in all branches of Medical Sciences.
- To secure co-ordination between medical and other scientific academies, societies, associations, institutions and Government medical and scientific departments and services.



- To publish such proceedings, journals, memoirs, transactions and other publications as may be found desirable.
- To promote and maintain a liaison between medicine and other sciences.

I think here is one area we last time discussed. It was suggested that we may have a kind of inter-academy panel. This being Year of Science, we should think about taking the idea further. Because there are many issues which are interlinked in the field of science. Medicine in some way or other comes into each field because wherever there is health issue, the medicine comes. And in every area there is going to be health issues.

Last year one issue discussed was BT Brinjal issue in which all academies like agriculture, engineering joined and we tried to give document to the Government of India.

The National Academy of Medical Sciences is a unique institution which fosters and utilises academic excellence as its resource to meet the medical and social goals. Over the year the academy has recognised the outstanding achievements of Indian scientists in the field of medicine and allied sciences and conferred fellowships and memberships. The Academy has been recognised by the Government of India as a nodal agency for continuing medical education, for medical and allied health professionals and it is advising the Government

of India in several matters of national health policy and

planning.

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We had our annual meeting in Bhubaneswar itself October last. The topic that we chose was 'Emergina and reemerging infections with special reference to eastern zone'. It was a full day session. Then we also had a symposium, which we call National Academy of Medical Sciences symposium, title of which was 'Social Determinants'. We had a very good session with active participation from some of the social scientist colleagues from JNU, Delhi. We have 19 chapter with which we try to do our activities in each region.

Last year we thought that maybe we should create an interacademy panel in the country. So they can have a common kind of issues which involves the society for discussion and even recommendation to the Government of India.



India poised for great structural change: Hon'ble Dy. Chairman, Planning Commission

The country has witnessed remarkable growth over the years and the young graduates of today will find themselves in a prosperous India which promises to have five times more and greater structural changes, said Shri Montek Singh Ahluwalia, Dy. Chairman of the Planning Commission of India, while delivering the Convocation Address at the 7th Annual Convocation of KIIT University on January 6. Six eminent personalities of the country were conferred degree of D.Litt. / D.Sc. / D.Law (Honoris Causa). The recipients of Honorary Degrees included - Dr. D. Y. Patil, Governor of Tripura (D.Litt.), Mr. Ram Jethmalani, Sr. Advocate, Supreme Court of India & Member of Parliament-R.S. (D.Law), Prof. C. N. R. Rao, Chairman, Scientific Advisory Council to Prime Minister (D.Sc.), Mr. H. M. Nerurkar, MD, Tata Steel (D.Sc.), Dr. Narendra Jadhav, Member, Planning Commission of India and National Advisory Council (D.Litt.) and Mr. Pinky Anand, Sr. Advocate, Supreme Court of India (D.Law). Prof. C. N. R. Rao received the degree in absentia.

Presenting a comparative picture of the growth, the country has witnessed, Ahluwalia said "India did progress at a slow pace because, while the GDP growth was only 3.5%, the population growth was more than 20%. In the 60s, the growth was slowest and this continued in the next twenty years." Though some

economists are skeptical about the growth because of the present slow down, yet in the next 20 years, Indian economy is bound to witness an annual growth rate of 8 to 9 percent per year, he said. Elaborating on the population growth which has slowed down from two percent to 1.4% per year, he said that the trend would continue. "In contrast to slower growth

for the last 45 years, the last nine years have seen tremendous growth in the economy.

In addition to the structural changes, technology is also changing much faster. The transmission of the technology is even faster," Ahluwalia explained. In the sixties and seventies India was being considered as a developing country, but the global perception about the country has changed now, he said, adding that in the changed situation the country is expected to be the third largest economy of the world. "It is predicted that by 2030, after China

and USA, India would be a major economic power," he said, while emphasizing on the quality of education. It is not quantitative growth alone that will take the country forward, but it should be combined with a qualitative growth of education and knowledge, he stated. Underscoring the need for Public – Private Partnership in the field of education, Ahluwalia commended the efforts of KIIT in creating an excellent infrastructure and for giving the country a value based education.

Hailing the efforts of Dr. A Samanta and KIIT, Ahluwalia said that KIIT provided a beckon and showed the way how private players can take up the responsibility. "It is a remarkable experiment that has been made by KIIT by creating KISS," while expressing the the best wishes for the young graduates passing out. Earlier in his report, Vice Chancellor Prof. A. S. Kolaskar said that the University has taken initiative to give impetus for research on the campus by establishing a center of innovation and research with seed money of Rs. 5 crore. "The University takes its social responsibility very seriously and ensures that no qualified student applicant is denied higher education for want of financial resources," he said, while informing that free education has been provided to more than 750 students many of whom are tribal or otherwise socially disadvantaged students.

Hailing the efforts of Dr. A Samanta and KIIT, Ahluwalia said that KIIT provided a beckon and showed the way how private players can take up the responsibility.

Speaking on the occasion Dr. D. Y. Patil congratulated the young graduates and urged them to work for those who have been left behind in the process of development. Dr. Narendra Jadhav said graduates have a role model in Dr. Achyuta Samanta and try to emulate him. Mr. H. M. Nerurkar expressed gratitude to

KIIT University for bestowing the honour on him. Ram Jethmalani urged the young graduates to use the science for the good of the society. "Science stands at the crossroads today. The whole planet is going to become a graveyard unless science develops some mechanism to fight the menace of religious fanaticism," he said in his acceptance speech. Calling Dr. Achyuta Samanta, Founder of KIIT & KISS as the Bhismapitamaha, the eminent lawyer hailed his endevour of providing education to 15,000 tribal students in KISS as outstanding. Ms. Pinky Anand expressed humility and thanked the university for the honour.



(From L) Dr. Sasmita Samanta, Registrar, Dr. Narendra Jadhav, Hon'ble Member, Planning Commission & National Advisory Council, Govt. of India, Dr. D. Y. Patil, His Excellency the Governor of Tripura, Prof. R. P. Kaushik, (the then) Chancellor, Shri Montek Singh Ahluwalia, Hon'ble Deputy Chairman, Planning Commission of India, Prof. A. S. Kolaskar, VC, Mr. Ram Jethmalani, Sr. Advocate, Supreme Court of India & Hon'ble Member of Parliament (R.S.), Mr. H. M. Nerurkar, MD, Tata Steel and Ms. Pinki Anand, Sr. Advocate, Supreme Court of India at the 7th Annual Convocation.

rate (Honoris Causa) Ram Jethmalani

vocate, Supreme Court of India & ole Member of Parliament (R.S.)



Degree of Doctorate (Honoris Causa) was conferred on



Mr. Ram Jethmalani, Sr. Advocate, Supreme Court of India & Hon'ble Member of Parliament (R.S.) receiving Degree of D.Law (Honoris Causa).



Mr. H. M. Nerurkar, MD, Tata Steel receiving Degree of D.Sc (Honoris Causa).



Dr. D. Y. Patil, His Excellency the Governor of Tripura receiving Degree of D.Litt (Honoris Causa).



Dr. Narendra Jadhav, Hon'ble Member, Planning **Commission &** National Advisory Council, Govt. of India receiving Degree of D.Litt (Honoris Causa).



Ms. Pinki Anand, Sr. Advocate, **Supreme Court of** India receiving Degree of D.Law (Honoris Causa).

Convocation Address by Mr. Montek Singh Ahluwalia,

Hon'ble Deputy Chairman, Planning Commission of India at KIIT University on 6th January 2012



Shri Montek Singh Ahluwalia, Dy. Chairman of the Planning Commission of India, Dr. Narendra Jadhav, Member, Planning Commission & National Advisory Council, Govt. of India and Dr. A. Samanta with 15,000 tribal students of KISS.



Shri Montek Singh Ahluwalia, Dy. Chairman of the Planning Commission of India with Dr. A. Samanta.

Chancellor of KIIT University, Prof. R. P. Kaushik, Founder, Dr. Achyuta Samantaji, Vice Chancellor, Prof. A. S. Kolaskar, other distinguished persons on the dais, His Excellency Dr. D. Y. Patil, Mr. Ram Jethmalani, Mr. Nerurkar and Ms. Anand. Members of the Academic Council, faculty members, graduating students and guests.

Thank you very much for inviting me to be Chief Guest of the 7th Annual Convocation Ceremony of KIIT University.

I would like to begin, of course, by congratulating the students. This is really a day of the students who worked hard and got their degrees. So, first of all, a warm congratulation to all the graduating students. And I would also add a special word of congratulation to those who have won medals. Most importantly, I want to congratulate the parents. Actually, convocations are remembered much more by the parents than by the students. This must be a day of pride for all the parents present who are seeing their children get degrees.

I also want to congratulate Dr. Achyuta Samantaji for the truly outstanding achievement. I had the pleasure of going through some documents connected with what this University does. He has taken me through the campus. You are honoured by having been chosen as venue for the Science Congress, which is not an easy thing to get done. This morning I went through the KISS, the tribal institute, which is connected with the University. Taken together, it is truly an extraordinary achievement. Considering that in our present conception of development strategy - our present conception of what is important for the country to move ahead - education right from the primary level upward and quality education are given the highest importance. That is what in the 11th Plan and, I think, in the 12th Plan the Planning Commission has been saying. And that is certainly the focus of the Government.

It is very easy to simply expand education, the real challenge is to produce quality education. And that of course depends upon the huge amount on personal effort. Personal efforts of the teachers, in this particular case of the Founder himself, having conceptualised the whole thing and made this possible. In our present strategy we also recognise that good quality education is not going to come only by an expansion of Government effort. That is of course very important and will still be the largest contribution. But we do see in it a very large role for the expansion of private educational institutions. In fact, in the Planning Commission we take the view that public-private partnership should also be encouraged.



In that sense, KIIT University provides a beacon of what is possible through purely private effort. Of course it makes sense to find ways in which public effort can support good quality private institutions, certainly at the school level. When I addressed a group of 15,000 students all from tribal areas, it strikes me that what is being achieved here is really quite remarkable.

This brings me to the subject of my convocation address. Convocation address puts a huge responsibility on the person delivering it, because I realise this is the last piece of mandatory instruction you are going to get before leaving this room fully armed with your degrees. I really don't believe I can be upto adding to the education that you have received, other than offering my good wishes and giving some thoughts on the world that lies ahead.

One thing that strikes me, which is actually relevant for your generation, is how different the world will be in the next 20 years of your life. During the end of this period you will be at the peak of your professional energy. These 20 years is going to be very different from the 20 years that faced my generation after I received my degree at a similar convocation in New Delhi. When I got my degree in 1963, the next 20 years were pretty much years when Indian economy was one of the slowest growing economies of the world. I mean, for many many years after that GDP growth of the economy was only 3.5% and population was growing by more than 2%. So per capita income for 20 years or so grew by 1.5%.

In your case, if you look at the recent past and don't get too worried about the short term slowdown that the newspapers tends to highlight, there is a basic underlying energy and growth in the Indian economy that has been unleashed and will not be suppressed. I think there is a very good chance that in the next 20 years of your working life you will see the Indian economy grow somewhere between 8% and 9% per year. We are, of course, targeting 9% but I don't think the exact number is important.

Population growth is slowing down. Right now population growth is about 1.4% per year. As time passes there is clear evidence that it is slowing down. So my guess would be that for 20 year average it will be around 1%, or maybe a little bit above that. So with the economy growth at 8% to 9% and population growth only at 1%, per capita income in the next 20 years there is a very good chance that it will grow by 7% or 8% per year.

So between 1.5 percent for my generation and, let's say, 7.5% for your generation, what is the difference? Actually the difference is in the first case it took about 45 years for per capita income to jump, and in the second case it takes 9 years. Now, remember that the change, structural change, comes when per capita income rise; not when GDP only rise. You can imagine a situation when GDP doubles and population doubles, per capita incomes remains exactly the same.

Now in such a situation, you have two Indias - equally poor, larger, more people, more GDP, same per capita income, not much changes. But when per capita income doubles, huge change takes place. Tastes change, patterns of consumption change, kinds of product people want change. I think you are going to see structural change taking place at a rate roughly five times faster than my generation did. Because it took 45 years for per capita to double for my generation and it will take 9 year for per capita income to double for your generation. That is a five fold faster rate of just economic change. I think in addition to this very important structural change which follows from the metrics of the economics, it is also true that technology is going to change much faster for your generation than it did in mine. Objectively, technology is changing very rapidly. In my generation, even when technology changed, it did not come to India.

"I also want to congratulate Dr. Achyuta Samantaji for the truly outstanding achievement. He has taken me through the campus. This morning I went through the KISS, the tribal institute. Taken together, it is truly an extraordinary achievement."

"There is a basic underlying energy and growth in the Indian economy that has been unleashed and will not be suppressed. I think there is a very good chance that in the next 20 years of your working life you will see the Indian economy grow somewhere between 8% and 9% per year."

> "When per capita income doubles, huge change takes place. I think you are going to see structural change taking place at a rate roughly five times faster than my generation did."

I do hope some of you will become entrepreneurs. One big difference between the opportunities open to graduates today compared to the opportunities that were open to graduates earlier is that the potential for getting into entrepreneurship. Just do something entrepreneurial rather than just look for an employment opportunity.

As you are bidding farewell to your graduating class - you have done a lot of hard work and got valuable degrees - I do hope that some small percentage of you will actually take the time to contribute back to society in some possible ways. More we find that we have created an ecosystem which encourages people to do that, richer and more solid society that we will be building.

Let me thank you for inviting me to deliver the convocation address. It has been a pleasure to be here.



MEDAL WINNERS

FOUNDER'S GOLD MEDAL

Anjana Prabhakar, School of Electronics Engineering For securing highest CGPA in the whole University across all the Post Graduate courses

Shweta Jena, School of Computer Science Engineering For securing highest CGPA in the whole University across all the Under Graduate courses

Sangharsh Soumein Satpathy, School of Electronics Engineering

For all round performance in the whole University across all the courses

CHANCELLOR'S GOLD MEDAL

Anjana Prabhakar, School of Electronics Engineering For securing highest CGPA in M. Tech Bijayalaxmi Panda, School of Computer Application For securing highest CGPA in MCA

Ravi Jain, School of Management For securing highest CGPA in MBA

Arti Mishra, School of Rural Management

For securing highest CGPA in MBA (Rural Management)

Sneha Singh, School of Biotechnology

For securing highest CGPA in MSc. (Applied Microbiology)

Sanjeeb Kisan, Kalinga School of Social Sciences For securing highest percentage of marks across all the Post Graduate Programme of Kalinga School of Social sciences

Shweta Jena, School of Computer Science Engineering For securing highest CGPA across all the B. Tech Programme

Chandini Jain, School of Computer Application For securing highest CGPA in BCA Programme Mugdha Madhurima Mishra, School of Management For securing highest CGPA in BBA Programme Jimiya Gamango, Kalinga School of Social Science For securing highest percentage of marks across all the Under Graduate Programme of Kalinga School of Social Science

P.K. BAL MEMORIAL GOLD MEDAL

For best all rounder in MBA Payal Chatterjee, School of Management

PARADEEP PHOSPHATES LTD. (PPL) GOLD MEDAL

For the best student of Marketing Specialization in MBA Ravi Jain, School of Management

ARIES AGRO GOLD MEDAL

For excellence in Agribusiness in MBA(Rural Management) Sunanda, School of Rural Management

VICE CHANCELLOR'S SILVER MEDAL

Romya Shanker, School of Electrical Engineering For securing highest CGPA in EE Branch, B. Tech Piyush Khandelwal, School of Electronics Engineering For securing highest CGPA in E&TC. Branch, B. Tech Soumya Mishra, School of Electronics Engineering For securing highest CGPA in E&EE Branch, B. Tech Shilpi, School of Computer Science Engineering For securing highest CGPA in IT Branch, B. Tech Arif Jamal, School of Mechanical Engineering For securing highest CGPA in ME Branch, B. Tech Azim Sabah, School of Civil Engineering For securing highest CGPA in CE Branch, B. Tech Prasanna Kumar Acharya, School of Civil Engineering For securing highest CGPA in CE Branch, M. Tech Saurav Ranjan Pradhan, School of Mechanical Engineering For securing highest CGPA in ME Branch, M. Tech Shashwati Mishra, School of Computer Science Engineering For securing highest CGPA in CSE Branch,

V V S R Chowdary Kanti Pudi, School of Electrical Engineering For securing highest CGPA in EE Branch,

Subhendu Kumar Acharya, School of Computer Science Engineering

For securing highest CGPA in CS&IS Branch, M. Tech

Kaushal Dalmia, School of Management

For securing highest CGPA in MBA programme with specialization in Finance

Nidhi Sharma, School of Management

For securing highest CGPA in MBA programme with specialization in Human Resource Management

Mousumi Mahapatro, School of Biotechnology

For securing highest CGPA in M. Sc. (Bio-Technology)



PH.D. AWARDEES

S. M. Mustakim, School of Applied Science in Chemistry, *Microwave Sintering of Fly Ash for Application in Water Purification*

Byamakesh Nayak, School of Electrical Engineering, Studies on Some Aspects of the Indirect Vector Control of 3-Phase Induction Motor Drive

Siba Prasad Rath, School of Management (KSOM), Curbing Consumption of Oral Intoxicants Through Social Marketing & Advertising: A Strategic Approach for the State of Orissa

Duryadhan Nayak, School of Management(KSOM), Fiscal Reforms, Its Economics Effects in the State of Orissa With Special Reference to Vat

Sethu Madhav Rao Nagendra, School of Management(KSOM), *Innovation Management As a Chaotic System in Organisations*

Chinmaya Kumar Das, School of
Management(KSOM), Effectiveness of
Empowering the Award Staff Members by
Revamping the Training System: A Case Study
of Bank of Baroda in Odisha

Ashis Kumar Mahapatra, School of Computer Science & Engineering, Dedicated Software Development Life Cycle Model to Address the Challenges of E-Governance Projects

H. Pal Thethi, School of Electronics &Telecommunication Engineering, Application of Bio-Inspired Techniques to Direct and Inverse Modeling Problems

Nirmala Soren, School of Electrical Engineering, "Some Studies on Renewable Energy Sources and Its Management"

Akhilesh Arvind Nim je, School of Electrical Engineering, "Some Studies on Application of Facts Controller in Power System Problems"



63 rd REPUBLIC DAY Celebrated at KIIT

KIIT is a big institution with 17,000 students studying in its 20 schools. Republic Day is celebrated in a big way to enthuse and reinforce a sense of patriotism and national integration among the students. The celebration at KIIT is meticulously planned and is at par with any State-level function. Every year an eminent person is invited to grace the occasion as Chief Guest.

Following this tradition, KIIT Group of Institutions celebrated 63rd Republic Day with pomp and patriotic fervor. Chief Guest of the occasion Padmashree Ruskin Bond, iconic writer unfurled the Tricolour at KIIT Sports Ground in the presence of Smt. Saswati Bal, President, KIIT & KISS, Dr. A. Samanta, Founder, KIIT & KISS, Prof. A. S. Kolaskar, VC, KIIT and Dr. Sasmita Samanta, Registrar. Briefing about the significance of Republic Day, the Chief Guest reminded students to work with dedication for the country.

The occasion brings the whole country together despite its inherent diversity, said Dr. Samanta. KIIT is a mini India as it has students and staff from all parts of the country presenting a confluence of diverse cultures, he said. Smt Bal urged the young generation to work hard to take the benefits of independence to poorer sections of the society.

Republic Day is celebrated at KIIT with much enthusiasm every year. Students of all wings of KIIT, KISS and cadets of NCC, NSS, etc participated in the march past. There were about 37 march past sequences, 18 show segments and 13 tableau presentations by the students. Later, a lively cultural programme mesmerized the audience. Outstanding students and staff of KIIT and KISS were felicitated for their commendable achievement at the occasion.



Chief Guest, Padmashree Ruskin Bond, noted writer, Smt. Saswati Bal, President, Dr. A. Samanta, Founder, Prof. A. S. Kolaskar, VC and Dr. S. Samanta, Registrar at the 63rd Republic Day celebration.

63 REPUBLIC DAY at KIIT

Best Teaching Staff AWARD-2011

KIIT has the tradition of felicitating its teaching and non-teaching staff on the occasion of Republic Day for their outstanding contribution to the institution. This year 10 teaching staff and 12 non teaching staff, representing different levels in KIIT hierarchy, were honoured with Best Staff Award 2011 for their exemplary work. Best Staff Award is the highest award in KIIT. While congratulating the awardees, Dr. A. Samanta emphasised on sincerity and dedication and thanked the winners for their valuable contribution in KIIT.



Mr. Sanjay Kumar Suar Principal, KiiT International School



Prof. Jitendra Mohanty Professor, School of Management



Mr. Basant Kumar Behera Asst. Prof. Orthapadis, KIMS



Dr. Swati Samantray Asso. Professor [I], School of Hamanities



Dr. Bhupati Bhusan Mishra Asso. Professor, School of Math.



Mr. Isham Panigrahi Asst. Prof. (Mech)



Mr. Dillip Kumar Bera Asst. Professor [II], School of Civel Engg.



Mr. Santosh Kumar Pani Asso. Professor (CSE)



Ms. Shweta Alpna Asst. Prof. Electronics



Ms. Bichitra Swain Asst. Teacher, KISS





Ms. Jhilimili Acharya In-charge, NICU, KIMS



Shri Gyanendra Kumar Dhal Nodal Officer KISS, Koraput & Kanker Project



Mrs. Puspalata Kandi Staff Nurse, KIMS

LIFETIME ACHIEVEMENT AWARD



Shri Kamalkanta Raut

KIIT & KISS FOUNDER'S MEDAL



Mr. Kim Seung Jae, Dean, Students Affairs, Hanseo University, South Korea

BEST KIIT ALUMNI AWARD



Mr. Varinder Singh

BEST STUDENT COORDINATOR



Haris Bin Zaman



Mr. Satyendra Kumar



63 rd REPUBLIC DAY at KIIT

Best Non-Teaching Staff AWARD-2011



Mr. Pratap Kumar Chamupaty, Sr. AO



Mr. Rajesh Verma, AO, Publication Cell



Mr. Snehasis Rout, AO, KP



Dr. Jugajyoti Pathi, AO, KIDS



Mr. Ranjit Pattnaik, Accounts Officer



Mr. Kalpataru Nayak, Manager (Systems)



Mrs. Bijayalaxmi Routray, Sr. Librarian



Mr. Jitendra Kumar Patnaik Manager (Electrical Maintenance)



Mr. Pravat Kumar Swain, ADO



Mr. Rudrakesh Jena, Sports Officer, KISS



Mrs. Pratima Pradhan, Attendant



Ms. Sumati Jena, Sweeper

NEWS & Events

8th ICDCIT at KIIT

Dr. Achyuta Samanta inducted in Plan Panel Committee on Corporate Participation on Higher Education

Platinum Standard 2011 Award for KIIT & KISS Founder

Second Term for KIIT & KISS Founder in ISTE Executive Council

Dr. Samanta Elected as ISCA Executive Council Member

(From L) Dr. Srini Ramaswamy, ABB Corporate Research, Bangalore, Prof. (Dr.) R. Ramanujam, IMSc, Chennai, Prof. (Dr.) R. K. Shyamasundar, TIFR, Dr. S. Nanda, Prof of Eminence & Research Chair, Prof. (Dr.) D. K. Tripathy, Dr. S. Samanta, Registrar & Prof. A. K. Bisoi, Dean-School of Computer Engg at the inaugural function of 8th ICDCIT 2012 at KIIT.

8th ICDCIT at KIIT

The 8th ICDCIT (International Conference on Distributed Computing and Internet Technology) has inaugurated at KIIT premises in presence of Dr. R. K. Shyamasundar, TIFR, India & Advisor, ICDCIT; Dr. R. Ramajunam, IMSc, Chennai & Programme Chair ICDCIT-2012; Dr. Srini Ramaswamy, ABB Corporate Research, Bangalore; Dr. S. Nanda Prof. of eminence & Research Chair & VC In-Charge, KIIT University; Dr. A. K. Bisoi, Dean, School of Compt. Engg. KIIT; Dr. Sasmita Samanta, Registrar, KIIT University and Dr. D. K. Tripathy, Pro-VC, KIIT University on 2nd February 2012. In the inaugural session of this 4day long programme, Dr. Sasmita Samanta on her welcome address said, through ICDCIT the knowledge of computer and internet can exchange among the students and faculties. Though KIIT organizes so many conferences for a proper knowledge exchange, ICDCIT is one of them.

Giving example of the project 'Aakash' Laptop for school students, an initiative by Govt. of India, Dr. R. K. Shyamsundar said, it's a nice combination of internet, computing and technology. More than 100 participants including USA, Israel, Finland, Iran and different parts of India have took part in this conference. ICDCIT was established in 2004, and since then the conference series has become a platform for Computer Science researchers from India and all over the world to exchange research results and ideas on the foundations and applications of Distributed Computing and Internet Technologies. Increasingly, such technologies enable individuals and organizations to jointly engage in the production, processing and dissemination of knowledge. During this period several events like Paper presentations, Invited Talks, Industry Symposium, 2nd Student Research Symposium and First Student "Project Innovation Contest" -2012 (PIC-2012) has been organized.



Dr. Achyuta Samanta inducted in **Plan Panel Committee on Corporate** Participation on Higher Education



Dr. A. Samanta, Founder

Dr. Achyuta Samanta, Founder, KIIT & KISS has been inducted as Member of a 12-member high level committee on corporate participation on higher education, constituted by the Planning Commission of India. As per an order of the Planning Commission of India, Committee on Corporate Sector Participation on Higher Education, chaired by Mr. N. R. Narayana Murthy, would work for formulation of the Twelfth Five Year Plan (2012-17) for higher education. It would examine and provide recommendations on the potential and modalities for corporate sector participation in higher education in support of development of national education and innovation hubs and the Institutions of National Importance (INIs) / Centres of Excellence.

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Qimpro Platinum Standard 2011 Award for Founder

Qimpro Foundation, Mumbai conferred prestigious Qimpro Platinum Standard 2011 Award for Education to Dr. A. Samanta, Founder, KIIT & KISS at a glittering award ceremony held in Mumbai on 1st February 2012. The Award was conferred on him for his exemplary contribution in the field of education and social service. "Dr. Samanta is a unique combination of educationist, philanthropist, and social entrepreneur. His mission is to create a level playing field for the most underprivileged tribals living beyond the borders of urban and rural civilization in India. He is often referred to as the Madan Mohan Malaviya of Odisha", the citation notes. The award is given every year in three categories -Education, Business and Health - for promising work at national level. This year, Mr. Adi Godrej, noted industrialist and philanthropist received the award in Business category.



Dr. A. Samanta, Founder, KIIT & KISS received Oimpro Platinum Standard 2011 Award for Education in Mumbai on February 1st, 2012.

Second Term for KIIT & KISS Founder in ISTE Executive Council

Dr. A. Samanta, Founder, KIIT & KISS has been nominated to the Executive Council of Indian Society for Technical Education (ISTE) for a second term. He will serve a term of three years. He was first nominated to the Executive Council of ISTE in 2009.

Dr. Samanta Elected as ISCA Executive Council Member

Dr. Achyuta Samanta, Founder, KIIT & KISS has been elected as a member of Executive Council (EC) for the Indian Science Congress Association (ISCA). In the recently concluded election for the EC, Dr. Samanta secured highest no. of vote to become the first odia to be included in the Executive Council of ISCA. In the highest body ISCA only 10 members are elected from all over the country to take important decisions on various activities relating to Science and Technology in the country.

NEWS & Events

37th Annual Conference of Environmental Mutagen Society of India

KIIT School of Management Organises
5th National Management Convention

The conference was inaugurated by Prof. A. T. Natarajan, Leiden **University Medical** Center, The Netherlands in the presence of Dr. A. Samanta, Founder, KIIT & KISS, Prof. M. Fenech, Commonwealth Scientific & Industrial **Research Organisation** (CSIRO), Australia, Prof. A. S. Kolaskar, VC, KIIT, Prof. K. Kalaiselvi, General Secretary, EMSI, Dr. B. N. Banerjee, Organising Secretary, EMSI and Dr. M. Suar, **Director KIIT School of** Biotechnology.

37th Annual Conference of Environmental Mutagen Society of India



Prof. A. T. Natarajan, Leiden University Medical Center, The Netherlands in the presence of Dr. A. Samanta, Founder, Prof. M. Fenech, Commonwealth Scientific & Industrial Research Organisation (CSIRO), Australia, Prof. A. S. Kolaskar, VC, KIIT, Prof. K. Kalaiselvi, General Secretary, EMSI, Dr. B. N. Banerjee, Organising Secretary, EMSI and Dr. M. Suar, Director KIIT School of Biotechnology.

KIIT School of Biotechnology organized 37th Annual Conference of Environmental Mutagen Society of India (EMSI) and International Symposium on "Molecular Basis of Human Health in Response to Mutagens and Environmental Stress " from February 24th-26th, 2012. The conference was inaugurated by Prof. A. T. Natarajan, Leiden University Medical Center, The Netherlands in the presence of Dr. A. Samanta, Founder, KIIT & KISS, Prof. M. Fenech, Commonwealth Scientific & Industrial Research Organisation (CSIRO), Australia, Prof. A. S. Kolaskar, VC, KIIT, Prof. K. Kalaiselvi, General Secretary, EMSI, Dr. B. N. Banerjee, Organising Secretary, EMSI and Dr. M. Suar, Director KIIT School of Biotechnology. Increasing volume and variety of manmade chemicals are making our environment genetically more toxic, experts observed. These man-made chemicals accumulate in the food chain and eventually pass on to the next generation, they elaborated, adding that these chemicals, if mutagenic, have the ability of producing alterations in genetic material leading to hereditary diseases, cancer and birth defects. Papers presented at the conference provided valuable insights on mechanisms of mutagenesis and evaluating risk of genotoxic agents for producing diseases especially cancer.

The conference, organized every year by Environmental Mutagen Society of India (EMSI), sought to promote and encourage research, and disseminate information in broader areas of environmental mutagenesis, as relevant to human health and environmental safety. It also includes an international symposium focusing on a specific theme every year. This year's theme elaborated on the impact of environment and the man made mutagenic chemicals on the health of humans and in agricultural produce. A wide audience of scientists in diverse interdisciplinary domains of biology, chemistry,

pharmacy and medicine and those engaged in public health participated in the conference, which provided an apt platform for encouraging collaborative research and training at national and international

The conference sought to promote and encourage research, and disseminate information in broader areas of environmental mutagenesis, as relevant to human health and environmental safety.

KIIT School of Management Organises

5th National Management Convention

The School of Management, KIIT University organized the 5th **National Management Convention** on the theme "Micro, Small and Medium Enterprises: The Way Forward" on 17th February 2012. Entrepreneurship and the ways to promote it through better infrastructure, policy changes and capital and knowledge infusion was the underlying focus area of the convention.

The event was inaugurated in the presence of eminent quests such as Mr. Praveen Gupta, Chief General Manager, SBI and Prof. B. B. Bhattacharya, Former Vice Chancellor, JNU and Distinguished Professor, IIM Lucknow. Prof. Ashok Kolaskar, Vice Chancellor, KIIT University and Prof. Ashok Kumar Sar, Dean, School of Management were also present. The delegates included professionals from manufacturing and service sectors, academicians, research scholars and consultants from across the country.

Addressing at the inaugural function, Prof. B.B. Bhattacharya, Chief Guest of the Convention, spoke of KIIT as a remarkable example of how education is being promoted through dedication. He emphasized the inequality of income in India which can be reduced through the expansion of the Micro.

Small and Medium Enterprises (MSMEs). Countries like Taiwan and Brazil have grown through the boom in MSME sector, he added. He expressed his concerns about the fact that the knowledge created by Business schools are not used locally. but are rather drained into MNCs.

Mr. Praveen Gupta, the keynote speaker of the convention, spoke about the unique features of MSME which includes generation of employment for the unskilled workforce, use of local resources and innovative means for reducing costs. He outlined the key issues facing the sector, which includes lack of capital, knowledge of the market, issues in getting land or governmental clearances.

He said even though financial institutions are willing to lend to the SME sector, equity contribution from the entrepreneur is still a major issue. He also pointed out the fact that many promoters aren't aware of the collateral-free loans offered by the banks today.

In his address, Prof. Ashok Kolaskar stressed on the fact that most of the employment today is through micro, small and medium enterprises. He gave examples of how corporate have elsewhere supported and nurtured fledgling entrepreneurs and turned them big, something which can emulated and

replicated in a state like Odisha as well. Introducing the convention to the audience, Prof. Sar highlighted how the MSMEs are contributing profoundly to the economic development of the country. The profitability of MSMEs depends on the efficiency, quality of the products and services, and the deployment of updated technologies in the value chain, he added.

The Convention spans two days with a total of four tracks that would cover four subthemes under the main theme, namely: Challenges of MSME Sector and their Implications, Ways to Improve the Overall Health of MSME Sector, Government Policy & Technological Support for Sector Efficiency and Skilled Manpower & Allied Issues in MSME. Each of these tracks would be chaired by an eminent guest from the industry and would have research paper or case study presentations by the delegates.



(From L) Prof. A. S. Kolaskar, VC, Mr. Praveen Gupta, Chief General Manager, SBI, Prof. B. B. Bhattacharya, Former Vice Chancellor, JNU and Distinguished Professor, IIM Lucknow and Prof. A. K. Sar, Dean, School of Management at the 5th National Management Convention.

NEWS & Events

National Conference on Engineering Design at KIIT

P. K. Sahoo from KIIT in FCI Committee

KIIT-TBI Organises Business
Plan Competition

KIIT faculty's paper features on coverpage of prestigious journal

A National Conference on "Advances in Simulation and **Optimization** Techniques in Mechanical Engineering" (NASOME-2012) was organized by the School of Mechanical **Engineering, KIIT** University. It aimed to provide common platform to academicians, industrialist and research scholars to exchange their expertise and knowledge.

National Conference on Engineering Design at KIIT

A National Conference on "Advances in Simulation and Optimization Techniques in Mechanical Engineering" (NASOME-2012) was organized by the School of Mechanical Engineering, KIIT University. The conference, which focused on engineering design theories and methodologies, simulation and engineering optimization, manufacturing systems modeling and optimization, was inaugurated in the presence of Prof. A. S. Kolaskar, VC, KIIT; Prof. Amalendu Mukherjee, IIT Kharagpur; Prof. D. K. Tripathy, PRO-VC, KIIT; Mr. Alok Ghosal, Vice President (INVEST); Prof. B. C. Routara, Organizing Secretary; Prof. K. C. Singh and Prof. K. B. Sahu, Convener of the programme.

It aimed to provide common platform to academicians, industrialist and research scholars to exchange their expertise and knowledge. In this era most of the problems are initially simulated for the following reasons: the real system cannot be engaged, because it may not be accessible, or it may be dangerous or unacceptable to engage; it is being designed but not yet built; or it may simply not exist. Different parameters can be varied to obtain different solutions and optimization techniques are to be employed for the optimum, the speakers said. In this context, the synchronization of simulation and optimization techniques is highly needed, they stressed.

Total 38 papers submitted by researchers throughout the country were selected for presentation in the conference. These papers cover topics such as Device simulation and modeling, Finite and boundary element techniques, Engineering analysis and simulations, Modeling and Simulation Methodologies, Mathematical and Numerical methods in simulation, Object-oriented simulation, Real-time modeling and simulation, Simulation Application in Industry, Simulation, Experimental Science and Engineering, Conventional optimization methods, Modern optimization methods and Multi-objective optimization.

P. K. Sahoo from KIIT in FCI Committee

Mr. Pramod Ku. Sahoo, Estate & Establishment Officer of KIIT has been nominated as Member of the Consultative Committee of the Food Corporation of India (FCI) for the State of Odisha. As per official order of the Ministry of Consumer Affairs, Food and Public Distribution Dept., the four-member Committee will function as an interface between FCI and the State Govt. on functioning of the targeted systems like TPDS including allocation, off take and distribution of food grains for Antyodaya, BPL and APL families operated by Central or State Govt.

Mr. Sahoo will work with a view to protect the interests of the producers as well as the consumers and advise the FCI on various matters relating to



procurement, storage and distribution of food grains. Mr. Sahoo belongs to Kulabadakhira of Cuttack district. He is the son of Mr. Lokanath Sahoo. As a conscientious and dedicated person, he is well known in Kulabadakhira. Expressing his satisfaction, Dr. A. Samanta, Founder KIIT & KISS said it is a matter of pride that a committee of Central Govt. has selected a staff of KIIT.



(From L) Mr. Arbind Sahoo, Ruchi, Cuttack, Mr. S.S. Acharya, SIDBI, Bhubaneswar, Mr. Anil Joshi, Mumbai Angels Venture Mentors, Dr. Koteswara Rao, Transgene Biotek, Hyderabad, Mr. Chandar Sundaram, NSRCEL, IIM Bangalore, Dr. A. Samanta, Founder and Dr. M. Suar, Director, KIIT School of Biotechnology at "INNOVIO: Business Plan Competition" organised by KIIT -Technology Business Incubator, KIIT University (KIIT-TBI).

KIIT-TBI Organises Business Plan Competition

KIIT - Technology Business Incubator organized a Business Plan Competition "Innovio" for students studying in Odisha. The winners were awarded at a glittering award ceremony at KIIT University on 4th February 2012. Giving away the prizes, Dr. Achyuta Samanta, Founder, KIIT & KISS underscored the importance of such competitions in development of innovation and entrepreneurship in the state.

Sudha Manajari Mishra won the first prize for her proposal on Teaching Learning Materials (TLM). She beat 63 other participants to emerge winner. She bagged a cash prize of Rs.50,000/- along with a six month free incubation period at the Technology Business Incubator. Dr. H.C. Rajhans and Niladri Pati bagged the second prize and Rs.30,000/- for their proposal on Fuel and Pollution Controller. Mr. Satyapriya Jena won the third prize and Rs. 20,000/- for his proposal on Chitosan Nanoparticle based polyherbal wound Healing Spray.

There were presentations of 10 shortlisted proposals in the final round. The proposals were scrutinized by a panel of judges which included Dr. Koteswar Rao of Transgene Biotek, Hyderabad; Mr. Anil Joshi, Mumbai Angels; Mr. S.S. Acharya, DGM, SIDBI; Mr. Chander Sundaram, NSRCEL, IIM Bangalore & Mr. Arbind Sahoo, Director, OOFML, makers of Ruchi Masala. Mr. Joshi expressed surprise at the level of talent in the state and it's potential. The competition was supported by SIDBI, Bhubaneswar and NSRCEL, IIM Bangalore. It was started during September 2011 with call for proposals.

Faculty's paper features on coverpage of prestigious journal

A research paper authored by Dr. Indrajit Chakraborty of the School of Applied Sciences, KIIT University had the distinction of featuring on the cover-page of the prestigious journal 'Soft Matter'. The paper titled 'Reverse thermal gelation of aromatic solvents by a series of easily accessible organic salt based gelators' appeared in the issue number '8 (2012), pp 2595' of 'Soft Matter', which is a journal of international repute from the Royal Society of Chemistry, UK. It highlights the joint research results from School of Applied Sciences, KIIT University and Indian Association of Cultivation Science, Jadavpur, Kolkata. He co-authored this paper with Mr. Pathik Sahoo and Prof. Parthasarathi Dastidar. Dr. Chakraborty, Asst. Professor in Chemistry, has a number of international publications to his credit. In 2011, his book titled ' δ -Keto-Enones: Exploratory Studies on Their Photo-reactivities' was published by Lambert Academic Publishing (Germany). Recently, he has also been invited to be a part of 'Reviewer Panel' of Cambridge University Press.



NEWS & Events

KIIT Signs MoU

KIIT Represents India in WISAS

KRITANSH
KIIT's Mega Techno-Management Fest

MoU with Yildiz
Technical University
(YTU) on 28-2-2012
at Istanbul. In its
effort to establish
academic link with
reputed foreign
Universities, KIIT has
also signed an MoU
with Bashkir State
Agrarian University
(BSAU).

KIIT Signs MoU

KIIT has signed an MoU with Yildiz Technical University (YTU) on 28-2-2012 at Istanbul. While KIIT despite being a young University has carved a niche for itself, YTU having a century old existence has proved itself one of the best technical universities in Europe. The MoU was signed by Prof. (Dr.) Satyendra Patnaik, Rector, KIIT University, on behalf of KIIT, while the President of YTU, Prof. (Dr.) Ismail Yuksek signed on behalf of YTU.

In its effort to establish academic link with reputed foreign Universities, KIT has also signed an MoU with Bashkir State Agrarian University (BSAU). The Rector, Dr. Patnaik singed the MoU on behalf of KIT, while Prof. I. Gabitou, Rector signed it on behalf of BSAU. Both the universities have agreed to co-operate in various academic fields including cooperating with each other in student, faculty exchange programme and in other research activities.



Dr. Satyendra Patnaik, Rector, KIIT University and Prof. (Dr.) Ismail Yuksek, President of YTU after signing the MoU.

KIIT Represents India in WISAS

Environment is key to the progress and any damage caused to environment will lead to destruction. It has been realized by Dr. Samanta, Founder of KIIT and KISS, hence a massive plantation programme has been undertaken by the University, informed Dr. Satyendra Patnaik, Rector to the hundreds of scholars attending the 1st Winter Summit at the Anatolian Summit (WISAS) on the theme, "Collaborative Projects on Tourism, Sports, Bio-Diversity and Global Changes" organized by Ataturk University, Erzurum, Turkey from 23rd to 27th February 2012.

In his address as a key note speaker, Dr. Patnaik spoke on 'Tourism vis-a-vis Bio-Diversity, Climate Change and Social Impacts' highlighting various aspects of the

Tourism of Odisha before the scholars from 70 universities of nearly 30 countries. KIIT had the unique distinction of being the only university from India to have been invited by WISAS.

Besides delivering the keynote address, Dr. Patnaik also chaired a Session in the conference.



KRITANSH KERIFA



KIIT's Mega Techno-Management Fest



Mt. M. n. Shivnanit Mr. Ches in Bhag.t 3+ 2 auris Panal Me. Kan

Eminent writer and novelist Mr. Chetan Bhagat and Ms. Rama Pandey, CEO, Montage Films in an interactive session with students during the 'Big Fight' segment of Kritansh.



Students displaying a robotic model at "Robosphere", an event on Robotics held on the opening day of Kritansh 2012-the annual Techno Management Fest of KIIT University.

The annual techno-management fest of KIIT University 'Kritansh' was held from 14th – 16th February 2012. On concluding day, it was an evening of celebration with singers of international repute Ash King and Riya keeping the audience spellbound with their foot tapping numbers. Earlier in the day, participants competed with one another in an interesting assortment of events. The major attraction of this day was aqua-drivers, a robotics event. The challenge here was not only to race against time, but also against the waves of water. Success depended upon the best understanding and anticipation of many situations that the raging water body might throw up.

Similarly, the event, 'Problem Statement', was designed to challenge the students' knowledge, imagination and creativity. It revolved around the concept of laying siege and gaining access to a heavily guarded fortress. Stack 'Em Up. and event of 'Learn' segment, caught up students' imagination. There were more than 300 models of different monuments, ship, etc made by the participants. More than 1,000 participants from different institutes participated in three-day long techno-management fest. They vied with one another in a string of events like Bulls and Bears, Genesis, Annual Multi-Disciplinary Business Management Game (Kronos), Contraption, Innovative Bridge Design (Megabuliders), Elektrina, Innovation Intensified, Ground Zero, Rhythmus, Innovative Mind, Kalakriti, Klick, Snap n Splash, Quests of the Strings, Krukshetra, Khoj and Karmayudh. Participants won more than 12 lakh cash prize in different events. More than 40 events were held in eight different categories. On its valedictory session, Chief Guest Mr. Jim Nickel, Dy. High Commissioner of Canada to India said "Students are future of any nation". Mr. J. Andersson, eminent Journalist and Editor of renowned travel magazine of Sweden 'Vagabond' said that his views about India changed after visiting KIIT & KISS, while pointing out that in western countries, there are still many misconceptions about the country and its people. Ms. C. Mahanandia, Member, House of Nobility, Sweden said that anything is possible with true love. Eminent film maker and director, Mr. Neelamadhab Panda also graced the occasion. In his welcome address, Dr. A. Samanta, Founder, KIIT & KISS said that youths should shape their future with responsibility and concern for the society. Among others, Prof. (Dr.) D. K. Tripathy, Pro VC, KIIT and Prof. A. S. Kolaskar, VC, KIIT were present.



Dr. A. Samanta, Founder at the Arts Exhibition by KIIT Students.



Singers of international repute, Ash King and Riya performing at Kritansh 2012

Speech of Smt. Promila Sibal, Eminent Social Worker at KISS on 15th December 2011

I feel grateful to Dr. A. Samanta for showing me this wonderful institution. Before coming here I had heard about KISS and knew that it is very big and very nice institution. Now I see that he had set up an entire township here. I am speechless to see all these. One would need at least a week to see KISS and understand all its dimensions. You are fortunate to get a mentor like Dr. Samanta.

I am very happy to visit here. It is incredible that all these have been done by one individual. I have visited many places in India and abroad, but never saw a remarkable sight like this. When Dr. Samanta told me about KISS, where 15,000 tribal students are pursuing their education, he did not inform me that he has also established many more



Smt. Promila Sibal, eminent social worker with 15,000 tribal students of KISS.

institutes like medical college, technical school and management school. When I had visited Yale University in Boston, USA, I saw it is an educational township. This township in India is similar to Yale University of USA. You are very fortunate to have got an opportunity to live and study here.

Education is foundation of everything. Today India is emerging as a global power. It is a developing country. In my opinion, only education separates developing countries from developed countries. There everyone is being educated, level of education is high, better colleges and facilities are there. Ours is a great country and a big country, but it is also highly populated.

There is no one like Dr. Samanta in the country. Even though he cannot provide education to whole country, he is providing education to 15,000 backward children of Odisha. Here he has made provision for vocational training along with education. You can earn while you learn. I saw small children making designs on wall here. It was just remarkable. All children are talented. Because of Dr. Samanta, you have got an opportunity to bring out and develop your hidden talents. You are doing a big service for the country and I congratulate you for this.

Your institution is functioning without any aid from the Government. Government has its own limitations. It does not have money to set up quality schools for all students of the country. Without any help from the Government, Dr. Samanta has set up an entire township for you. You have infrastructure, hospital, playground, swimming pool and everything. Problem of education in India will not end until private sector joins the effort. Until businesses do not assume their social responsibility, the country cannot develop. Right to Education has been brought in. It is now a legal right for every children upto age of 14 year to get education from the State. After this legislation, we hope that more and more children will come forward to avail education. Children are our country's future. They are our foundation. Everyone cannot become Dr. Samanta, but we are inspired by him to try our bit. Even if I can make

something which of only 5% of his KISS, I will consider myself very successful.

There is no one like Dr. Samanta in the country. Even though he cannot provide education to whole country, he is providing education to 15,000 backward children of Odisha. You are doing a big service for the country and I congratulate you for this.

You also have a lot of responsibilities. When you pass out from here, we will have a lot of expectations from you because you have been mentored by a person like Dr. Samanta. Each of you should think how you can contribute for education of your less privileged friend. Dr. Samanta was just telling me that the State is well endowed, but people here still lives in poverty. You have to improve this situation.

Thank you very much.





KiiT International School

(A constituent of KIIT Group of Institutions & KIIT University)

Selfless Service - Endless Learning



Grade 11 & 12 IB Diploma & Grade 8,9,10 IGCSE





IGCSE

KiiT International School is the first school in eastern India authorized to offer International Baccalaureate Diploma Programme (IBDP), Geneva.



KiiT International School is proud to have iconic writer PADMASHREE RUSKIN BOND as its Ambassador

- Indian and foreign university counseling and preparation programme
- Extensive subject options for Science,
 Commerce and Arts students
- Offering a full-boarding programme with world class facilities
- Subjects taught by IG/IB experienced and trained teachers
- Located in a safe, healthy, and stimulating environment
- PADMASHREE RUSKIN BOND Headed by international educators



Mr. Craig Patterson
Head of International Curriculum





FACILITIES

- Eco-Friendly Green Campus
- ☐ Wi-fi air-conditioned residences
- ☐ Science Park
- Amphitheaters
- ☐ Temperature regulated swimming pool
- ☐ Hi-tech interactive classrooms
- Super-speciality hospital
- Indoor & Outdoor Stadium
- ☐ Wi-fi air-conditioned classrooms
- Multi-gym
- □ amusement Park
- Multi-purpose activity hall
- ☐ Modern digital library
- ☐ Air-conditioned transport facility
- ☐ Air-conditioned cafeteria
- ☐ State-of-the-art laboratories

KiiT International School, another addition to KIIT Group of Institutions, has become the only school in eastern India to offer International Baccalaureate Diploma Programme (IBDP). Besides IBDP, it also offers International General Certificate of Secondary Education (IGCSE) of University of Cambridge as international curriculum and Central Board of Secondary Education (CBSE) as national curriculum. Padmashree Ruskin Bond, iconic writer is the Brand Ambassador of KiiT International School. The School with a holistic approach continues to attract students from all parts of the globe through its curriculum it inculcates the virtues of self discipline, intellectual pride and confidence among the students for becoming global citizens. The curriculums are headed by highly qualified and experienced Principals, supported by highly qualified teachers, drawn from different countries, to deliver quality education. For further details please log on to www.kiit-is.org

Panorama



Mr. Albert Peter Burleigh, His Excellency U.S. Ambassador to India and Ms. Katherine S. Dhanani, U.S. Consul General, Hyderabad with KISS students



Dr. Jenn-Der Lin, Hon'ble President, National Formosa University, Taiwan and other Delegates from the University visiting the vocational training unit of KISS.



Dr. A. Samanta, Founder, felicitating Mr. Sudhakar Rao, Former Chief Secretary, Karnataka.



Prof. Martin Killias, Director, Institute of Criminology, University of Zurich, Switzerland speaking at KIIT School of Law.



Prof. Pradyut Ghosh, Indian Association for the Cultivation of Science, Kolkata, Prof. B. B. Bhattacharya, Satyendra Nath Bose National Centre for Basic Sciences, Kolkata and Prof. M. Suar, Director, KIIT School of Biotechnology at Inspire Internship Programme at KIIT.



Mr. Anders Thomsen, Deputy Representative (India and Bhutan), United Nations Population Fund with students of KISS.





Shri Naveen Patnaik, Hon'ble Chief Minister of Odisha appreciating a painting by KISS student at the Adivasi Mela.



Volunteers of Hanseo University, Korea with Dr. A. Samanta during their visit to KIIT.



Dr. S. Samanta, Registrar, KIIT, Prof. A. S. Koslakar, VC, KIIT, Dr. A. Samanta, Founder, KIIT & KISS, Shri Soumya Ranjan Patnaik, Chairman, 'Ama Odisha' & Editor, Sambad and Dr. S. Priyabadini, Joint Registrar, Student Affairs KIIT at the thanks giving ceremony for KIIT's all time record in blood collection in a Mega Blood Donation Camp organized by 'Ama Odisha' at KIMS



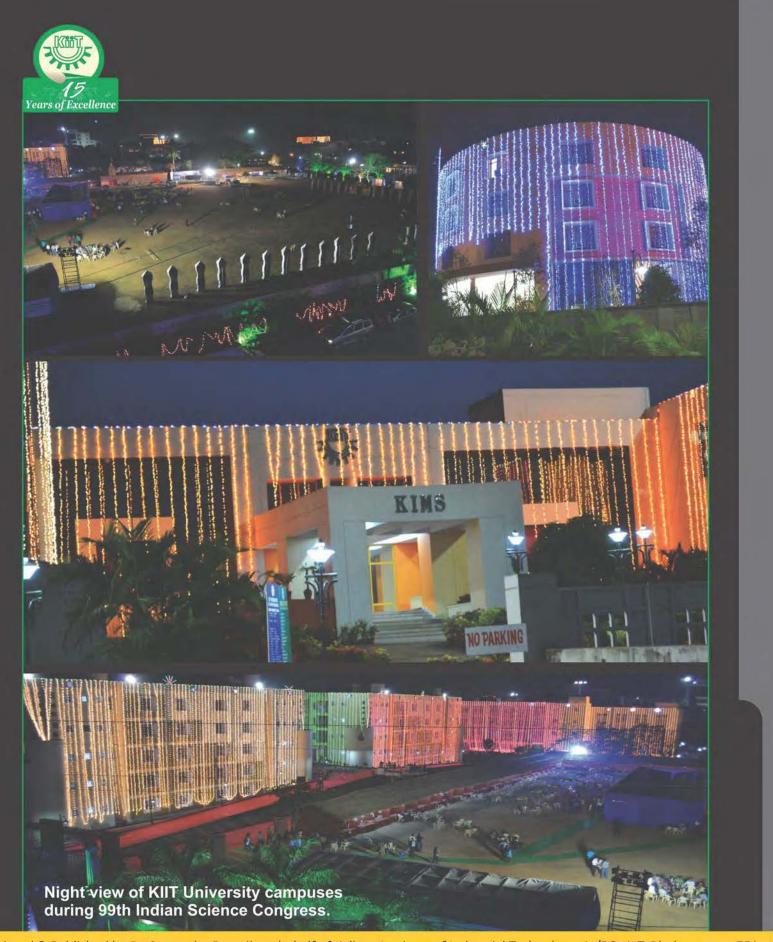
Ms.Renuka Chowdhury, Fmr. Member of Parliament in a discussion with Dr. A. Samanta during her visit to KISS.



Prof. Trinh Xuan Thuan, Professor, Dept of Astronomy, University of Virginia, USA & UNESCO Kalinga Prize Laureate 2009 with Dr. A. Samanta and students of KISS



Dr. S. N. Subba Rao, Noted Gandhian & Freedom Fighter in KISS.



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